

UNIVERSITY OF OXFORD

Darwin-Scepticism and Mass Persuasion:
An Examination of Propaganda in the Evolution Wars

by

Thomas Aechtner

Word Count: 95,615

A THESIS SUBMITTED TO THE UNIVERSITY OF OXFORD
RESEARCH DEGREE EXAMINATION OFFICE
IN FULFILMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY

Abstract

Title: Darwin-Scepticism and Mass Persuasion: An Examination of Propaganda in the Evolution Wars

Author and College: Thomas Aechtner, Exeter College

Degree: DPhil

Term/Year: Trinity 2012

Modern socio-religious controversies involving the scientific theory of biological evolution and Darwin-scepticism, described collectively as the “Evolution Wars,” appear to be spreading unremittingly across the globe. Due to the potential impact of these skirmishes, numerous scholars have endeavoured to answer exactly why these so-called wars have continued to flourish. This dissertation seeks to help answer this question by uniquely considering a crucial piece of the modern Evolution Wars puzzle: *propaganda*. Specifically, this study contends that propaganda is a decisive element of this science-religion controversy, and that its sociological significance is not merely derived from the merits of its communicated arguments, but by the degree of its media persuasiveness. To assess this premise a robust amalgam of propaganda analysis methodologies are employed to examine mass communications produced from 2009-2011 by three of the Evolution Wars’ leading Darwin-sceptic organizations. These groups include the Institute for Creation Research, Answers in Genesis, and Center for Science and Culture.

While a number of studies have polemically deconstructed various antievolutionist arguments, and briefly identified the populist nature of many Darwin-sceptic organizations, there has remained a substantial need to examine Evolution Wars communications as media for mass persuasion. In order to do so, this study develops a neutral, non-normative definition of propaganda, and methodologically triangulates

communication studies, persuasion research, and the sociology of knowledge for its analysis. This methodology is employed to systematically identify, examine, and consider the significance of persuasive elements exhibited throughout Darwin-sceptic mass media. Importantly, the project moves beyond an evaluation of the intrinsic merits of antievolutionist arguments, to concentrate instead on the persuasive attributes of Evolution Wars communications. The study thus focuses on sets of persuasive cues, or cognitive mental shortcuts, that function in media as subtle but effective methods of influencing public opinion and behaviour. This analysis also investigates how these persuasive characteristics serve to cultivate Evolution Wars brands and fortify antievolutionists constructions of reality. What results is an important perspective on Darwin-sceptic mass media and its ability to persuade audiences. This perspective reveals the persuasive constituents of antievolutionist propaganda, and divulges how it may influence audiences regardless of whether researchers have unanimously concluded that there should be no evolution-religion conflict, or if scholars have argued that such Darwin-sceptic communications are philosophically, scientifically, or theologically fallacious.

Long Abstract

One of the puzzles of contemporary science and religion relations is the persistence of what historians of science routinely refer to as “the conflict myth”; the idea that science and religion, by virtue of what they are, will necessarily be opposed to each other. Not surprisingly, perhaps, religious responses to evolutionary theory have been identified as a key source of the putative conflict. While numerous commentators have pointed to the fact that there need be no intrinsic conflict between religious commitment and evolutionary theory, controversies about scientific theories of human origins show no signs of abating. If anything, the so-called “Evolution Wars” seem to be escalating in their country of origin, the US, and hostilities have spread beyond its territories to become a truly global phenomenon. Because of the persistence and growth of these science-religion skirmishes, numerous scholars have attempted to determine exactly *why* the Evolution Wars have somewhat enigmatically become a worldwide phenomenon. This dissertation seeks to help answer this question by uniquely considering a key piece of the Evolution Wars riddle: *propaganda*. Specifically, it is contended that propaganda, as defined in this study, is a decisive element of the Evolution Wars controversy, and that its sociological significance is not merely derived from the merits of its communicated arguments, but by the extent of its media persuasiveness. This persuasiveness, it is argued, results from sizeable quantities of elements that have the ability to conceivably influence audiences irrespective of the quality of the claims with which they are linked. In order to assess this thesis propaganda analysis is employed to systematically examine mass communications produced from 2009-2011 by three of the Evolution Wars’ leading Darwin-sceptic organizations. These groups include the Institute for Creation Research, Answers in Genesis, and the Discovery Institute’s Center for Science and Culture.

Thus far, research of the Evolution Wars have tended to follow one of four approaches: i) Polemical evaluations of antievolutionist arguments; ii) Historical investigations of the conflicts; iii) Examinations of possible avenues for religion-evolution consonance; and, iv) Population analytics, which include surveys and statistics designed to gauge the acceptance of evolution and/or various forms of Darwin-scepticism. In a number of these studies investigators have drawn attention to the use of mass media by antievolutionist organizations, and have implied that this practice may represent an important constituent of the Evolution Wars' escalation. Observations such as these call out for further analysis, as they hint at some of the reasons for the popular ascendancy of antievolutionist groups and touch upon the theorized efficacy of mass persuasion campaigns in the Evolution Wars. However, while some scholars have briefly noted the importance of communications within the Evolution Wars, and have even described various Darwin-sceptic pacesetters as "master propagandists," comprehensive studies of Evolution Wars mass media *as* propaganda are virtually nonexistent.

In order to fill this void the current project first develops a functional, non-normative definition of the term propaganda. While the word is often applied in a derogatory manner its actual connotations are complex, and a survey of the most influential classifications of the idiom reveals a number of useful common definitional elements. Succinctly, these elements describe propaganda as encompassing: i. Conflict-related mass communications involving premeditated, systematic media use; ii. Persuasion tactics/strategies; and, iii. Attempts to impact an audience's actions, opinions, and social constructions of reality. These major premises are used to generate the project's essential definition: *Propaganda is deliberate and systematic mass communication, engendered by conflict, designed to persuade target audiences and*

influence perceptions of reality, in order to yield specific attitudes and actions. The study's list of common definitional elements also helps to delineate which research perspectives and methodologies may be especially suited for propaganda's analysis. For example, because propaganda is mass communication this project employs communications studies, and, since propaganda is a form of persuasion, this study utilizes persuasion theory. Also, the sociology of knowledge is adopted in order to examine propaganda's goal of influencing actions, opinions, and perceptions of reality. The resulting methodological synthesis contributes a distinct research approach to propaganda analysis, not only for this project, but also for propaganda studies in general.

Communications studies media effects research is utilized to assess the conceivable impact that propaganda may have. This serves to reveal propaganda's capacity to *work*, or have influence upon audiences, which is relevant to the question of whether propaganda is a potentially efficacious component of the Evolution Wars. These considerations include the following documented media effects: i. Agenda-Setting; ii. Cumulative Exposure; iii. The Cultivation of Assumptions; and, iv. Priming Effects. Using this list as a guide, observations are made regarding the discernible constituents affiliated with these media effects levers throughout Darwin-sceptic propaganda materials.

In association with media effects research, content analysis is employed to identify and report upon the specific persuasion techniques that are exhibited throughout Evolution Wars media enterprises. This research method is commonly utilized in communication studies and it involves explicit rules of analysis that entail the systematic coding of message elements within discreet samples of media content. In brief, content analysis incorporates: i. The selection of appropriate samples of

investigated materials; ii. The creation of a suitable coding scheme, which is a detailed list of artefacts that may appear within media messages; iii. The judicious coding of communications materials using the devised coding scheme; and, iv. Interpretations of coded data. This project's content analysis coding list is derived from persuasion research and the Elaboration Likelihood Model of persuasion. This model postulates that there are two major avenues of persuasion that result from exposure to communications: the central and peripheral routes. The first route involves attitude change through an individual's diligent scrutiny of a persuasive message, described as high elaboration, which can only ensue if a message recipient possesses both the motivation and the ability to thoroughly study the claims made in any particular communication. Alternatively, the second route occurs when there is low elaboration, resulting from a lack of motivation or ability to meticulously investigate and process a persuasive message's contentions. In such cases individuals rely upon various cognitive mental shortcuts, or peripheral cues, to help formulate responses. These cues can subtly influence public opinion and behaviour, especially because individuals prefer to minimize cognitive exertion when faced with persuasive messages. Such techniques include attempts at reinforcing the perceived source credibility of a communicator, the use of rhetorical questions, message repetition, and social proof, which involves claims that numerous people support a particular opinion.

This project identifies the most ubiquitous persuasive cues located throughout all three organization's leading Evolution Wars communications. Such materials are text-based media that characterize antievolutionist propaganda, and they embody the primary arguments made throughout modern Darwin-sceptic broadcasts. Specifically, persuasive message variables exhibiting ≥ 0.400 occurrences per 1000 words of text are isolated, and the idiosyncratic ways in which each is used to bolster Young Earth

Creationism or Intelligent Design premises is revealed. Reporting the observations gathered from this inquiry engages much of this study, while also providing the foundational data that will be analyzed throughout the project. This data is then compared with a control group sample in the form of *New Scientist* articles, and Evolution Wars propaganda media effects are subsequently conceptualized. Furthermore, the content analysis findings are examined within the context of the sociology of knowledge.

The sociology of knowledge is often concerned with social constructions of reality as well as the societal origins and influences of ideas. In relation to this, the current project examines how persuasive cues identified in Evolution Wars propaganda function as devices of reality therapy or nihilation; where therapy involves attempts at keeping people within a constructed reality, and nihilation endeavours to delegitimize anything that attacks it. Furthermore, the sociology of knowledge is utilized to examine how persuasive cues in Darwin-sceptic propaganda serve to establish Evolution Wars brands. Branding has become a fundamental concern in marketing, and it is now recognized that brands are much more than simple logos. A brand may be conceived as a type of metaphor of a constructed product reality that can be affiliated not only with consumer goods but with a wide range of “products,” including services, people, or political ideas. From the perspective of persuasion research, a brand is a single commanding persuasive cue. By examining the idea of branding and reality construction, the project demonstrates what styles of brands are being fashioned by antievolutionist propaganda, and considers its persuasive implications within the Evolution Wars.

It is essential to note that the goal of this study is not to critique the veracity of antievolutionist claims, or to judge the philosophical, scientific, and theological

substance of such arguments. Instead of evaluating whether the ideas expressed in antievolutionist mass communications are “valid” or “invalid,” the objective is to determine whether they are *persuasive*. To this end the project demonstrates how Evolution Wars propaganda is animated by a variety of persuasive message variables that have been demonstrated to affect communications recipients in peripheral ways, and to influence audiences expressing what would be called low-to-medium elaboration likelihood. It also validates that the concentration of such persuasive cues is far greater in Evolution Wars propaganda than in the popular science writing which these materials often resemble. What results is a broad sketch of Evolution Wars propaganda and its various levels of persuasion; expressed by persuasive cues, conceivable media influences, and the construction of antievolutionist brand realities. The corollary is that antievolutionist media must be regarded within the context of persuasion and its ability to foster Darwin-sceptic realities, rather than simply whether its claims are philosophically/scientifically/theologically accurate.

Acknowledgements

Numerous people deserve recognition for their involvement in this research project. Of this company I would like to especially thank three individuals. Firstly, I am truly grateful for Dr. Rosemary Peacocke, who partnered with Exeter College to inaugurate the Arthur Peacocke Studentship in Science and Religion. Without this generous funding, established by means of the Templeton Prize awarded to Dr. Arthur Peacocke in 2001, I would not have been able to complete doctoral research at the University of Oxford. Furthermore, Rosemary also invited my wife and I into her home, making us feel exceedingly welcome in a new city and a foreign country.

Secondly, I must thank Dr. Peter Harrison, my academic supervisor. His steady guidance and wisdom helped to sharpen me as a researcher, and he provided valuable input as this dissertation evolved over the years. Peter embodies the very best of the academia, and I can think of no other scholar who I would have rather worked with on this endeavour.

Finally, I thank my steadfast wife, Mindy, for her unyielding support. She has sacrificed much to allow me to pursue academics. Together we have travelled the world, and Mindy has proven a resolute companion, a wonderful friend, and a loving mother. I am inconceivably thankful to be married to her, my beloved.

For Benjamin Isaac Shao Aechtner.
The son of my right hand.

Table of Contents

Abstract.....	i
Long Abstract	i
Acknowledgements	ix
Dedication.....	x
Table of Contents	xi
List of Tables.....	xiv
List of Figures.....	xvi
List of Abbreviations.....	xviii
Appendixes	xix
CHAPTER ONE: THE EVOLUTION WARS AND DARWIN-SCEPTIC PROPAGANDA.....	1
1.1 The Evolution Wars and Propaganda	1
1.2 The Darwin-Sceptics	8
1.3 Project Overview	16
CHAPTER TWO: <i>OUR AGE OF PROPAGANDA</i> : OPERATIONALIZING A RESEARCH DEFINITION.....	18
2.1 <i>A Message Dense Bombardment</i> : The Necessity for Propaganda Research.....	18
2.2 <i>Catching a Greased Pig</i> : The Difficulties of Defining Propaganda	20
2.3 <i>Congregat de Propaganda Fide</i> : Origins of the Term.....	23
2.4 <i>The 20th Century Spark</i> : WWI and the Development of Propaganda Studies	25
2.4.1 Post-WWI Definitions	28
2.5 WWII and Propaganda	35
2.5.1 Definitions From WWII to the Late 1970s.....	37
2.6 <i>The Resurgence</i> : Definitions from the 1980s Onward	41
2.6.1 Definitions From the 1980s to the Present-day	43
2.7 Common Definitional Elements	49
2.8 <i>Why Propaganda?</i> : Considering Potential Substitutes.....	55
CHAPTER THREE: PROPAGANDA ANALYSIS: FORMULATING A METHODOLOGICAL SYNTHESIS	57
3.1 Surveying Propaganda Analysis Research Methodologies	57
3.2 Communications Studies and Propaganda	59
3.2.1 Content Analysis and Propaganda.....	57
3.3 Persuasion Research and the Elaboration Likelihood Model.....	72
3.3.1 The ELM, EW Propaganda, and Persuasion Technique	77
3.4 The Sociology of Knowledge and Propaganda	101
3.4.1 Reality Construction/Maintenance, Brands, and Persuasion.....	105
3.5 The Methodological Synthesis	109
CHAPTER FOUR: INSTITUTE FOR CREATION RESEARCH PROPAGANDA ...	110
4.1 ICR Message Variable Frequencies	110
4.2 ICR and Source Cues.....	113
4.2.1 ICR Messenger Credibility I: Appeals to Expertise and Evidence ...	115
4.2.2 ICR Messenger Credibility II: Appeals to Sacred Authority	126
4.2.3 ICR Source Attraction	131

4.3	ICR and Asking Questions	134
4.4	ICR's Use of the Contrast Principle and Negativity Effect.....	144
4.5	ICR and Social Consensus.....	157
4.6	ICR's Use of Statistics and Technical Jargon	164
4.7	From ICR to Answers in Genesis	169
CHAPTER FIVE: ANSWERS IN GENESIS PROPAGANDA.....		171
5.1	AiG Message Variable Frequencies	171
5.2	AiG and Source Cues	173
5.2.1	AiG Messenger Credibility I: Appeals to Sacred Authority	175
5.2.2	AiG Messenger Credibility II: Appeals to Expertise and Evidence..	183
5.2.3	AiG Source Attraction	188
5.3	AiG and Asking Questions.....	192
5.4	AiG's Use of the Contrast Principle and Negativity Effect	201
5.5	AiG's Use of Statistics and Technical Jargon	215
5.6	AiG and Social Consensus	225
5.7	AiG Message Repetition.....	231
5.8	From Repeated Claims of Design to the Intelligent Design Movement	236
CHAPTER SIX: CENTER FOR SCIENCE AND CULTURE PROPAGANDA		238
6.1	CSC Message Variable Frequencies	238
6.2	CSC's Use of the Contrast Principle and Negativity Effect.....	240
6.2.1	Negative Contrast I: Lacking Evidence and Character	242
6.2.2	Negative Contrast II: Misunderstanding and Misrepresenting ID	251
6.2.3	Negative Contrast III: Criticizing Reconciliation Efforts.....	255
6.3	CSC and Asking Questions	258
6.4	CSC and Source Cues.....	270
6.5	CSC and the Scarcity Principle	281
6.6	CSC's Use of Statistics and Technical Jargon	289
6.7	From CSC Propaganda to Media Effects, Reality Maintenance, and Branding	296
CHAPTER SEVEN: MEDIA EFFECTS, REALITY MAINTENANCE, AND EVOLUTION WARS BRANDING		298
7.1	EW Propaganda and the Content Analysis Control Group	298
7.2	<i>New Scientist</i> Frequency Rates.....	301
7.3	Media Effects, Reality Maintenance, and EW Source Cues	306
7.4	Asking Questions in EW Propaganda	313
7.5	The Contrast Principle and Negativity Effect in EW Propaganda	317
7.6	Statistics and Technical Jargon in EW Propaganda	322
7.7	EW Propaganda and Social Consensus	326
7.8	EW Propaganda and the Scarcity Principle.....	330
7.9	EW Propaganda and Message Repetition.....	332
7.10	The Meta-Cue: EW Branding.....	335
7.11	Therapy, Nihilation, and The Project's Hypotheses.....	345
CHAPTER EIGHT: <i>THE BIGGEST STICK WINS</i> : ASSESSING THE HYPOTHESES AND THE PROJECT IMPLICATIONS		347
8.1	Assessing the Hypotheses.....	347
8.2	Considering the Implications.....	350

REFERENCES	365
------------------	-----

List of Tables

Table 2.1: Propaganda Definitional Element.....	49
Table 3.1: Propaganda Definitional Elements and Applied Research Perspectives.....	59
Table 3.2: Code Descriptions: Message Variables that Serve as ELM Cues.....	80
Table 4.1: Frequency of Message Variables in ICR Materials.....	111
Table 4.2: ICR Message Variables Exhibiting ≥ 0.400 Incident Rates per 1000 Words.....	112
Table 5.1: Frequency of Message Variables in AiG Materials.....	172
Table 5.2: AiG Message Variables Exhibiting ≥ 0.400 Incident Rates per 1000 Words.....	173
Table 6.1: Frequency of Message Variables in CSC Materials.....	239
Table 6.2: CSC Message Variables Exhibiting ≥ 0.400 Incident Rates per 1000 Words.....	240
Table 6.3: The Darwin Lobby vs. Darwin Sceptics.....	296
Table 7.1: Frequency of Message Variables in <i>New Scientist</i>	303
Table 7.2: ICR Branding.....	337
Table 7.3: AiG Branding.....	340
Table 7.4: CSC Branding.....	342
Table 7.5: EW Brand Messages.....	344

List of Figures

Figure 2.1: The Header of an 18 th Century <i>Inscrutabilis Divinae</i> Text.....	24
Figure 2.2: French and American WWI War Bond Posters.....	28
Figure 2.3: American and Canadian WWII Propaganda Posters.....	37
Figure 2.4: False Banknotes Air Dropped During the Vietnam War.....	42
Figure 2.5: Jowett and O’Donnell’s Model for the Process of Propaganda.....	44
Figure 2.6: Campaign Against Drunk Driving Advert.....	46
Figure 3.1: Krippendorff’s α Equation.....	70
Figure 3.2: A Schematic Depiction of the Elaboration Likelihood Model.....	77
Figure 3.3: <i>Wer ist Adolf Hitler</i>	82
Figure 3.4: <i>Redeverbot</i>	85
Figure 3.5: If You Can’t Stop Smoking.....	87
Figure 3.6: I’m a Mac, I’m a PC.....	89
Figure 3.7: Luckies Are Less Irritating, and Science Discovered IT.....	91
Figure 3.8: Perfectionist [CP+] Wrinkle Lifting Serum.....	94
Figure 3.9: A Million New Yorkers.....	98
Figure 3.10: The Top Ten Most Valuable Global Brands of 2012.....	106
Figure 4.1: ICR Source Cues Subcategory Frequencies.....	113
Figure 4.2: ICR - Source Cues.....	114
Figure 4.3: An Example of Expertise and Experience found in ICR Articles.....	116
Figure 4.4: Biology and the Bible.....	122
Figure 4.5: New Frontiers.....	123
Figure 4.6: Similar Features.....	123
Figure 4.7: Life Sciences Research Erlenmeyer Flask.....	124
Figure 4.8: Our Day in Court.....	132
Figure 4.9: Christian Heritage of Liberty.....	132
Figure 4.10: Celebrating our Freedom, Honoring our Creator.....	134
Figure 4.11: ICR Asking Questions Subcategory Frequencies.....	135
Figure 4.12: ICR - Asking Questions	136
Figure 4.13: ICR Subcategory Frequencies of the Contrast Principle and Negativity Effect.....	145
Figure 4.14: ICR – The Contrast Principle and Negativity Effect.....	146
Figure 4.15: Conveying ID’s “Closed-Bible” Approach.....	148
Figure 4.16: Creation by Evolution.....	150
Figure 4.17: BioLogos Can Be Hazardous.....	151
Figure 4.18: Fighting the Dragon.....	153
Figure 4.19: Evolutionary Faith.....	156
Figure 4.20: ICR Social Consensus Subcategory Frequencies.....	158
Figure 4.21: ICR – Social Consensus.....	160
Figure 4.22: ICR Subcategory Frequencies of Statistics and Technical Jargon.....	165
Figure 4.23: ICR – Statistics and Technical Jargon.....	166
Figure 4.24: Trends in Solar Activity and Temperature.....	167
Figure 4.25: Accumulated WRF Model.....	167
Figure 4.26: Zonal Flow Storm Precipitation	168
Figure 5.1: AiG Source Cue Subcategory Frequencies.....	173
Figure 5.2: AiG – Source Cues.....	174
Figure 5.3: Designed for the Curse.....	179
Figure 5.4: Science and History Confirmed.....	186
Figure 5.5: Building a Community for Discovery.....	187

Figure 5.6: Jesus Loves the Little Children.....	189
Figure 5.7: Creationism Focuses on the Differences.....	190
Figure 5.8: Our Suffering Saviour.....	192
Figure 5.9: Beneath the Cross.....	192
Figure 5.10: AiG Asking Questions Subcategory Frequencies.....	193
Figure 5.11: AiG – Asking Questions.....	194
Figure 5.12: Man’s Opinion.....	198
Figure 5.13: All Other Planets.....	199
Figure 5.14: AiG Subcategory Frequencies of the Contrast Principle and Negativity Effect.....	202
Figure 5.15: AiG – The Contrast Principle and Negativity Effect.....	203
Figure 5.16: Fabricating Ardi	205
Figure 5.17: Darwin’s Swap.....	207
Figure 5.18: Are You Prepared for the Real Global Warming?.....	208
Figure 5.19: Castle Cartoon Ver.2.....	209
Figure 5.20: The Descent of Man.....	212
Figure 5.21: Evolution Sunday.....	213
Figure 5.22: Christian College Compromise.....	214
Figure 5.23: AiG Subcategory Frequencies of Statistics and Technical Jargon.....	216
Figure 5.24: AiG – Statistics and Technical Jargon.....	217
Figure 5.25: Multi-tasking Muscle Tendons.....	218
Figure 5.26: Radiocarbon Found!.....	218
Figure 5.27: Hardened by Pressure and Heat.....	219
Figure 5.28: Radiometric Ages of Rocks Samples.....	219
Figure 5.29: Order of the Rock Layers.....	220
Figure 5.30: A Mixed Bag of Beliefs.....	222
Figure 5.31: Look at the Numbers... ..	223
Figure 5.32: 65% of UK Teachers.....	224
Figure 5.33: AiG Social Consensus Subcategory Frequencies.....	226
Figure 5.34: AiG – Social Consensus	226
Figure 5.35: “Alternative Universe” Wins the Gold.....	229
Figure 5.36: AiG Message Repetition Subcategory Frequencies.....	232
Figure 5.37: AiG – Message Repetition.....	233
Figure 6.1: CSC Subcategory Frequencies of the Contrast Principle and Negativity Effect.....	241
Figure 6.2: CSC – The Contrast Principle and Negativity Effect.....	242
Figure 6.3: The Three Magic Wands.....	244
Figure 6.4: Nature’s Darwin Illustration.....	250
Figure 6.5: The Darwin-Hitler Link.....	255
Figure 6.6: CSC Asking Questions Subcategory Frequencies.....	259
Figure 6.7: CSC - Asking Questions.....	259
Figure 6.8: CSC Source Cues Subcategory Frequencies.....	271
Figure 6.9: CSC - Source Cues.....	272
Figure 6.10: CSC Use of American Symbols.....	281
Figure 6.11: CSC Scarcity Principle Subcategory Frequencies.....	282
Figure 6.12: CSC – The Scarcity Principle.....	283
Figure 6.13: Darwinian Censorship.....	284
Figure 6.14: CSC Subcategory Frequencies of Statistics and Technical Jargon.....	290
Figure 6.15: CSC – Statistics and Technical Jargon.....	291
Figure 6.16: Bacterial Flagellum Assembly Jargon.....	292

Figure 6.17: Bacterial Flagellum Signal Transduction Jargon.....	292
Figure 6.18: Darwin Day Poll Shatters Stereotypes.....	295
Figure 7.1: Cumulative Frequency Rates.....	304
Figure 7.2: Source Cues Frequencies	307
Figure 7.3: Messenger Credibility Frequencies.....	309
Figure 7.4: Asking Questions Frequencies.....	314
Figure 7.5: The Contrast Principle and Negativity Effect Frequencies.....	318
Figure 7.6: Statistics and Technical Jargon Frequencies.....	323
Figure 7.7: Social Consensus Frequencies.....	327
Figure 7.8: Scarcity Principle Frequencies.....	331
Figure 7.9: Messenger Repetition Frequencies.....	333

List of Abbreviations

AiG	Answers in Genesis
AiG-B	Answers in Genesis Branding
CSC	(The) Center for Science and Culture
CSC-B	Center for Science and Culture Branding
ELM	Elaboration Likelihood Model
EW	Evolution Wars
ICR	(The) Institute for Creation Research
ICR-B	Institute for Creation Research Branding
ID	Intelligent Design
SoK	Sociology of Knowledge
YEC	Young Earth Creationism(-ist)

Appendixes

Appendix One: Standard Propaganda Analysis Research Steps.....	358
Appendix Two: An Inventory of Propaganda Techniques.....	359

CHAPTER ONE

The Evolution Wars and Darwin-Sceptic Propaganda

Unlike the antievolution crusade of the 1920s, which remained confined mainly to the North America, the creationist revival of the last third of the century rapidly spread overseas as American creationists and their books circled the globe. By the 1990s scientific creationism, though made in America, had become a small-scale international phenomenon.

Ronald L. Numbers¹

The evolution wars continue.

Art Hobson²

1.1 The Evolution Wars and Propaganda

The glossy cover of *Time*'s August 15, 2005 U.S. edition controversially displayed an altered image of Michelangelo's Sistine Chapel fresco, in which a chimpanzee's portrait concealed the figure of Adam. The newsmagazine's title read 'Evolution Wars' and the publication's contents included descriptions of court cases associated antievolutionism and American public school curricula.³ These so-called *wars* represent the continuing debates associated with modern science and religious beliefs, which may have major implications for global religion, education, as well as popular perceptions of evolutionary theory.⁴ Not surprisingly, such disputes have often been considered integral catalysts in the persistence of what many historians of science

¹ Ronald L. Numbers, *The Creationists: From Scientific Creationism to Intelligent Design*, 2nd ed. (Cambridge: Harvard University Press, 2006), 355.

² Art Hobson, "Unintelligent Design," *Interactions* 37, no. 1 (2007).

³ "Evolution Wars," *Time* 166, no. 7 (2005).

⁴ Evolutionary theory within this study refers to contemporary theories of biological evolution, or the modern evolutionary synthesis. See: Eugenie C. Scott, *Evolution vs. Creationism: An Introduction*, 2nd ed. (London: Greenwood Press, 2009), 35-37; Christian C. Young and Mark A. Largent, *Evolution and Creationism: A Documentary and Reference Guide* (London: Greenwood Press, 2007), 183-84; Eugenie C. Scott, "Antievolution and Creationism in the United States," *Annual Review of Anthropology* 26(1997): 4-5.

routinely refer to as ‘the conflict myth’; the idea that science and religion, by virtue of what they are, will necessarily be opposed to each other.⁵ Indeed, with its notorious legal battles and headline capturing drama, the Evolution Wars (EW) seem to embody the oft criticized Draper-White Warfare Model of science-religion interactions.⁶ For this reason, analyses of the EW have frequently occupied contemporary science-religion research, as well as media reporting on the apparent discord between science and belief. As the distinguished historian of science, Ronald Numbers has observed, ‘For the past century and a half no issue has dominated discussions of science and religion more than evolution.’⁷

Thus far, investigations of the EW have tended to follow one of four approaches:

i) Polemical evaluations of religiously-motivated antievolutionist arguments; ii) Historical investigations of EW conflicts; iii) Examinations of possible avenues for religion-evolution consonance; or, iv) Population analytics, which include surveys and statistics designed to gauge the acceptance of evolution and/or various forms of antievolutionism.⁸ Many of these studies have been motivated, at least to some extent, by concerns over the hypothetical impact that such quarrels may have on public

⁵ Harold W. Attridge, *The Science and Religion Debate: Why Does It Continue?* (New Haven: Yale University Press, 2009).

⁶ John William Draper, *History of the Conflict between Religion and Science* (Cambridge: Cambridge University Press, 2009 [1875]); Andrew Dickson White, *A History of the Warfare of Science with Theology in Christendom*, vol. 1 (Cambridge: Cambridge University Press, 2009 [1896]). For a synopsis of EW court battles see: Michael B. Shermer, "Science Defended, Science Defined: The Louisiana Creationism Case," *Science, Technology & Human Values* 16, no. 4 (1991); Steven Goldberg, *Culture Clash: Law and Science in America* (New York: University Press, 1994); Scott, "Antievolution and."; Eugenie C. Scott, "Not (Just) in Kansas Anymore," *Science* 288, no. 5467 (2000); Marjorie George, "And Then God Created Kansas? The Evolution/Creationism Debate in America's Public Schools," *University of Pennsylvania Law Review* 149, no. 3 (2001); Edward J. Larson, *Trial and Error*, 3rd ed. (Oxford: Oxford University Press, 2003); Randy Moore, Murray Jensen, and Jay Hatch, "Twenty Questions: What Have the Courts Said About the Teaching of Evolution and Creationism in Public Schools?," *BioScience* 53, no. 8 (2003); Young and Largent, *Evolution and*; Scott, *Evolution vs*; Glenn Branch, Eugenie C. Scott, and Joshua Rosenau, "Dispatches from the Evolution Wars: Shifting Tactics and Expanding Battlefields," *Annual Review of Genomics and Human Genetics* 11(2010).

⁷ Ronald L. Numbers, "Scientific Creationism and Intelligent Design," in *The Cambridge Companion to Science and Religion*, ed. Peter Harrison (Cambridge: Cambridge University Press, 2010), 127.

⁸ Bronislaw Szerszynski, "Understanding Creationism and Evolution in America and Europe," in *Science and Religion: New Historical Perspectives*, ed. Thomas Dixon, Geoffrey Cantor, and Stephen Pumfrey (Cambridge: Cambridge University Press, 2010), 156-60.

assessments of science, scientific pedagogy, and the future of scientific research.⁹ This is especially the case in countries like the United States, where nationwide opinions concerning evolutionary theory have been mixed, and where school curricula are selected through democratic processes. Hence, Kenneth R. Miller explains regarding America, ‘In a democracy popular education inevitably reflects popular opinion, which, in the case of Darwin, narrowly supports the rejection of evolutionary ideas.’ In fact, he insists that what is truly at stake in EW debates is ‘nothing less than America’s scientific soul.’¹⁰ Such concerns are particularly relevant in light of the ascendancy of evolution as a scientific premise, which has been described by the National Academy of Science as ‘the most important concept in modern biology, a concept essential to understanding key aspects of living things.’¹¹

Evolution Wars research has also been occupied with documenting the long duration of these science-religion controversies, as well as endeavouring to ascertain why these wars have continued into the 21st century. Though numerous commentators have delineated that there need be no intrinsic conflict between religious commitment and evolutionary theory, controversies about scientific theories of biological origins show no signs of abating.¹² If anything, the EW seem to be escalating in their country

⁹ For discourse concerning the potential role of popular opinion on scientific research, education, and textbook contents, see: Eugene Provenzo, Jr., *Religious Fundamentalism and American Education: The Battle for the Public Schools* (Albany: State University of New York Press, 1990), 32; Christopher P. Toumey, *God's Own Scientists: Creationists in a Secular World* (New Brunswick: Rutgers University Press, 1994), 25-28; Numbers, *The Creationists*, 1-5; Eugenie C. Scott and Glenn Branch, eds., *Not in Our Classrooms: Why Intelligent Design is Wrong for Our Schools* (Boston: Beacon Press, 2006); Paul F. Lurquin and Linda Stone, *Evolution and Religious Creation Myths: How Scientists Respond* (Oxford: Oxford University Press, 2007), 186-87; Eric Plutzer and Michael Berkman, "Evolution, Creationism, and the Teaching of Human Origins in Schools," *Public Opinion Quarterly* 0, no. 0 (2008).

¹⁰ Kenneth R. Miller, *Only a Theory: Evolution and the Battle for America's Soul* (New York: Viking Penguin, 2008), 12-13, 16.

¹¹ National Academy of Science, *Teaching About Evolution and the Nature of Science* (Washington: National Academies Press, 1998), viii.

¹² See: Michael Ruse, *Can a Darwinian Be a Christian?: The Relationship between Science and Religion* (Cambridge: Cambridge University Press, 2001); Francis S. Collins, *The Language of God: A Scientist Presents Evidence for Belief* (London: Free Press, 2006); Denis Alexander, *Evolution or Creation: Do We Have to Choose?* (Oxford: Monarch Books, 2008); Nick Spencer and Denis Alexander, *Rescuing Darwin: God and Evolution in Britain Today* (London: Theos, 2009).

of origin, the US, and hostilities have spread beyond its borders to become a truly global phenomenon.¹³ Accordingly, Eugenie Scott has conceded that the ‘creationism/evolution controversy...shows no sign of disappearing.’¹⁴ Explanations for this growth, described in a *Science* editorial as intellectual ‘retrogression,’ have been offered alongside fears of its potential ramifications.¹⁵ Some have considered creationism’s success to have resulted from a reaction to scientific elitism, while noting that religiously motivated antievolutionism also offers security to a fundamentalist/evangelical worldview in the face of ‘overwhelming political and environmental challenges.’¹⁶ Regarding this premise of worldview preservation, Michael Roberts has noted that antievolutionism ‘provides the “scientific” capping to a “biblical world view.”’¹⁷ It may also supply the means to comprehend scripture without necessitating serpentine hermeneutical/theological steps in order to accommodate modern scientific theories.¹⁸ Furthermore, Provenzo has observed that fundamentalist and evangelical movements, with which much of the EW can be linked, are in fact ‘responding to real problems and conflicts’ of society that concern religious communities.¹⁹ As such, antievolutionism has become part and parcel of a larger religious response to perceived concerns and fears over the secularization of society, as well as the supposed moral implications of a society-wide acceptance of evolutionary

¹³ On the EW’s global proliferation see: James Moore, "The Creationist Cosmos of Protestant Fundamentalism," in *Fundamentalisms and Society: Reclaiming the Sciences, the Family, and Education*, ed. Martin E. Marty and R. Scott Appleby (London: University of Chicago Press, 1993), 156-60; Toumey, *God's Own*, 31-48; Simon Coleman and Leslie Carlin, eds., *The Cultures of Creationism: Anti-Evolutionism in English Speaking Countries* (Aldershot: Ashgate, 2004); Numbers, *The Creationists*, 62-68, 351-55; Peter J. Bowler, *Monkey Trials and Gorilla Sermons: Evolution and Christianity from Darwin to Intelligent Design* (London: Harvard University Press, 2007), 216-17; Szerszynski, "Understanding Creationism."; Numbers, "Scientific Creationism," 150-55.

¹⁴ Scott, *Evolution vs.*, 1.

¹⁵ Donald Kennedy, "Twilight for the Enlightenment?," *Science* 308, no. 5719 (2005).

¹⁶ Bowler, *Monkey Trials*, 215.

¹⁷ Michael Roberts, *Evangelicals and Science* (Westport: Greenwood, 2008), 167.

¹⁸ Numbers, *The Creationists*, 371.

¹⁹ Provenzo, *Religious Fundamentalism*, xvi.

theory.²⁰ Combined with these socio-religious stimuli are the EW's political dimensions. This facet of the EW involves the politicization of science, the escalation of America's culture wars, and the pairing of antievolutionist legislation with conservative political ideologies.²¹

In a number of these discussions, investigators have also drawn attention to the use of mass media by antievolutionist organizations, implying that its utilization may represent an important constituent of the Evolution Wars's escalation.²² Karl Giberson has thus contended that Christian creationism has effectively become a 'populist movement,' which has successfully circulated antievolutionist rhetorical anecdotes.²³ Simon Coleman and Leslie Carlin further distinguish that creationists have 'used new media of communications in skilful ways, combining the giving of lectures and the writing of books with the use of television, videos and the Internet in order to propound their message.'²⁴ In like manner, Numbers has concluded that intelligent design (ID) theorists have successfully cultivated a 'public relations victory,' while Barbara Forrest and Paul R. Gross have stated critically: 'Their public relations tricks are up to date and skillful; they know how to manipulate the media.'²⁵ Surely, Forrest and Gross explain, such mass communications have become 'all too effective' in convincing audiences of

²⁰ Toumey, *God's Own*, 48-49.

²¹ Hee-Joo Park, "The Politics of Anti-Creationism: The Committees of Correspondence," *Journal of the History of Biology* 33, no. 2 (2000); Jon D. Miller, Eugenie C. Scott, and Shinji Okamoto, "Public Acceptance of Evolution," *Science* 313, no. 5788 (2006); Plutzer and Berkman, "Evolution, Creationism."; James W. Fraser, *Between Church and State: Religion and Public Education in a Multicultural America* (New York: St. Martin's Press, 1999).

²² Bowler, *Monkey Trials*, 214-15; Barbara Forrest, "The Wedge at Work: How Intelligent Design Creationism Is Wedging Its Way into the Cultural and Academic Mainstream," in *Intelligent Design Creationism and Its Critics: Philosophical, Theological, and Scientific Perspectives*, ed. Robert T. Pennock (Cambridge: MIT Press, 2001), 22-27.

²³ Karl W. Giberson, *Saving Darwin: How to Be a Christian and Believe in Evolution* (New York: Harper Collins, 2008), 142.

²⁴ Simon Coleman and Leslie Carlin, "The Cultures of Creationism: Shifting Boundaries of Belief, Knowledge and Nationhood," in *The Cultures of Creationism: Anti-Evolutionism in English-Speaking Countries*, ed. Simon Coleman and Leslie Carlin (Hants: Aldershot, 2004), 2.

²⁵ Numbers, *The Creationists*, 396; Barbara Forrest and Paul R. Gross, *Creationism's Trojan Horse: The Wedge of Intelligent Design* (New York: Oxford University Press, 2004), 9.

their antievolutionist premises.²⁶ Likewise, Eugenie C. Scott and Glenn Branch note that ‘instead of attempting to persuade the scholarly community, ID proponents bypass scientists and go directly to the general public, where they have been much more successful.’²⁷ For that reason it has been said that the populist dissemination of such antievolutionist messages has helped to cause advocates of the theory of evolution to steadily lose ‘the hearts and minds of millions of Americans whose interest in science did not extend much beyond making sure that it did not undermine their faith in God as the creator of the universe.’²⁸

Such observations call out for systematic analysis, as they hint at some of the reasons for the popular ascendancy of antievolutionist groups, and touch upon the theorized efficacy of EW mass persuasion campaigns. However, while some scholars have briefly noted the importance of media within the EW, and have even described antievolutionists as propagandists, comprehensive studies of EW mass media *as* propaganda are virtually nonexistent.²⁹ The current project seeks to fill this investigative void by contending that propaganda is a key piece of the modern EW puzzle.³⁰ In particular, this study utilizes a neutral definition of the term, and non-normative methods of propaganda analysis, to examine the persuasive attributes of Evolution Wars mass media. It is essential to note that the goal is not to critique the veracity of antievolutionist claims, or to judge the philosophical, scientific, and theological substance of such arguments. This has already been done elsewhere.

²⁶ Forrest and Gross, *Creationism's Trojan*, 13.

²⁷ Scott and Branch, eds., *Not In*, 23.

²⁸ Karl W. Giberson and Mariano Artigas, *Oracles of Science: Celebrity Scientist Versus God and Religion* (New York: Oxford University Press, 2007), 13-14.

²⁹ Numbers, *The Creationists*, 365.

³⁰ In 1985 Richard Stempien and Sarah Coleman conducted a preliminary study of creationist propaganda that featured a number of methodological similarities with those exhibited throughout this project. However, while Stempien and Colman's venture provided an introductory examination of EW propaganda, there has remained a serious dearth of comparable analyses, as well as the need to update and build upon its basic investigative approach to further confirm its findings. See: Richard Stempien and Sarah Coleman, "Processes of Persuasion: The Case of Creation Science," *Review of Religious Research* 27, no. 2 (1985).

Instead of evaluating whether the ideas expressed in antievolutionist mass communications are *valid* or *invalid*, the objective is to determine whether they are *persuasive*.³¹ Thus, the aim is to explain the continued success of antievolutionism and the EW global expansion in terms of persuasive devices exhibited throughout widely distributed mass media. With this in mind, the project's central hypothesis can be stated as follows:

H1: Propaganda is an important component of the EW. Its sociological significance is not merely derived from the merits of its communicated arguments, but by the degree of persuasiveness affiliated with these assertions in the context of mass media.

In association with H1, this study further contends that EW propaganda incorporates an abundance of persuasive elements. These elements include various characteristics and persuasion techniques that have been successfully utilized in contemporary marketing campaigns, and which have been empirically substantiated by a host of persuasion studies. Specifically, these factors include properties that can, in certain circumstances, actuate relatively automatic persuasion responses. As a result, it is necessary to examine whether antievolutionist mass media includes persuasion constituents that have been demonstrated to affect audiences. While researchers have scrutinized the scientific accuracy and theological cogency of EW communications, it may be just as vital to investigate whether they feature such distinct persuasive qualities. Therefore, this project's second hypothesis is:

³¹ It should be also iterated that the goal is *not* to analyze how popular media, such as news reporting, may be reporting on science-religion, while also influencing the EW through an inordinate focus on antievolutionism. For more on this important subject, see: Sharon Dunwoody, "Scientists, Journalists, and the Meaning of Uncertainty," in *Communicating Uncertainty: Media Coverage of New and Controversial Science*, ed. Sharon M. Friedman, Sharon Dunwoody, and Carol L. Rogers (Mahwah: Lawrence Erlbaum Associates, 1999); Chris Mooney and Matthew C. Nisbet, "Undoing Darwin," *Columbia Journalism Review* 44, no. 3 (2005); Jame Schaefer, "Reporting Complexity: Science and Religion," in *Quoting God: How Media Shape Ideas About Religion and Culture*, ed. Claire Hoertz Badaracco (Waco: Baylor University Press, 2005); Joe Williams, "Fairness and Pressure Advocacy in Controversial Science," in *Quoting God: How Media Shape Ideas About Religion and Culture*, ed. Claire Hoertz Badaracco (Waco: Baylor University Press, 2005); Jason Rosenhouse and Glenn Branch, "Media Coverage of "Intelligent Design"," *BioScience* 56, no. 3 (2006); Scott, *Evolution vs.*, 303-05.

H2: EW propaganda contains persuasive attributes in sizeable quantities. These persuasive elements have the ability to conceivably influence audiences irrespective of the quality of the arguments with which they are linked.

Finally, this study asserts that if persuasive factors can be identified throughout antievolutionist mass communications, these features demonstrate how propaganda may be functioning within the Evolution Wars as persuasive media. That is, the incident rates of specific persuasive elements in antievolutionists materials discloses the foremost persuasion themes that are being articulated to EW audiences, while also providing insights into why and how such communications may be persuasive to audiences:

H3: The occurrence and distribution of persuasive attributes throughout EW propaganda reveal the specific persuasion foci of antievolutionist organizations, and exhibit potential ways in which such mass media can influence message recipients.

To address these hypotheses, the propaganda materials disseminated by three leading EW organizations from 2009-11 will be systematically examined, and then compared with each other as well as a control sample. These three EW groups include the Institute for Creation Research (ICR), Answers in Genesis (AiG), and the Center for Science and Culture (CSC).

1.2 The Darwin-Sceptics and EW Propaganda

The current EW are rooted in the expansion of various forms of antievolutionism, or Darwin-scepticism, throughout the latter half of the 20th century.³²

³² The idioms “Darwin-sceptic” and “Darwin-scepticism” are utilized here as synonyms for the terms antievolutionist and antievolutionism. Members of the groups being analyzed occasionally describe themselves using these categories, and in some respects, they are apposite designations. This is because representatives of each organization are not actually opposed to every single facet of evolution, but instead specifically reject Darwinism and its associated concepts. It should be noted that while Darwin-sceptics are primarily concerned with combating evolutionary theory, antievolutionism is also commonly associated with the following issues: global-warming, the possibility extraterrestrial life, abortion, home-schooling, and stem-cell research. See: David Klinghoffer, "Who Is James Le Fanu? Part II: The Book to Buy for Your Darwin-Devoted Friends," Center for Science and Culture, http://www.evolutionnews.org/2009/04/who_is_james_le_fanu_part_ii_t019671.html; Lawrence E. Ford,

This rise of Darwin-scepticism began with the ‘renaissance’ of Christian *Young Earth Creationism* (YEC) throughout the United States.³³ While it is important to note that ‘YEC is not monolithic,’ its adherents generally ascribe to the following propositions: The age of the universe is between 6,000 to 10,000 years; Noah’s flood is responsible for most fossiliferous strata; Evolution from primordial organic molecules to humans did not occur; God created specific ‘kinds’ of animals, which have micro-evolved into related forms, but do not macro-evolve into entirely new species; and, Evolution is an atheistic supposition, which is in direct opposition to theism.³⁴ Similar descriptions of YEC have been offered in numerous studies, which also associate its American resurgence with the work of one influential figure: Henry M. Morris.³⁵

One of the ways that Morris helped to facilitate the revival of Young Earth Creationism was through the proficient use of media communications.³⁶ Notably, Christian Darwin-scepticism has a long history of utilizing mass media in the 20th century, including pamphlets written and distributed by William Jennings Bryan, as well as cartoons designed to ‘demonize evolution’ which were published around the time of the Scopes trial.³⁷ However, the contemporary Evolution Wars and their propaganda truly begun with Morris’ broadcasting efforts, and the publication of a

"Werner Arber: An Honest Evolutionist?," *Acts & Facts* 38, no. 6 (2009); Robert Crowther, "Academic Elites Don't Appreciate Uppity Scientists Who Buck the Consensus," Center for Science and Culture, http://www.evolutionnews.org/2010/09/here_come_more_threats_to037901.html.

³³ Toumey, *God's Own*, 31-48.

³⁴ Roberts, *Evangelicals and*, 167.

³⁵ Scott, *Evolution vs.*, 57, 66-68; Numbers, *The Creationists*, 6-14, 217-25, 34-38; Thomas Dixon, *Science and Religion: A Very Short Introduction* (New York: Oxford University Press, 2008), 87-93; Robert T. Pennock, *Tower of Babel: The Evidence against the New Creationism* (Cambridge: MIT Press, 1999), 10-14; Kristi L. Bowman, "Seeing Government Purpose through the Objective Observer's Eyes: The Evolution-Intelligent Design Debates," *Harvard Journal of Law & Public Policy* 29, no. 2: 431-32; Eugenie C. Scott and Glenn Branch, "Antievolutionism: Changes and Continuities," *BioScience* 53, no. 3 (2003): 283; Scott, "Antievolution and," 267-72; Giberson, *Saving Darwin*, 130- 37.

³⁶ Bowler, *Monkey Trials*, 207-11.

³⁷ William Jennings Bryan, *The Menace of Darwinism* (New York: Fleming H. Revell, 1922); Edward B. Davis, "Science and Religious Fundamentalism in the 1920s," *American Scientist* 93, no. 5 (2005); —, "Fundamentalist Cartoons, Modernist Pamphlets, and the Religious Image of Science in the Scopes Era," in *Religion and the Culture of Print in Modern America*, ed. Charles L. Cohen and Paul S. Boyer (Madison: University of Wisconsin Press, 2008).

seminal creationist text entitled *The Genesis Flood*.³⁸ This book, which Morris co-authored with John C. Whitcomb, was published in 1961; at the beginning of a decade which many thought would mark the demise of creationism's public influence in America. In fact, by the end of the 50s American Darwin-scepticism was waning, and during the 60's both Tennessee and Arkansas repealed their antievolution laws. One Scientific American writer went so far as to hail this 'The End of the Monkey Way.'³⁹ However, *The Genesis Flood* was well received within America's conservative Christian communities, and in 1963 the Creation Research Society was formed by Morris and nine other creationists. Morris was intent on reaching the masses with antievolutionist messages, and as Numbers explains:

Throughout the 1960s Morris aggressively marketed his brand of creationism in a variety of packages: a series of Sunday-school lessons, a text for youth groups, and a collection of articles he had published in such popular evangelical journals as *His* (Inter-Varsity Christian Fellowship), *Collegiate Challenge* (Campus Crusade for Christ), and *Christian Life Magazine*, an interdenominational monthly.⁴⁰

In the early 1970s, this civil engineering professor went on to help launch the Institute for Creation Research, which has subsequently been credited with establishing 'the basic infrastructure of the modern creationist movement.'⁴¹ ICR was unique in pioneering one of the first professional teams of antievolutionists, and it has always incorporated considerable mass media efforts. Described as 'the most important messenger for bringing creationism to the public,' ICR now produces multiple radio programs broadcasted on nearly 1,600 radio stations around the globe, *Acts & Facts* magazine delivered to over 200,000 recipients each month, its *Impact* journal, tracts,

³⁸ Numbers, *The Creationists*, 51-52.

³⁹ Toumey, *God's Own*, 35.

⁴⁰ Numbers, *The Creationists*, 236.

⁴¹ Toumey, *God's Own*, 35.

books, DVD's, and daily *Days of Praise* devotionals.⁴² Furthermore, the majority of these media are also accessible on ICR's regularly updated website which has been in operation since 1995 and receives approximately 80,000 unique visitors every month.⁴³ As ICR's Director of Communications makes clear, this online presence represents a particularly important facet of the organization's communications enterprises:

With ICR's emphasis on disseminating science information, the Internet is one of the best tools we have for getting the right information out to teachers, pastors, science students, researchers, and many more people who need it. This is why ICR is committed to utilizing this tool in the most effective means possible.⁴⁴

Another of the Institute for Creation Research's leaders has explained of the internet, 'Judging by the thousands of personal testimonies and emails we have received, it is clear God has abundantly blessed this vital aspect of ICR's ministry.'⁴⁵ These types of media ventures have continued to form a significant volume of propaganda in the EW, and they have acted as the archetypes of modern worldwide YEC communications endeavours.

ICR characterizes itself as 'the premier institution in the creation science movement,' which is 'dedicated to equipping believers with truth and knowledge to strengthen their faith and to be prepared to minister to the people around them.'⁴⁶ Its Director of Donor Relations emphasizes that a chief goal of ICR is to persuade audiences, and that this 'intent to persuade is driven by awareness that truth will "set free" the hearer and "open the eyes" of those who yearn for knowledge.' In fact, one of ICR's mandates is to be 'persuasive and bold in our global presentations, whether in

⁴² *Ibid.*, 113.

⁴³ "icr.org," Compete, <http://siteanalytics.compete.com/icr.org/>.

⁴⁴ Lawrence E. Ford, "2008: Laying the Groundwork for Growth," *Acts&Facts* 38, no. 1 (2009): 5.

⁴⁵ Henry Morris IV, "Gift Legacy," *Acts&Facts* 38, no. 8 (2009): 21.

⁴⁶ Christine Dao, "ICR Offers New Biblical Apologetics Degree," *Acts & Facts* 38, no. 8 (2009).

person, through our writings, or through whatever media the Lord permits.⁴⁷ This involves spreading YEC ‘by every means available,’ and spending millions of dollars to distribute ICR materials across the globe.⁴⁸ To accomplish this objective, over 1.5 million dollars of ICR’s program expenses, which were over 5 million dollars per year from 2009-2010, and \$4,547,657 in 2011, are exclusively devoted simply to providing free *Acts&Facts* magazines and Christian devotional materials to worldwide audiences.⁴⁹ *Acts&Facts* is the Institute for Creation Research’s premier pro-YEC publication, and from its inception in the 1970s, to its appearance on icr.org, the magazine has remained a crucial medium for reaching audiences. In many ways its articles typify the messages found in all of the organization’s media, and for this reason, every edition of *Acts&Facts* published from 2009-2011 will be analyzed as ICR’s contribution to EW propaganda.

While ICR has remained a media titan in the EW, it may be argued that AiG has actually become the most prominent Young Earth Creationist organization on the planet. This is reflected in the organization’s \$17,041,887 program expenses, which far surpasses ICR’s monetary expenditures.⁵⁰ Nonetheless, both institutions share a common history, since AiG’s founder, Ken A. Ham, began working with ICR in 1987 after moving to the United States from Australia.⁵¹ Described as ‘America’s leading creationist,’ Ham established AiG after resigning from ICR in 1994, though both organizations have continued to work together, and often feature the same contributors in their media broadcasts.⁵² Like the Institute for Creation Research, one of AiG’s

⁴⁷ Henry Morris, III., "Communicating Certainty," *Acts & Facts* 40, no. 6 (2011): 4, 5.

⁴⁸ Lawrence E. Ford, "Communicating Like the Old Masters," *Acts & Facts* 40, no. 6 (2011): 3.

⁴⁹ Henry Morris IV, "The Stewardship of Talents," *Acts & Facts* 38, no. 7 (2009); "Institute for Creation Research," Charity Navigator, <http://www.charitynavigator.org/index.cfm?bay=search.summary&orgid=7485>.

⁵⁰ "Answers in Genesis," AiG,

<http://www.charitynavigator.org/index.cfm?bay=search.summary&orgid=5214>.

⁵¹ Ken Ham, "The History of Aig through July 2012," <http://www.answersingenesis.org/about/history>.

⁵² Giberson, *Saving Darwin*, 20.

principal aims has involved circulating YEC materials worldwide in numerous languages, and the organization uses a myriad of communications mediums to reach international audiences.

Answers in Genesis boasts thousands of employees, and its website receives over 190,000 unique visitors every month.⁵³ In fact, in 2000 Ham claimed that its website was ranked as one of the top 1% in the world for overall visits.⁵⁴ Notoriously, AiG opened a twenty-seven million dollar, 70,000 ft² Creation Museum in Petersburg, Kentucky in 2007, and it is currently raising over 24 million dollars to build *Ark Encounter*; a Noah's Ark inspired theme park. Along with its magazine, *Answers*, AiG also produces tracts, books, DVD's, an internationally transmitted radio program hosted on over 850 stations, a plethora of streaming videos-on-demand, cartoons, online articles for children, teaching curricula, and media messages from Ham himself. *Answers* magazine was first published in 2006 and it currently has over 75,000 regular subscribers to its hardcopy releases, while its articles are also a main feature on AiG's website.⁵⁵ Moreover, it has received sixteen awards from the Evangelical Press Association, and its contents reflect every aspect of AiG's YEC message.⁵⁶ For this reason, articles appearing in this magazine's 2009-11 editions will be investigated within this project.

Following YEC's revival in the 1960s, another form of Darwin-scepticism emerged in the United States that has since garnered its own international following. Referred to as ID, its fundamental premise is that the complex biological adaptations, especially at the intracellular level, could not have resulted from natural selection or any other entirely materialistic process. Instead, the appearance of such biochemical

⁵³ Ibid., 21; "Answersingenesi.Org," Compete <http://siteanalytics.compete.com/answersingenesi.org/>.

⁵⁴ Ken Ham, "Top 1% on the Web!," AiG, <http://www.answersingenesi.org/articles/2000/12/13/top-of-the-web>.

⁵⁵ Dale T. Mason, "The First Five Years: A Brief Report," *Answers* 6, no. 3 (2011).

⁵⁶ "About Answers Magazine," AiG, <http://www.answersingenesi.org/articles/am/about/>.

intricacies necessitates the intervention of a supernatural designer, and can be best explained as the work of an intelligent architect. The expansion of this type of antievolutionism has been marked by appearance of new ID groups around the world, and as one Center for Science and Culture contributor boasts:

An often-heard criticism of intelligent design claims that it is exclusively an American phenomenon, since presumably the rest of the world is too smart to fall for the stuff. Of course this is nonsense. ID is making impressive strides in Europe and Asia. As I can report from personal experience, the future looks particularly bright in the United Kingdom.⁵⁷

Though many studies have equated Intelligent Design with YEC, designating it ‘stealth creationism,’ ‘neocreationism,’ or even ‘Creationism-lite,’ it should be recognized that ID rejects Young Earth Creationism while simultaneously denying the scientific validity of evolution.⁵⁸ Though ID truly gained prominence in the 90s through the work of Philip E. Johnson, its origins can be linked back to the publication of three important books published in the 1980s: *The Mystery of Life’s Origin, Origin Science, a Proposal for the Creation-Evolutionist Controversy*, and the high school biology textbook, *Of Pandas and People*.⁵⁹

The CSC was originally founded in 1996 as the Center for the Renewal of Science and Culture, and as an arm of the Discovery Institute, it now represents the

⁵⁷ Jonathan M., "The Year in Review: Intelligent Design in the Uk," Center for Science and Culture, http://www.evolutionnews.org/2011/12/the_year_in_rev054561.html.

⁵⁸ See: Pennock, *Tower of*, 28-31; William A. Dembski and Michael Ruse, eds., *Debating Design: From Darwin to DNA* (Cambridge: Cambridge University Press, 2004), 33-36; Forrest and Gross, *Creationism’s Trojan*, 16-23; Eugenie C. Scott, "The Once and Future Intelligent Design," in *Not in Our Classrooms: Why Intelligent Design Is Wrong for Our Schools*, ed. Eugenie C. Scott and Glenn Branch (Boston: Beacon Press, 2006), 24-25; Sahotra Sarkar, *Doubting Darwin?: Creationist Designs on Evolution* (Oxford: Blackwell, 2007), 2; Barbara Forrest, "Still Creationism after All These Years: Understanding and Counteracting Intelligent Design," *Integrative and Comparative Biology* 48, no. 2 (2008): 2-3; Michael Ruse, *The Evolution Wars: A Guide to the Debates* (Millerton: Grey House, 2008), 127; Scott, *Evolution vs.*, 122-23.

⁵⁹ See: Roberts, *Evangelicals and*, 193-94; Scott, *Evolution vs.*, 122-23; Forrest and Gross, *Creationism’s Trojan*, 16-23; Forrest, "The Wedge," 6-15.

world's largest and most well-funded ID organization.⁶⁰ One of CSC's leading ambitions, which has been pursued at a 'head-spinning pace,' involves using its appreciable financial resources for 'publicity and opinion making' by generating ID materials intended to steer audiences away from evolutionary theory.⁶¹ This has constituted publishing numerous books, hosting conferences, creating teacher training programs, developing ID-centred school curricula, producing magazine advertisements, and establishing an increasingly prominent online presence. Such online efforts consist of internet banners, podcasts that receive 500,000 downloads per year, and several web pages, including CSC's *Evolution News and Views* site.⁶² *News and Views*, which is one of the most visited ID links on the World Wide Web that is also networked with other Discover Institute/CSC pages, features articles written by CSC members and many other prominent ID allies.⁶³ As a result, its 2009-11 contents echo the main suppositions of the organization, and the fundamental Intelligent Design messages regularly communicated to audiences.

The years 2009-2011 were characterized by several notable EW incidents that also fuelled the mass communications efforts of ICR, AiG, and CSC. 2009, of course, represented the bicentennial of Charles Darwin's birth, and the 150th publication anniversary of his seminal text *On the Origin of Species*. This "Year of Darwin" actually motivated antievolutionists, who referred to it as 'The Year of Opportunity,' because it provided ideal opportunities to capitalize on Darwinism's media spotlight.⁶⁴ 2009 also witnessed legal trials and school board votes in the state of Texas regarding

⁶⁰ Forrest, "The Wedge," 16-23; "The Center for Science and Culture," Discovery Institute, <http://www.discovery.org/csc/aboutCSC.php>; Forrest and Gross, *Creationism's Trojan*, 148-50; Lurquin and Stone, *Evolution and*, 182-83; Young and Largent, *Evolution and*, 270.

⁶¹ Forrest, "The Wedge," 43; Forrest and Gross, *Creationism's Trojan*, 154.

⁶² Casey Luskin, "Circumventing the Post-Dover Media Blackout," CSC, http://www.evolutionnews.org/2011/12/circumventing_t054541.html; *evolutionnews.org*, (Compete, 2012).

⁶³ "Help Support Discovery Institute in 2010," CSC, http://www.evolutionnews.org/2010/12/help_support_discovery_institu042051.html; *evolutionnews.org*.

⁶⁴ Dale Mason and Ken Ham, "Year of Opportunity," *Answers* 4, no. 1 (2009).

the teaching of evolution, and CSC's program director saw his book *Signature in the Cell* published, which went on to be named a *Times Literary Supplement* 'Book of the Year.'⁶⁵ During these three years Answers in Genesis also received media attention for its plans to build the Ark Encounter theme park, while ICR celebrated its 40th anniversary, and went to court over its ability to grant MSc degrees. Furthermore, academic freedom bills associated with ID were contemplated throughout America, the Discovery Institute attempted to initiate an ID research journal called *Bio-Complexity*, and the UK's Centre for Intelligent Design was launched. Consequently, the Evolution Wars were alive and well during 2009-11, and all three organizations sustained considerable media efforts throughout this period.

1.3 Project Overview

In order to systematically examine EW mass media disseminated from 2009-11, Chapter Two of this project will first delineate what is meant by the contentious term 'propaganda.' This will involve surveying the historical development of the word as a religious, academic, and popular concept. Through this overview, an operationalized definition will be formulated, establishing the study's distinctly neutral rendering of the term. The same definition also reveals apposite methodologies that can be used for propaganda analysis, which are detailed throughout Chapter Three. Specifically, a tripartite methodological framework for propaganda research will be advanced that integrates communication studies, persuasion research, and the sociology of knowledge. Chapters Four, Five, and Six subsequently utilize this investigative lattice to supply comprehensive analyses of the most widespread persuasive features exhibited throughout ICR, AiG, and Center for Science and Culture materials. These extensive chapters report on this study's primary quantitative data and detailed findings; imparting

⁶⁵ Ibid.

a comprehensive synopsis of the ways each group is persuasively communicating to global audiences. Chapter Seven then contrasts each group's figures with a control group to help establish observational significance, and provide a context with which to conceptualize the plausible media effects and branding influences fostered by EW mass communications. Finally, Chapter Eight will reassess hypotheses H1-3 in light of the project's observations, and reflect upon propaganda's significance in the EW.

Collectively then, this thesis will supply much needed perspectives on Darwin-sceptic mass media and the Evolution Wars's worldwide proliferation.

CHAPTER TWO

Our Age of Propaganda: Operationalizing a Research Definition

But what *is* propaganda? The definers do not agree.

Frank E. Lumley⁶⁶

Admittedly, propaganda is hard to define. It is broad and fluid. Nevertheless, we can mark its boundaries.

Gorham Munson⁶⁷

2.1 A Message-Dense Bombardment: The Necessity for Propaganda Research

Anthony R. Pratkanis and Elliot Aronson have explained that ‘Every day we are bombarded with one persuasive communication after another.’⁶⁸ Our daily lives function in a ‘message-dense’ environment, and thus, ‘For better or worse, ours is an *age of propaganda*.’⁶⁹ Analogous claims have been made by scholars in numerous academic fields over the past 100 years. Edward L. Bernays, the pioneer of public relations studies, declared in 1928 that propaganda exists ‘on all sides of us,’ and that it ‘is here to stay.’⁷⁰ 34 years later the French polymath Jacques Ellul likewise asserted that ‘Propaganda, by whatever name we may call it, has become a very general phenomenon in the modern world.’⁷¹ Correspondingly, A. Peter Foulkes contended that propaganda has now become ‘world-wide and all-pervasive,’⁷² while Jay Black has stated more recently that ‘Propaganda is inevitable in today’s media mix,’ and, ‘It is not

⁶⁶ Frederick E. Lumley, *The Propaganda Menace* (New York: Century, 1933), 42.

⁶⁷ Gorham Munson, *12 Decisive Battles of the Mind: The Story of Propaganda During the Christian Era with Abridged Versions of Texts That Have Shaped History* (New York: Greystone Press, 1942), 13.

⁶⁸ Anthony R. Pratkanis and Elliot Aronson, *Age of Propaganda: Everyday Use and Abuse of Persuasion* (New York: W.H. Freeman and Company, 2001), 7.

⁶⁹ *Ibid.*, 7, 14.

⁷⁰ Edward L. Bernays, *Propaganda* (Brooklyn: Ig Publishing, 2005 [1928]), 53, 54.

⁷¹ Jacques Ellul, *Propaganda: The Formation of Men’s Attitudes*, trans. Konrad Kellen and Jean Lerner (New York: Alfred A. Knopf, 1972 [1962]), ix.

⁷² A. Peter Foulkes, *Literature and Propaganda* (London: Methuen, 1983), 1.

a question of “if” our society and its institutions engage in propaganda; it is rather a question of “how.”⁷³

In acknowledging that the 20th a 21st centuries may very well constitute an *Age of Propaganda*, it would seem fitting that significant research delineating what propaganda actually is, and how it is employed, should readily exist. However, though numerous propaganda studies have been completed over the past century, many scholars have identified a serious dearth of academic analysis and educational materials devoted to its understanding.⁷⁴ Stanley B. Cunningham has noted that in 20 years of postsecondary teaching he found that academically ‘there was surprisingly little when it came to a conceptual analysis of what propaganda is or how we should describe it.’⁷⁵ Similarly, Kevin Moloney has contended that British academia has often disregarded propaganda as simply “‘froth,” “workaday deceit,” “a victory of presentation over content,” just “spin.”⁷⁶ Nonetheless, despite the apparent scarcity of research, the significance and frequency of phenomena described as propaganda cannot be ignored. This is especially the case as propaganda may affect present-day sociopolitical exchanges, including modern science-religion discourse and the EW. Indeed, propaganda’s importance has been emphasized by many contemporary scholars, who have acknowledged that currently ‘mass media are literally omnipresent and all-pervasive,’ providing ‘ever growing opportunities for governments and companies to manipulate, control and even shape our minds.’⁷⁷ Nicholas O’Shaughnessy has even

⁷³ Jay Black, "The Ethics of Propaganda and the Propaganda of Ethics," in *The Handbook of Mass Media Ethics*, ed. Lee Wilkins and Clifford G. Christians (New York: Routledge, 2009), 130.

⁷⁴ Garth S. Jowett and Victoria O’Donnell, *Propaganda and Persuasion*, 5th ed. (London: Sage, 2012), xiii.

⁷⁵ Stanley B. Cunningham, *The Idea of Propaganda: A Reconstruction* (Westport: Praeger, 2002), ix.

⁷⁶ Note: Here Moloney is discussing “Public Relations,” however, as he repeatedly makes clear, PR is propaganda. Kevin Moloney, *Rethinking Public Relations: Pr Propaganda and Democracy*, 2nd ed. (Abingdon: Routledge, 2006), 3.

⁷⁷ Karl A. E. Enenkel and Ilja Leonard Pfeijffer, "Introduction," in *The Manipulative Mode: Political Propaganda in Antiquity a Collection of Case Studies*, ed. Karl A. E. Enenkel and Ilja Leonard Pfeijffer (Leiden and Boston: Brill, 2005), 1.

gone so far as to state that propaganda ‘has over-determined our history and over-mastered our present time’ to the degree that ‘propaganda is the guiding hand of history: wherever persuasion was critical to the survival of the regimes or institutions, or the attainment of radical social objectives.’⁷⁸ Though this is a relatively extreme assessment of propaganda’s historical, it does appear as though we do in fact live in an Age of Propaganda. Also, before we can study it we must formulate its definition.

2.2 *Catching the Greased Pig: The Difficulties of Defining Propaganda*

One of the most crucial tasks of researching propaganda lies in operationalizing the term, for as Douglas E. Cowan has noted, failing to do so seriously hinders its use as an adequate ‘analytic tool.’⁷⁹ Unfortunately, the ‘definition of “propaganda” is not settled,’ even though, ‘the use of this word is as current as ever.’⁸⁰ While the word is often utilized its actual connotations are complex, and as C. Carey has colourfully stated, ‘Defining propaganda is a bit like trying to catch a greased pig: slippery.’⁸¹ This *slippery* nature is owed in part to the sheer quantity of definitions that have been proposed for the term, such that it often truly does appear as though there are ‘as many definitions of propaganda as there are definers.’⁸² In fact, while surveying the plethora of definitions, and the apparent differences existing between them, several researchers have claimed that propaganda has become a rather opaque and useless research category.⁸³ However, a profusion of definitions does not necessarily imply a total

⁷⁸ John O’Shaughnessy and Nicholas O’Shaughnessy, "The Death and Life of Propaganda," *Journal of Public Affairs* 12, no. 1 (2012): 29.

⁷⁹ Douglas E. Cowan, "Contested Spaces: Movement, Countermovement, and E-Space Propaganda," in *Religion Online: Finding Faith on the Internet*, ed. Lorne L. Dawson and Douglas E. Cowan (New York: Routledge, 2004), 259.

⁸⁰ Randal Marlin, *Propaganda and the Ethics of Persuasion* (Peterborough: Broadview Press, 2002), 15.

⁸¹ C. Carey, "Propaganda and Competition in Athenian Oratory," in *The Manipulative Mode: Political Propaganda in Antiquity a Collection of Case Studies*, ed. Karl A. E. Enenkel and Ilja Leonard Pfeijffer (Leiden and Boston: Brill, 2005), 65.

⁸² Alex S. Edelstein, *Total Propaganda: From Mass Culture to Popular Culture* (New Jersey: Lawrence Erlbaum, 1997), 13.

⁸³ Marlin, *Propaganda and*, 1; Cunningham, *The Idea*, 3, 15, 38-44.

contradiction of each classification, nor does it negate the potency of the word for research purposes.

Even so, while the surfeit of definitions does not repudiate the term, it *can* serve to profoundly confuse assessments of propaganda and cripple its analysis.⁸⁴ One of the most significant problems to emerge from multiple definitions is related to variations in specificity that can occur between characterizations.⁸⁵ That is, disparate meanings of propaganda can develop because ‘definitions are too all-encompassing or conversely that they are overtly narrow and as such fail to provide a suitably general term for universal usage.’⁸⁶ The propaganda researcher faces the challenge of defining the term so that it maintains precision, and yet still functions as a general identifier of phenomena. Reciprocally, characterizations of propaganda must not lose specificity to the degree of becoming ‘unwieldy,’ and thus make the conception of propaganda ‘difficult to isolate, identify, and understand.’⁸⁷

In addition to the plenitude of academic definitions, researchers must also contend with popular perceptions of the term. ‘In mainstream discourse,’ explains Mark A. Wollaeger, “‘propaganda’ is regularly used to dismiss purportedly documentary accounts for their deceptive inaccuracy or deliberate bias, as if “‘propaganda’ were the accepted name for the capacious category of politically motivated falsehood.’⁸⁸ Unmistakably, propaganda is oft considered simply ‘a dirty word.’⁸⁹ This provokes significant questions concerning whether the term can even be used descriptively and non-normatively for research analysis. ‘Is it,’ asks Cunningham, ‘just a word we use to

⁸⁴ Douglas E. Cowan, “‘Bearing False Witness’: Propaganda, Reality Maintenance, and Christian Anticult Apologetics” (University of Calgary, 1999), 129-30.

⁸⁵ Charles R. Hoffer, “A Sociological Analysis of Propaganda,” *Social Forces* 20, no. 4 (1942): 445.

⁸⁶ David R. Willcox, *Propaganda, the Press and Conflict: The Gulf War and Kosovo* (Abingdon: Routledge, 2005), 11.

⁸⁷ Cunningham, *The Idea*, 14.

⁸⁸ Mark A. Wollaeger, *Modernism, Media, and Propaganda: British Narrative from 1900 to 1945* (Princeton and Woodstock: Princeton University Press, 2006), 1.

⁸⁹ Cunningham, *The Idea*, 3.

evaluate, deride, and dismiss certain kinds of unwelcomed discourse?’ Does it ‘really help to illustrate a special aspect of social reality,’ and is it truly ‘a valid social science category?’⁹⁰ In light of these uncertainties, it is evident that the task of defining propaganda befalls additional complications. Though such encumbrances will be examined later, it is helpful to recognize here that dismissing the term outright because of its common vernacular is not necessarily beneficial. Merely designating all propaganda as negative because of everyday parlance can be problematic, for as Wollaeger advances, ‘one person’s propaganda is another person’s information.’⁹¹

With these potential complications in mind it is apparent that composing a functional definition of propaganda for research purposes is a formidable task. As one propaganda researcher perspicaciously noted during WWII:

Even a cursory examination of the term ‘propaganda’ will reveal the fact that it is widely used in a variety of ways by a great many people. It occurs in newspapers, casual conversation, and in scientific discussion with a readiness that bespeaks complete understanding of the word. But as soon as comparisons are made of the definitions which are stated or implied, it becomes clear that there are many different ideas regarding what is meant by propaganda.⁹²

Thus, Leonard Doob, the former Sterling Professor Emeritus of Psychology at Yale University, contended that ‘a clear-cut definition of propaganda is neither possible nor desirable.’⁹³ Doob’s position, however, appears unduly cynical, and the repercussions of such a stance threaten the systematic study of propaganda from the very outset. To deny a definition obfuscates that which is being examined and presents further difficulties, for as Cunningham notes, failing to derive a functional definition of the

⁹⁰ Ibid., 12.

⁹¹ Wollaeger, *Modernism, Media*, 1, 12.

⁹² Hoffer, "A Sociological," 445.

⁹³ Leonard W. Doob, "Propaganda," in *International Encyclopaedia of Communications*, ed. Erik Barnouw (Oxford: Oxford University Press, 1989), 375.

term debilitates research.⁹⁴ In order to avoid such incongruity the present study will first examine the historical development of the term, and then canvass the most significant 20th and 21st century interpretations of propaganda. Once these have been assayed an operational definition will be formulated in order to consider propaganda in the EW.

2.3 *Congregat de Propaganda Fide: Origins of the Term*

The current use of the term propaganda, a word of ‘relatively recent origin’⁹⁵ that may have first been used in English during the 18th century,⁹⁶ finds its roots grafted within the Catholic Counter-Reformation. Following the Council of Trent the Vatican began new efforts to secure the Church’s position in both the New World and Europe through the centralisation and promotion of Catholic missionary initiatives. Various scholars, such as Lindley Fraser, have associated the idea of propaganda specifically with Pope Gregory XIII, as he commissioned three cardinals to examine and propagate foreign Catholic enterprises.⁹⁷ However, Pope Gregory XV is most often concatenated with the naissance of the term, for in 1622 he drafted the bull *Inscrutabilis Divinae*. This decree authorized the centralisation of Catholic missions, as well as the international aggrandizement of the Catholic Church and its tenants. Through this the *Sacra Congregatio de Propaganda Fide* was founded.⁹⁸

The function of the term within Gregory XV’s charge is revealed in the Latin word *propago*, ‘meaning to extend, enlarge, increase, carry forward, advance, spread.’⁹⁹ This Latin expression refers to the natural reproduction of plants or animals, and was not used by the Church to imply the spread of falsehoods or the excessive manipulation

⁹⁴ Cunningham, *The Idea*, 59.

⁹⁵ Aronson, *Age of*, 11.

⁹⁶ Erwin W. Fellows, "'Propaganda: History of a Word,'" *American Speech* 34, no. 3 (1959): 182.

⁹⁷ Lindley Fraser, *Propaganda* (London: Oxford University Press, 1957), 22-23.

⁹⁸ Cunningham, *The Idea*, 15-17; Jowett and O'Donnell, *Propaganda and*, 2; Aronson, *Age of*, 11.

⁹⁹ Munson, *12 Decisive*, 11.

of cultures.¹⁰⁰ For instance, Michael A. Mullett has articulated that the Congregatio was not necessarily concerned with ‘the cultural Europeanization of native peoples’ or ‘cultural imperialism as well as Christian conversion.’¹⁰¹ Thus, he refers to a translation of a 1659 *Propaganda Fide* text, which was printed for the instruction of missionaries:

Do not regard it as your task, and do not bring any pressure to bear on the peoples, to change their manners, customs, and uses, unless they are evidently contrary to religion and sound morals... [Do not introduce European values] to them, but only the faith, which does not despise or destroy the manners, customs of any people, always supposing that they are not evil, but rather wishes to see them preserved unharmed.¹⁰²

As Mark C. Miller explains, ‘Far from denoting lies, half-truths, selective history or any other tricks,’ the initial implications of the word were in fact the ‘total opposite of deceptions.’¹⁰³ It is evident that the Catholic Church considered this 17th century propaganda initiative to be an appreciably moral enterprise.¹⁰⁴ Certainly, because it was associated with a strategic counter-Protestant initiative, ‘The word *propaganda* thus took on a negative connotation in Protestant countries,’ while within Catholic regions of the world it denoted a positive meaning ‘similar to that of *education* or *preaching*.’¹⁰⁵

FIGURE 2.1
The Header of an 18th Century *Inscrutabilis Divinae* Text¹⁰⁶

Erectio Congregat. de Propaganda Fide .
GREGORIUS EPISCOPUS
SERVUS SERVORUM DEI
Ad perpetuam rei memoriam .

¹⁰⁰ Fellows, "Propaganda," 182.

¹⁰¹ Michael A. Mullett, *The Catholic Reformation* (London: Routledge, 1999), 191.

¹⁰² *Ibid.*, 191-92.

¹⁰³ Mark C. Miller, "Introduction," in *Propaganda* (Brooklyn: Ig Publishing, 2005 [1928]), 9.

¹⁰⁴ James E. Combs and Dan Nimmo, *The New Propaganda: The Dictatorship of Palaver in Contemporary Politics* (New York and London: Longman, 1993), 201.

¹⁰⁵ Aronson, *Age of*, 11.

¹⁰⁶ University of Notre Dame, "Inscrutabili Divinae," University of Notre Dame Archives, <http://classic.archives.nd.edu/bull.htm>. (Accessed March 15, 2009)

However, though the term's etymology may lie within the Counter-Reformation, it is evident that contemporary understandings of propaganda have transitioned well beyond these historical constructs. Throughout the 18th and 19th centuries references to the term began to evolve away from its original positive appropriations to overtly negative connotations. Furthermore, the term began to develop into an increasingly military-associated concept, and then later became a largely political category.¹⁰⁷ Thus, Fraser cogently declared in 1957 of the original Catholic meaning of propaganda, 'As such, and very paradoxically, it is *not* primarily concerned with "propaganda" in the present-day sense of the word.'¹⁰⁸ It is with this in mind that the current study will now examine the evolution of the term's definitions within the 20th and 21st centuries.

2.4 The 20th Century Spark: WWI and the Development of Propaganda Studies

Though the word propaganda frequently appears in contemporary political rhetoric and news broadcasts, it was employed far less during the 19th and the early 20th centuries.¹⁰⁹ However, in Europe and North America the Great War animated fervent interest in the term, its meaning, and its practice. Miller notes, 'Prior to World War I, the word *propaganda* was little-used in English, except by certain social activists and close observers of the Vatican.'¹¹⁰ In fact, previous to the Great War '*propaganda* was

¹⁰⁷ Fellows, "Propaganda," 188.

¹⁰⁸ Fraser, *Propaganda*, 22-23.

¹⁰⁹ The OED provides a valuable list of early references to the word propaganda, including a 1790 quotation that is often considered to be one of the first negative uses of the term. Another early negative reference to propaganda, appearing in the 1842 edition of the *Encyclopedia of Science*, is cited by Jowett. In addition to publications produced by, or referring to, the Catholic Church, the author of this study also found an 1880 reference to 'The Propaganda of Health' in the *British Medical Journal*, along with negative uses of the term in the same journal associated with antivaccination and antivivisection propaganda throughout the late 19th Century. Furthermore, an 1884 negative report of Islamic religious propaganda was found in the journal *Science*. See: "The Propaganda of Health," *The British Medical Journal* 1, no. 1011 (1880): 745; "The Antivaccination Propaganda," *The British Medical Journal* 2, no. 1960 (1898): 246-47; Kenelm E. Digby, "The Antivivisectionist Propaganda," *The British Medical Journal* 2, no. 1974 (1898): 1375; W. H. Dall, "A Mussulman Propaganda," *Science* 4, no. 93 (1884): 457-59; "Propaganda, N.," in *OED Online* (Oxford University Press, 2012); Garth S. Jowett, "Propaganda and Communication: The Re-Emergence of a Research Tradition," *Journal of Communication* 37, no. 1 (1987): 97.

¹¹⁰ Miller, "Introduction," 10-11. (his italics)

a term so unimportant that there is no definition for it in the great 1911 *Encyclopaedia Britannica*,¹¹¹ although an entry for the word was first included the *New English Dictionary* in 1908.¹¹² However, following the Great War new media tactics and technologies employed by governments on all sides of the conflict for mass persuasion were brought into sharp relief. In the words of O'Shaughnessy, during the early 20th century '[m]ethodologies, technologies and causes coalesce in an incendiary combination' to spark unique propaganda approaches and analysis.¹¹³ Near the beginning of WWI Britain had established the War Propaganda Bureau, which was soon followed by the genesis of similar institutions in other nations.¹¹⁴ Throughout the war years 'pictorial magazines, radio, cinema, and telegraphic news services gave a whole new dimension to the speed and reach of propaganda as well as great powers of orchestration.'¹¹⁵ As David R. Willcox explains, 'The widespread employment of methods to alter public opinion stimulated both interest in its usefulness and fears about its powers to manipulate the public.'¹¹⁶ Thus, while the concept of propaganda existed previous to the Great War, 'it was not until 1915 that governments first systematically deployed the entire range of modern media to rouse their populations to fanatical assent.'¹¹⁷

Consequently, the aftermath, or aftertaste, of the Great War's mass media campaigns roused a new focus on propaganda research. In 1927 Harold D. Lasswell, a pioneering communications theorist who expressed fear of propaganda's persuasive abilities, brusquely described this newfound curiosity: 'These people probe the

¹¹¹ Ibid. (his italics)

¹¹² "Propaganda, N.."

¹¹³ O'Shaughnessy and O'Shaughnessy, "The Death," 32.

¹¹⁴ Sarabeth A. Smith, "What's Old is New Again: Terrorism and the Growing Need to Revisit the Prohibition on Propaganda," *Syracuse Journal of International Law and Commerce* 37, no. 299 (2010): 309.

¹¹⁵ Marlin, *Propaganda and*, 62.

¹¹⁶ Willcox, *Propaganda, the*, 11-12.

¹¹⁷ Miller, "Introduction," 11.

mysteries of propaganda with that compound of admiration and chagrin with which the victims of a new gambling trick demand to have the thing explained.¹¹⁸ The advent of these mass media campaigns marshalled in a fresh awareness of propaganda, described by Lasswell as a ‘Propaganda Consciousness,’¹¹⁹ which resulted from the recent exposure to communications that ‘combined the aggressive passions of nationalism with machine-age scales of mass production and distribution.’¹²⁰ In 1920 this propaganda consciousness was galvanized by George Creel’s book *How We Advertised America*. During the war Creel had led the Committee on Public Information, an independent civilian propaganda service established by Woodrow Wilson, which became America’s first true propaganda ministry.¹²¹ In his book, Creel expressed how the committee successfully enlisted sophisticated mass media campaigns to garner American public support for the war effort.

During the same period, representatives of the League of Nations concluded that propaganda had been a crucial stimulus of the Great War, and many theorists believed that it had significantly influenced its outcome.¹²² In a similar vein Adolf Hitler wrote that propaganda interested him greatly, due in part to the apparent superiority and potent effects he believed enemy war propaganda had actuated during the War.¹²³ Following WWI and the Bolshevik Revolution, the Soviet Union continued to increase its own propaganda machinery, while new fascist states considered propaganda to be an

¹¹⁸ Harold D. Lasswell, *Propaganda Techniques in the World War* (New York: Alfred A. Knopf, 1927), 2.

¹¹⁹ ———, "The Study and Practice of Propaganda," in *Propaganda and Promotional Activities: An Annotated Bibliography*, ed. Harold D. Lasswell, Ralph D. Casey, and Bruce Lannes Smith (Minneapolis: University of Minnesota Press, 1935).

¹²⁰ Brett Gary, *The Nervous Liberals: Propaganda Anxieties from World War I to the Cold War* (New York: Columbia University Press, 1999), 1.

¹²¹ Alan Axelrod, *Selling the Great War: The Making of American Propaganda* (New York: Palgrave Macmillan, 2009), x.

¹²² Smith, "What’s Old," 309.

¹²³ Adolf Hitler, *Mein Kampf* (Munchen: Eher-Verlag, 1943 [1925, 1927]), 193.

instrumental tool for the task of ruling.¹²⁴ During this time the academy often deemed propaganda to be simply a negative contrivance requiring extensive study, while others characterized propaganda as an indispensable apparatus for the functioning of modern democratic societies. Whether motivated through awe, fear, anger, or admiration, the cessation of the Great War marked the beginning of a new stage of propaganda; a stage in which propaganda's meaning, methods, and effects would be vigorously evaluated as never before.

FIGURE 2.2
French and American WWI War Bond Posters¹²⁵



2.4.1 Post-WWI Definitions

Following WWI one of the first noteworthy texts published on the topic of propaganda was Walter Lippmann's *Public Opinion*. Lippmann has been described as 'a man of enormous influence on American life as a journalist, public philosopher, and

¹²⁴ Howard Woolston, "Propaganda in Soviet Russia," *The American Journal of Sociology* 38, no. 1 (1932); Jowett, "Propaganda and," 100; Colin Moore, *Propaganda Prints: A History of Art in the Service of Social and Political Change* (London: A&C Black Publishers, 2010), 123-30.

¹²⁵ Marcel Falter, "Pour Le Suprême Effort," Royal Alberta Museum, <http://www.royalalbertamuseum.ca/vexhibit/warpost/english/post10.htm>; John Warner Norton, "Keep These Off the U.S.A.," The Royal Alberta Museum, <http://www.royalalbertamuseum.ca/vexhibit/warpost/english/post4.htm>.

trusted advisor to several U.S. presidents,' while also being credited with laying the foundations of modern communications studies.¹²⁶ Additionally, he is generally deemed the researcher that truly codified present-day notions of propaganda.¹²⁷

Lippmann had worked as a government propagandist during the war, which acutely motivated his devotion to the subject.¹²⁸ He theorized that it was 'pictures inside the heads' of individuals, such as images 'of themselves, of others, of their needs, purposes, and relationship,' which fuel people to action.¹²⁹ Though these mental pictures are not necessarily accurate portrayals of objective reality, they compose portraits, or subjective *perceptions of reality*, that endorse particular behaviour from individuals. As Lippmann iterates: 'We shall assume that what each man does is based not on direct and certain knowledge, but on pictures made by himself or given to him.'¹³⁰ Propaganda is the manipulation of these formative pictures to create what he identifies as a 'pseudo-environment,' or a 'counterfeit of reality,' that promotes actions in people desired by the propagandist. This formulates the basis of his brief definition of the term: 'But what is propaganda, if not the effort to alter the picture to which men respond, to substitute one social pattern for another?'¹³¹

Within three years of Lippmann's seminal text Adolf Hitler published *Mein Kampf*, which included two chapters dedicated to propaganda. Described as having the 'unique distinction of being a shrewd theorist of propaganda, as well as its ultimate

¹²⁶ Timothy Richard Glander, *Origins of Mass Communications Research During the American Cold War: Educational Effects and Contemporary Implications* (Mahwah: Lawrence Erlbaum Associates, 2000), 30.

¹²⁷ Anne-Marie Brady, *Marketing Dictatorship: Propaganda and Thought Work in Contemporary China* (Lanham: Rowman & Littlefield, 2007), 67; Wollaeger, *Modernism, Media*, 25; Everett M. Rogers, "Theoretical Diversity in Political Communication," in *Handbook of Political Communication Research*, ed. Lynda Lee Kaid (Mahwah: Lawrence Erlbaum Associates, 2004), 4.

¹²⁸ Wollaeger, *Modernism, Media*, 25; David M. Kennedy, *Over Here: The First World War and American Society* (New York: Oxford University Press, 2004), 91; Ronald Steel, *Walter Lippmann and the American Century* (New Brunswick and New Jersey: Transaction Publishers, 1999), 141-44.

¹²⁹ Walter Lippmann, *Public Opinion* (New York: Free Press, 1997 [1922]), 29.

¹³⁰ *Ibid.*, 25.

¹³¹ *Ibid.*, 26.

practitioner,' Hitler was embittered by Germany's WWI defeat, and professed that the miscarriage of German propaganda efforts spurred him to examine how it should be employed.¹³² 'It was because the complete failure of the German side's entire reconnaissance/information system, which was particularly obvious to every soldier,' wrote Hitler, 'that I became motivated with a great urgency to deal with the subject-matter of propaganda.'¹³³ While describing propaganda as a truly frightful weapon when it is used in the hands of an expert, he further explained that it should be addressed exclusively to the masses.¹³⁴ Hence, he noted, 'The operation of propaganda does not depend on the scientific/academic training of individuals but in demonstrating to the masses certain facts, events, needs, etc.'¹³⁵ He further argued that the art of propaganda 'lies totally in communicating matters so clearly, and in a first-rate manner, as to produce a general conviction of the truthfulness of a fact, the necessity of an event, and the correctness of something which is inevitable.'¹³⁶ To Hitler this should fundamentally be a project of persuading the masses through emotional influence, with concerted and repetitive sloganeering. In many ways the essence of propaganda was characterized not by the scientific or academic validity of its arguments, but *how* these arguments are persuasively expressed to the public in a convincing manner.

Though Hitler's writings and influence would permanently affect later conceptions of the term, the consummation of his propaganda fervour was not truly realized until the rise of National Socialism in Germany. These Nazi propaganda efforts have remained a significant topic of propaganda research, and some controversy has

¹³² Nicholas O'Shaughnessy, "Selling Hitler: Propaganda and the Nazi Brand," *Journal of Public Affairs* 9(2009): 57.

¹³³ Hitler, *Mein Kampf*, 193. (my translation)

¹³⁴ *Ibid.*, 196.

¹³⁵ *Ibid.*, 197. (my translation)

¹³⁶ *Ibid.* (my translation)

remained concerning the true efficacy of the Third Reich's media campaigns.¹³⁷ Even so, it is apparent that propaganda was an important element of Hitler's Germany, which often shaped command decisions. As O'Shaughnessy explains, for the Third Reich

[p]ropaganda was both an organizational ethos and an operational programme. Nothing in the Reich was created without reference to propaganda values, everything from the design of Berlin Tempelhof airport which mimicked the outline of a German eagle, to the so-called miracle weapons, the V1s and V2s, which had no military value but, for the Nazis, great propaganda worth in the terrorizing of their enemies... Military strategy was itself an exercise in propaganda, as with the battle of Stalingrad and the decision to hold it to the last because of its symbolic resonances: the propaganda dictated the political and military strategy rather than the other way round.¹³⁸

In advance of Hitler's rise to power, Harold D. Lasswell's work in the latter half of the 1920s significantly influenced propaganda analysis, and his *Propaganda Technique in the World War* has been referred to as 'the first attempt to systematically define propaganda to assure some degree of validity and reliability in studies of the phenomenon.'¹³⁹ Lasswell's authoritative definition states:

Propaganda refers solely to the control of opinion by significant symbols, or, to speak more concretely and less accurately, by stories, rumours, reports, pictures and other forms of social communication. Propaganda is concerned with the management of opinions and attitudes by the direct manipulation of social suggestion rather than by altering other conditions in the environment or in the organism.¹⁴⁰

¹³⁷ See: Ernest K. Bramsted, *Goebbels and National Socialist Propaganda, 1925-1945* (East Lansing: Michigan State University Press, 1965); Jeffrey Herf, "The 'Jewish War': Goebbels and the Antisemitic Campaigns of the Nazi Propaganda Ministry," *Holocaust Genocide Studies* 19, no. 1 (2005); Robert Edwin Herzstein, *The War That Hitler Won: The Most Infamous Propaganda Campaign in History* (New York: Putnam, 1978); Gerhard Paul, *Aufstand Der Bilder: Die Ns-Propaganda Vor 1933*, 2nd ed. (Bonn: Verlag J.H.W. Dietz Nachf., 1992); David Welch, *Nazi Propaganda: The Power and the Limitations* (London: Croom Helm, 1983); ———, *The Third Reich: Politics and Propaganda*, 2nd ed. (New York: Routledge, 2007); Julius Yourman, "Propaganda Techniques within Nazi Germany," *Journal of Educational Sociology* 13, no. 3 (1939); Alexander L. George, *Propaganda Analysis: A Study of Inferences Made from Nazi Propaganda in World War 2* (Evanston: Row, Peterson, 1959); O'Shaughnessy, "Selling Hitler."

¹³⁸ O'Shaughnessy and O'Shaughnessy, "The Death," 33.

¹³⁹ Black, "The Ethics," 123.

¹⁴⁰ Lasswell, *Propaganda Techniques*, 4.

The inclusion of symbols within Lasswell's definition became instrumental for later understandings of propaganda. These symbols have been vaguely portrayed as 'words, and word substitutes like pictures and gestures,' which he described in later work as 'whatever has meaning or significance in any sense.'¹⁴¹ Such symbols are used in propaganda for 'strengthening attitudes which facilitate the desired goal and toward weakening attitudes which obstruct it.'¹⁴² Additionally, propaganda symbol manipulation serves to disseminate contentious ideas because Lasswell argued, 'The spread of controversial attitudes *is* propaganda.'¹⁴³

Lasswell defined propaganda from a relatively neutral stance, for as Barbara Hirschfelder-Ascher has cogently stated, 'The breadth of his definition of propaganda, as symbol manipulation to shape opinion, would clearly encompass positive efforts such as civic education, public mobilization for the common good over individual selfishness, or efforts to convince people of an aggressor nation to abandon an unjust aggression.'¹⁴⁴ While Lasswell claimed that 'actual propaganda, wherever studied, has a large element of the fake in it,'¹⁴⁵ he also later asserted it may be 'one of the most powerful contributors to the growth of civilization on the North American continent.'¹⁴⁶ Likewise, many contemporaries of Lasswell, such as Edward L. Bernays, asserted that "'Propaganda" in its proper meaning is a perfectly wholesome word, of honest parentage, and with an honourable history.' Bernays further emphasized that whether 'propaganda is good or bad depends upon the merit of the cause urged, and the

¹⁴¹ Harold D. Lasswell and Abraham Kaplan, *Power and Society: A Framework for Political Inquiry* (New Haven: Yale University Press, 1950), 10.

¹⁴² Harold D. Lasswell and Dorothy Blumenstock, *World Revolutionary Propaganda: A Chicago Study* (New York and London: Alfred A. Knopf, 1939), 21.

¹⁴³ Harold D. Lasswell, "The Person: Subject and Object of Propaganda," *Annals of the American Academy of Political and Social Science* 179(1935): 189. (my italics)

¹⁴⁴ Barbara Hirschfelder-Ascher, *Revitalizing Political Psychology: The Legacy of Harold D. Lasswell* (Mahwah: Lawrence Erlbaum Associates, 2005), 62.

¹⁴⁵ Lasswell, *Propaganda Techniques*, 206.

¹⁴⁶ Harold D. Lasswell, *Democracy through Public Opinion* (Chicago: George Banta, 1941), 36.

correctness of the information published.’¹⁴⁷ From this neutral standpoint he defined propaganda as ‘a consistent, enduring effort to create or shape events to influence the relations of the public to an enterprise, idea or group.’¹⁴⁸ Moreover, this is not simply persuasion, but mass influence using multiple forms of communication.¹⁴⁹

It is evident that propaganda analysis in the 1920s often included such neutral definitions of the term, or relatively negative definitions that still articulated the necessity of propaganda for the maintenance of democratic states.¹⁵⁰ However, during the 1930s the insidious qualities of propaganda were often greatly emphasized. In 1933 Fredrick E. Lumley claimed that propaganda does not consist of ‘facts and soundly marshalled evidences,’ but is instead derived of ‘generalizations or conclusions’ that have ‘an emotional rather than an intellectual backing.’¹⁵¹ Propaganda’s most characteristic negative attribute was deemed to be ‘secrecy,’ or the concealment of a message’s source and purpose.¹⁵² Correspondingly, Leonard W. Doob and Edward S. Robinson’s classified propaganda as ‘the employment of non-logical, or affective appeals in the public dissemination and modification of ideas, attitudes, and beliefs.’¹⁵³ Doob further conjectured that propaganda exists ‘whenever and wherever there is a conflict within society,’ for when there is opposition, disagreement, and discord, ‘Competing groups attempt either to secure adherents from among the ranks of neutrals or of enemies, or to strengthen themselves through the use of propaganda.’¹⁵⁴ He

¹⁴⁷ Bernays, *Propaganda*, 48, 50.

¹⁴⁸ *Ibid.*, 48.

¹⁴⁹ *Ibid.*, 161.

¹⁵⁰ See: Lippmann, *Public Opinion* 16, 29, 248; Bernays, *Propaganda*, 6.

¹⁵¹ Lumley, *The Propaganda*, 147.

¹⁵² *Ibid.*, 44.

¹⁵³ Leonard W. Doob and Edward S. Robinson, "Psychology and Propaganda," *Annals of the American Academy of Political and Social Science* 179(1935): 88.

¹⁵⁴ Leonard W. Doob, *Propaganda: Its Psychology and Technique* (New York: H. Holt and Company, 1935), 77. Alfred and Elizabeth Lee also claimed that “All propaganda contains a conflict element in some form or other--either as cause, or as effect, or as both cause and effect.” Alfred M. Lee and Elizabeth B. Lee, *The Fine Art of Propaganda: A Study of Father Coughlin's Speeches* (New York: Harcourt Brace and Company, 1939), 16.

continued to represent propaganda unfavourably throughout the rest of his influential career, and later updated his 1930s definition by describing it as ‘the attempt to affect the personalities and to control the behaviour of individuals towards ends considered unscientific or of doubtful value in society.’¹⁵⁵

During the latter half of the 1930s various researchers examined propaganda and its mechanisms in an attempt to preserve the ideals of democracy. The formation of the American *Institute for Propaganda Analysis* (IPA) in 1937, and the work of British scholar A. J. Mackenzie illustrate this concern. The IPA was a non-profit organization established to inform the American public of propaganda techniques; with the intent of safeguarding democracy by educating citizens on how to properly analyze political rhetoric. Two of the IPA’s most prominent scholars, Alfred M. Lee and Elizabeth B. Lee, contended, ‘It is essential in a democratic society that young people and adults learn how to think,’ so that each citizen may ‘learn how to make up their minds.’¹⁵⁶ With this aim the IPA focussed primarily on the methods utilized by propagandists for mass persuasion, and defined propaganda as the ‘expression of opinion or action by individuals or groups deliberately designed to influence opinions or actions of other individuals or groups with reference to predetermined ends.’¹⁵⁷

Maintaining a similar esteem for democracy, A. J. Mackenzie also sought to discern the mechanisms of propaganda. He expressed that in the face of growing European totalitarianism and fascist propaganda campaigns, Britain had the responsibility of defending and sustaining democratic principles. Consequently, while he insisted that totalitarian propaganda was ‘completely amoral,’ he concurrently advocated that Britain use its own propaganda ‘to give democracies a lead, not with any bellicose intent, but with a genuine desire to place her power at the service of

¹⁵⁵ Leonard W. Doob, *Public Opinion and Propaganda* (Hamden: Archon Books, 1966), 240.

¹⁵⁶ Lee and Lee, *The Fine*, viii.

¹⁵⁷ *Ibid.*, 15.

civilization.¹⁵⁸ Intrinsic to Mackenzie's view was his contention that propaganda may subsist as an unconscious action. Thus, he defined the term as 'an attempt, either unconsciously or as part of a systematic campaign by an individual or group holding certain beliefs or desiring certain ends, to influence others to adopt identical attitudes.'¹⁵⁹ During the period that Mackenzie was writing his 1938 treatise, sociopolitical forces were rapidly building up to WWII which set the stage for the greatest propaganda operations the world had yet to experience.

2.5 WWII and Propaganda

The copious use of every accessible mass media for the purposes of influence and persuasion by both the Allies and Axis powers during WWII is well documented. Britain alone relayed thousands of hours of radio broadcasts to continental Europe, and disseminated nearly 1.5 billion pamphlets via RAF Bomber Command.¹⁶⁰ At the same time, the Third Reich's propaganda efforts were considerable, Mussolini's regime circulated vast quantities of propaganda materials, and the United States of America's WWII mass media exploits, such as its enduring poster campaigns, are infamous to this day.¹⁶¹ As Philip M. Taylor has stated, 'The Second World War witnessed the greatest propaganda battle in the history of warfare. For six years, all the participants employed propaganda on a scale that dwarfed all other conflicts, including even the First World War.'¹⁶²

¹⁵⁸ A. J. Mackenzie, *Propaganda Boom* (London: The Right Book Club, 1938), 363.

¹⁵⁹ *Ibid.*, 35.

¹⁶⁰ Tim Brooks, *British Propaganda to France, 1940-1944: Machinery, Method and Message*, ed. Philip M. Taylor, International Communications (Edinburgh: Edinburgh University Press, 2007), xvii.

¹⁶¹ See: Darlene C. Mahaney, "Propaganda Posters," *OAH Magazine of History* 16, no. 3 (2002); Welch, *The Third*; Manuela A. Williams, *Mussolini's Propaganda Abroad: Subversion in the Mediterranean and the Middle East, 1935-1940* (New York: Routledge, 2006); Aristotle A. Kallis, *Nazi Propaganda and the Second World War* (New York: Palgrave MacMillan, 2005).

¹⁶² Philip M. Taylor, *Munitions of the Mind: A History of Propaganda from the Ancient World to the Present Era*, 3rd ed. (New York: Manchester University Press, 2003), 208.

Of particular import is that while WWII marshalled in what has oft been deemed the largest expression of propaganda in history, it also advanced research into its effectiveness, as well as psychological and social psychological approaches to its analysis.¹⁶³ This was fuelled, at least in part, by mounting fears concerning propaganda's alleged capacity to influence the populace.¹⁶⁴ Certainly, during WWII the practice of propaganda 'reached a new level of scientific sophistication,' and researchers attempted to evaluate the effectiveness of mass media persuasion through empirical measurements.¹⁶⁵ Analysis of propaganda continued after the war with this added concentration, and for the first time the act of propaganda was prosecuted as an international crime during the Nuremburg Trials.¹⁶⁶ Nevertheless, academic research of propaganda dramatically atrophied within 5 years of Japan's 1945 surrender, and subsequently, 'After World War II, little agreement came about as to which definitions of propaganda were the most relevant and useful.'¹⁶⁷ Furthermore, interest in propaganda moved away from the largely military concerns that dominated wartime media campaigns, in which propaganda had as its chief purpose the necessity of spreading 'the contagion of fear among our enemies but also spread the contagion of hope, confidence and determination among our friends.'¹⁶⁸ Propaganda became increasingly researched as an apparatus of political ideology and rhetoric. Michael Sproule notes that, 'During the post-war years communications researchers touted their focus on measurable persuasive effect as providing reliable knowledge that could serve

¹⁶³ ———, *Global Communications, International Affairs and the Media since 1945* (London: Routledge, 1997), 161.

¹⁶⁴ See: "Scientist Gives Principles for Practical Propaganda," *The Science News-Letter* 22, no. 602 (1932): 266; William E. Berchtold, "The World Propaganda War," *The North American Review* 238, no. 5 (1934): 421; Yourman, "Propaganda Techniques," 148; Edward Yarnall Hartshorne, "Reactions to the Nazi Threat: A Study of Propaganda and Culture Conflict," *The Public Opinion Quarterly* 5, no. 4 (1941): 625.

¹⁶⁵ Jowett and O'Donnell, *Propaganda and*, 211.

¹⁶⁶ Smith, "What's Old," 300.

¹⁶⁷ Edelstein, *Total Propaganda*, 19.

¹⁶⁸ Holly. C. Shulman, *The Voice of America: Propaganda and Democracy, 1941-1945* (Madison: University of Wisconsin Press, 1990), 97.

the needs of the nation's policymakers.¹⁶⁹ This focus continued to develop in post-WWII propaganda analysis, before the study of propaganda began to wane in the early 1950s, not fully regaining a conspicuous place within academic research until the 1980s.

FIGURE 2.3
American and Canadian WWII Propaganda Posters¹⁷⁰



2.5.1 Definitions From WWII to the Late 1970s

During WWII Edgar Henderson offered noteworthy definitional modifications to the term in his 1943 article 'Toward a Definition of Propaganda.' This work has been credited with appreciably altering propaganda research,¹⁷¹ because while Henderson admitted that formulating a definition is difficult, he still considered propaganda to be

¹⁶⁹ J. Michael Sproule, "Social Responses to Twentieth-Century Propaganda," in *Propaganda: A Pluralistic Perspective*, ed. Ted J. Smith, III (West Port: Praeger, 1989), 16.

¹⁷⁰ Glenn Grohe, "He's Watching You," The National Archives, http://www.archives.gov/exhibits/powers_of_persuasion/hes_watching_you/images_html/hes_watching_you.html; Henry R. Eveleigh, "Allons-Y... Canadiens!: Campagne De Propagande De Guerre " Library and Archives Canada, http://collectionsCanada.gc.ca/pam_archives/index.php?fuseaction=genitem.displayItem&lang=eng&rec_nbr=2897160&back_url=%28%29.

¹⁷¹ Cunningham, *The Idea*, 80-83.

‘isolable from other phenomena and independently observable.’¹⁷² Most importantly, Henderson posited that a definition must be founded upon propaganda’s method rather than propaganda content.¹⁷³ With this in mind, Henderson stated that ‘Propaganda is any anti-rational process consisting of pressure-techniques used to induce the propagandee to commit himself, before he can think the matter over freely, to such attitudes, opinions, or acts as the propagandist desires of him.’¹⁷⁴ Though Henderson’s definition may not appear particularly original, his focus upon defining propaganda as a function of methods proved to be an influential consideration.

Despite Henderson’s work, which sought to increase definitional precision and an analytical focus on propaganda methods, the term still remained rather vague in its academic as well as popular connotations.¹⁷⁵ Only a few scholars, including Lindley Fraser, Terrance H. Qualter, as well as John C. Merrill and Ralph L. Lowenstein, attempted to plumb its definitional depths or pursue propaganda as a research category.¹⁷⁶ However, the most significant treatise to develop during this period would prove be *Propaganda: The Formation of Men’s Attitudes*, written in 1962 by the French resistance war veteran, academic, politician, and Christian leader, Jacques Ellul. Though Ellul’s conclusions have since been readily disputed, this text established itself as the premier systematic analysis of propaganda in a contemporary and technologically-imbued society.

Ellul defined propaganda as ‘a set of methods employed by an organized group that wants to bring about the active or passive participation in its actions of a mass of

¹⁷² Edgar H. Henderson, "Toward a Definition of Propaganda," *The Journal of Social Psychology* 18(1943): 73.

¹⁷³ *Ibid.*: 74.

¹⁷⁴ *Ibid.*: 83.

¹⁷⁵ Black, "The Ethics," 123.

¹⁷⁶ See: Fraser, *Propaganda*; Terrance H. Qualter, *Propaganda and Psychological Warfare* (New York: Random House, 1962); John C. Merrill and Ralph L. Lowenstein, *Media, Messages, and Men: New Perspectives in Communication* (New York: McKay, 1971).

individuals, psychologically unified through psychological manipulations and incorporated in an organization.’¹⁷⁷ It is important to note that the ideas of participation and action act as the nucleus of Ellul’s description. According to Ellul, propaganda in contemporary society is focussed upon developing *orthopraxy*, or right action, rather than *orthodoxy*. Thus, while others have approached propaganda as simply ‘dealing with beliefs or ideas,’ Ellul contended that this is incorrect, for the ‘aim of modern propaganda is no longer to modify ideas, but to provoke action.’¹⁷⁸ Though altering beliefs is necessary within this paradigm, specific action is the true goal, and action can precede and/or create belief.¹⁷⁹ Thus, he explained:

For action makes propaganda’s effect irreversible. He who acts in obedience to propaganda can never go back. He is not obliged to *believe* in that propaganda because of his past action. He is obliged to receive from it his justification and authority, without which his action will seem to him absurd or unjust, which would be intolerable. He is obliged to continue to advance in the direction indicated by propaganda, for action demands more action.¹⁸⁰

This definition was integrated with Ellul’s premise that propaganda ‘must be total,’ such that, ‘The propagandist must utilize all of the technical means at his disposal—the press, radio, TV, movies, posters, meetings, door-to-door canvassing.’¹⁸¹ Quite literally propaganda is the method of using *all* communication mediums.

While Ellul did not express a positive view of propaganda, he still advanced that propaganda fulfils individuals’ needs. The modern individual is faced with problems that are ‘beyond him in volume and intensity’ such that ‘he simply cannot grasp the

¹⁷⁷ Ellul, *Propaganda*, 61.

¹⁷⁸ *Ibid.*, 25.

¹⁷⁹ Note: Unlike many other propaganda researchers, Ellul asserted that propaganda does not necessarily try to alter people’s opinions. On the contrary, propaganda frequently serves to buttress and exacerbate pre-existing opinions, such that through propaganda individuals are “constantly reinforced in their allegiances,” so that, “They learn more and more that their group is right, that its actions are justified.” *Ibid.*, 213.

¹⁸⁰ *Ibid.*, 29.

¹⁸¹ *Ibid.*, 9.

world's economic and political problems.¹⁸² With these anxieties of contemporary life, individuals yearn for something to guide action, and the answers to questions about *how one should live, how to vote, and how to participate in society* are delivered through propaganda messages.¹⁸³ This need for guidance is catalyzed by the desire for community, since modern individuals experience a fierce 'loneliness inside the crowd.'¹⁸⁴ He argued that contemporary society is composed of distinct individuals rather than a uniform community, and as such, people ache for a sense of purpose and kinship amongst the masses. Propaganda provides a desired collective ideology, which arises from a sense of importance through common action. Additionally, as propaganda seems to fulfil these various needs, its presence and effects become self-perpetuating. Ellul rationalized, 'The individual subjected to propaganda can no longer do without it,' and 'the more propaganda there is, the more the public wants.'¹⁸⁵

Additionally, as Marlin has noted, 'One of Ellul's main contributions to the study of propaganda is his expansion of the horizons under which it is commonly viewed as a highly organized, top-down, politically motivated strategy for controlling a population.'¹⁸⁶ Ellul stretched the realm of propaganda to also include the gradual sociological diffusion of ideas and actions throughout a populace. He described this as 'sociological propaganda' which encompasses 'the group of manifestations by which any society seeks to integrate the maximum number of individuals into itself, to unify its members' behaviour according to a pattern, to spread its style of life abroad, and thus to impose itself on other groups.'¹⁸⁷ Though this is one of the most contentious and difficult aspects of Ellul's treatment of propaganda, his work assisted in developing

¹⁸² Ibid., 140.

¹⁸³ Ibid., 138.

¹⁸⁴ Ibid., 148.

¹⁸⁵ Ibid., 182.

¹⁸⁶ Marlin, *Propaganda and*, 34.

¹⁸⁷ Ellul, *Propaganda*, 62.

propaganda outside of the political sphere it was so often associated. These influential characterizations and classifications of propaganda thoroughly impacted the resurgence of propaganda studies in the 1980s.

2.6 *The Resurgence: Definitions from the 1980s Onward*

Though the propaganda efforts of WWII have often been regarded as the most significant of the 20th century, others have claimed that during the Vietnam War ‘the United States launched what was at the time the largest propaganda campaign in the history of warfare.’¹⁸⁸ Undeniably, both U.S. and North Vietnamese powers readily utilized mass media operations.¹⁸⁹ Nonetheless, many contemporary propaganda scholars note that during the mid-1950s the research of propaganda went into a state of decline until the 1980s.¹⁹⁰ Despite the work of Ellul and others, Cunningham has contended that there occurred a ‘near eclipse’ of academic propaganda research,¹⁹¹ while Black maintains that during this time propaganda became ‘a theoretically underdeveloped notion.’¹⁹² Though such appraisals may be overstated, it is apparent that from the early 1980s onward propaganda research experienced a noteworthy increase in academic attention and scholarship.

Writing at the cusp of the 1980s’ revival of propaganda studies, Thomas M. Steinfatt theorized that propaganda studies had generally been in a state of decline as a result of the ‘difficulty in reaching agreement among scholars on a useful definition of the term; useful in that the phenomenon being defined was capable of being studied, and

¹⁸⁸ Jowett and O’Donnell, *Propaganda and*, 263.

¹⁸⁹ See: "Leaflet and Money Drop," National Museum of the US Air Force, <http://www.nationalmuseum.af.mil/factsheets/factsheet.asp?id=1322>.

¹⁹⁰ Garth S. Jowett and Robert L. Heath, "Propaganda," in *Encyclopedia of Public Relations*, ed. Robert L. Heath (Thousand Oaks: Sage, 2005), 655; Jay Black, "Semantics and Ethics of Propaganda," *Journal of Mass Media Ethics* 16, no. 2/3 (2001): 126-27.

¹⁹¹ Cunningham, *The Idea*, 87.

¹⁹² Black, "The Ethics," 135.

of being distinguished from other similar terms.¹⁹³ There had developed confusion over what should be included within the construct of propaganda, and questions were asked about whether propaganda was truly a ubiquitous social phenomenon, as Ellul has suggested, or if it could be isolated to a particular set of very specific attributes and/or actions. Moreover, Cunningham has argued that the general failure of the empirical approach to the study of propaganda led to an academic disinterest in the term.¹⁹⁴ It has also been posited that the popular negative perceptions of the word marked the term as simply derogatory slang.¹⁹⁵

FIGURE 2.4
False Banknotes Air Dropped During the Vietnam War¹⁹⁶



Additionally, Steinfatt, Cunningham, and others fail to notice that the waning of propaganda analysis seems to directly coincide with a change in how media effects were interpreted during the 1950s and 60s within communication studies. It appears that direct effects media models, discussed in Chapter Three, were questioned around the same time that propaganda research experienced decline. Hence, when scholars began

¹⁹³ Thomas M. Steinfatt, "Evaluating Approaches to Propaganda Analysis," *ETC.* 36, no. 2 (1979): 157.

¹⁹⁴ Cunningham, *The Idea*, 87-92.

¹⁹⁵ Jowett, "Propaganda and," 101.

¹⁹⁶ U.S. Air Force, "500 Kip Note," National Museum of the US Air Force, <http://www.nationalmuseum.af.mil/shared/media/photodb/photos/050503-F-1234P-004.jpg>.

to doubt that mass media actually influenced audiences, and subsequently proposed limited effects models, there was also an appreciable decrease in propaganda studies. Interestingly, propaganda analysis once again received greater attention in the 1980s, following challenges to limited effects models that were made during and after the 1970s.¹⁹⁷

Even so, Ted Smith notes that despite the ‘decline of scholarly interest in propaganda analysis, one thing seems clear: It cannot be attributed to any decline in the incidence of propaganda itself.’¹⁹⁸ For that reason, while propaganda faced near ‘conceptual extinction,’ a renewed awareness of its operation in the contemporary world has revived its usefulness as an analytical category.¹⁹⁹ This resuscitation of the term has ‘painted propaganda with a wider brush that covers the canvas of media, popular culture, and politics.’²⁰⁰ It is this updated work-in-progress *painting* that will now be examined, with the intent of reviewing the most contemporary definitional strokes that have been added to its canvas.

2.6.1 Definitions From the 1980s to the Present-day

In 1986 Garth S. Jowett and Victoria O’Donnell coauthored an introductory textbook entitled *Propaganda and Persuasion*, which was followed by Jowett’s journal article “Propaganda and Communication: The Re-emergence of a Research Tradition” in 1987. These works represented a new concern for the academic study of propaganda, described as the ‘revival of interest in the role of propaganda as a tool of mass

¹⁹⁷ It appears that Jowett previously began to insinuate a similar conclusion in 1987. See: Jowett, "Propaganda and," 101.

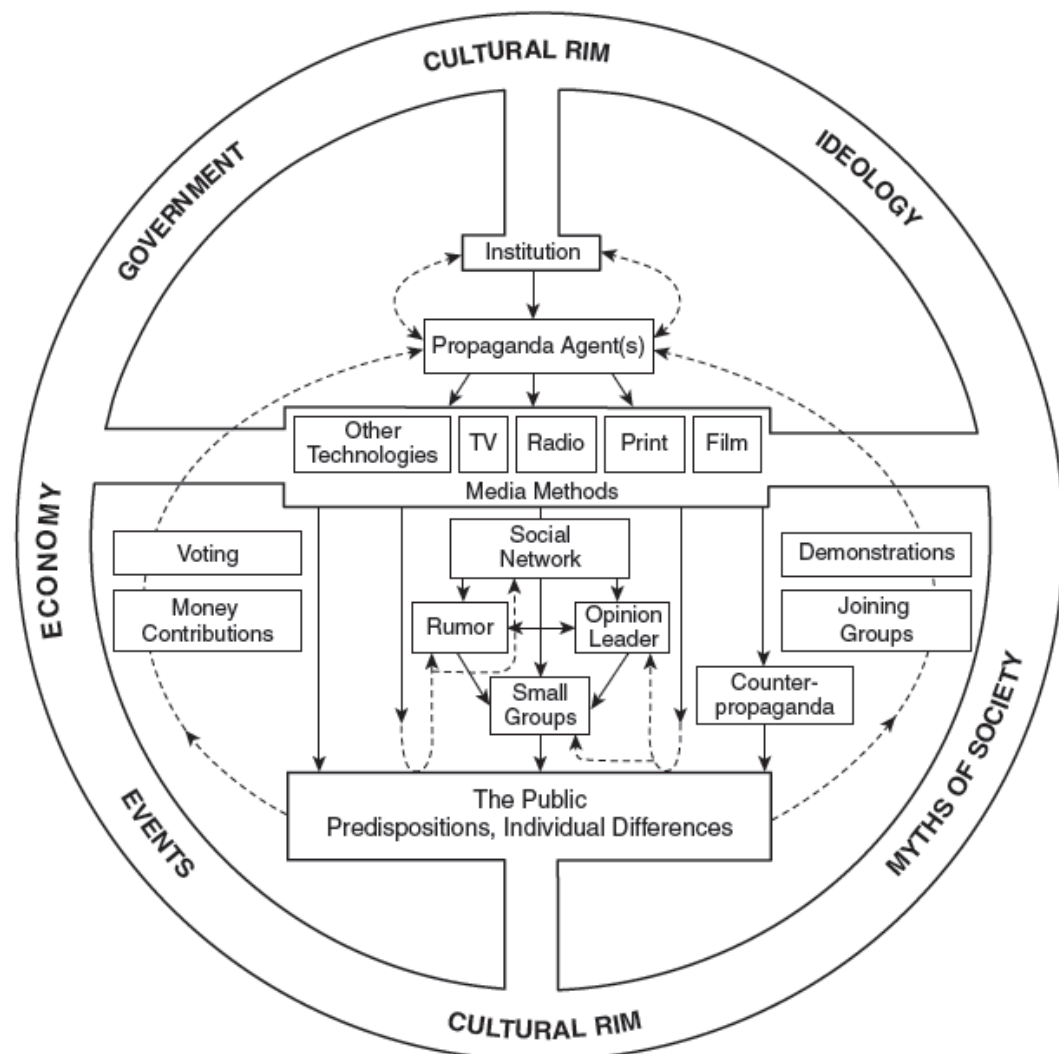
¹⁹⁸ Ted J. Smith, III, "Propaganda and the Techniques of Deception," in *Propaganda: A Pluralistic Perspective*, ed. Ted J. Smith, III (West Port: Praeger, 1989), 68.

¹⁹⁹ Note: O’Shaughnessy believes that propaganda was still underused and considered academically irrelevant in the early 21st century. Nicholas O’Shaughnessy, *Politics and Propaganda: Weapons of Mass Seduction* (Manchester: Manchester University Press, 2004), vi. (my italics)

²⁰⁰ Black, "The Ethics," 135.

persuasion.²⁰¹ Jowett and O'Donnell positioned their influential definition of propaganda within communications studies, explaining that it is 'the deliberate, systematic attempt to shape perceptions, manipulate cognitions, and direct behaviour to achieve a response that furthers the desired intent of the propagandist.'²⁰² Paralleling earlier definitions, they also stressed that as a form of communication, within a socio-historical context, propaganda 'can be depicted as a process.'²⁰³ This cyclical and interactive propaganda process is depicted in figure 2.5.

FIGURE 2.5
Jowett and O'Donnell's Model for the Process of Propaganda²⁰⁴
SOCIAL-HISTORICAL CONTEXT



²⁰¹ Jowett, "Propaganda and," 97.

²⁰² Jowett and O'Donnell, *Propaganda and*, 7.

²⁰³ *Ibid.*, 359.

²⁰⁴ *Ibid.*, 361.

According to the authors, the ‘cultural rim’ in this model denotes the necessary intrinsic elements that are employed by propaganda, such as ‘ideologies, societal myths, government, economy, social practices, and specific events that take place.’²⁰⁵ It is from this cultural rim that institutions actuate propaganda with the intent of reaching the public for their own purposes. This propaganda is facilitated via propaganda agents, who subsequently utilize available media methods to deliver the institutions’ messages. Additionally, the public may receive the propaganda messages not only from the media, but also from specific audience members that function as communicative channels within a social network. Once the public has been successfully reached with the propaganda message, the audience reciprocates with action, including voting, money contributions, joining groups, and demonstrations.

Jowett and O’Donnell’s definition is fundamentally neutral. While the authors state that there is a distinction between propaganda and the ‘free and open exchange of ideas,’ they still make it clear that propaganda ‘is not necessarily an evil thing.’²⁰⁶ Philip M. Taylor has also advanced a broad definition which is not overtly negative: ‘By propaganda, then, I mean the *deliberate* attempt to persuade people to think and behave *in a desired way*.’²⁰⁷ In this vein he has noted that it is incorrect to assume that ‘propaganda has to do with ‘good or bad,’ ‘right or wrong.’”²⁰⁸ In a sense, propaganda is merely a tool that can be used in diverse ways, on behalf of various ends. For instance, if an organization produces persuasive mass media targeting drunk driving, such as the example illustrated in figure 2.6, this may be conceived as propaganda which does *not* necessarily exemplify negative intent or evil tactics.

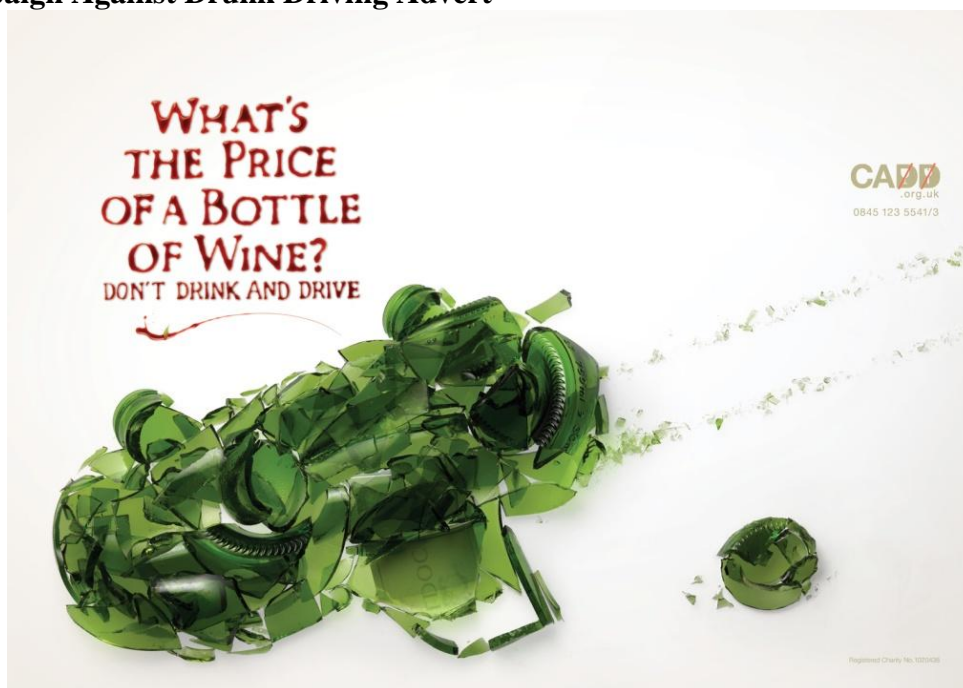
²⁰⁵ Ibid., 362.

²⁰⁶ Ibid., 17, 367.

²⁰⁷ Taylor, *Munitions of*, 6. (his italics)

²⁰⁸ David Welch, "Propaganda, Definitions of," in *Propaganda and Mass Persuasion: A Historical Encyclopedia, 1500 to the Present*, ed. Nicholas J. Cull, David Culbert, and David Welch (Santa Barbara: ABC-Clio, 2003), 317.

FIGURE 2.6
Campaign Against Drunk Driving Advert²⁰⁹



Others, such as David Welch, O'Shaughnessy, and even the United States Department of Defence, have also provided relatively neutral characterizations of the term.²¹⁰ O'Shaughnessy contends that it is incorrect to restrict propaganda's definitional borders to only negative attributes, and he emphasizes that propaganda includes an 'essential trinity' of rhetoric, the use of myth, and symbolism.²¹¹ O'Shaughnessy also explains that propaganda can include manipulation as well as deceit, and usually requires the social construction of an enemy idea or group to blame and attack.²¹² More recently, the United States Department of Defence has also provided a value-free definition of propaganda for national interests, stating that it is 'any form of communication in support of national objectives designed to influence the

²⁰⁹ Russell Ramsey, "What's the Price of a Bottle of Wine?," (London: JWT, 2010).

²¹⁰ David Welch, "Power of Propaganda," *History Today* 49(1999): 26.

²¹¹ O'Shaughnessy, *Politics and*, 1, 4-6, 65-109; Nicholas O'Shaughnessy, "Persuasion, Myth and Propaganda," *Journal of Political Marketing* 3, no. 3 (2004).

²¹² O'Shaughnessy, *Politics and*, 7, 123-27; Nicholas O'Shaughnessy, "The Social Construction of Enmity," *Journal of Political Marketing* 1, no. 1 (2002).

opinions, emotions, attitudes, or behaviour of any group in order to benefit the sponsor, either directly or indirectly.’²¹³

Alternatively, several contemporary scholars have provided negative interpretations of the term. In 1993 James E. Combs and Dan Nimmo described propaganda as ‘the mastery of all forms of palaver,’ which is essentially superficial communication, making use ‘of guile and charm.’²¹⁴ Sproule later defined propaganda as ‘the work of large organizations or groups to win over the public for special interests through a massive orchestration of attractive conclusions packaged to conceal both their persuasive purpose and lack of sound supporting reasons.’²¹⁵ Anthony R. Pratkanis and Elliot Aronson also interpret propaganda as an abuse of persuasion techniques, and the manipulation of both symbols and the psychology of its recipients. They describe propaganda as ‘the dexterous use of images, slogans, and symbols that play on our prejudices and emotions; it is the communication of a point of view with the ultimate goal of having the recipient of the appeal come to “voluntarily” accept this position as if it were his or her own.’²¹⁶

Randal Marlin and Stanley B. Cunningham have also proposed negative descriptions. Marlin classifies propaganda as ‘the organized attempt through communication to affect belief or action or inculcate attitudes in a large audience in ways that circumvent or suppress an individual’s adequately informed, rational,

²¹³ Joint Chiefs of Staff, *Department of Defense Dictionary of Military and Associated Terms*, Joint Publication 1-02 (Washington: Department of Defense, 2007), 430. Quoted in Dennis M. Murphy and James F. White, "Propaganda: Can a Word Decide a War?," *Parameters* 37, no. 3 (2007): 15. Note: As of 03/15/2012 this definition has been updated to negatively describe propaganda as an enemy activity: ‘propaganda — Any form of adversary communication, especially of a biased or misleading nature, designed to influence the opinions, emotions, attitudes, or behavior of any group in order to benefit the sponsor, either directly or indirectly.’ However, within this same updated document propaganda still finds positive connotations. For instance, the definition of *asset (intelligence)* states that this includes resources such as an “agent asset or propaganda asset.” Joint Chiefs of Staff, "Department of Defense Dictionary of Military and Associated Terms." (Washington: Department of Defense, 2012 [2010]), http://www.dtic.mil/doctrine/dod_dictionary.

²¹⁴ Combs and Nimmo, *The New*, 45.

²¹⁵ J. Michael Sproule, *Channels of Propaganda* (Bloomington: EDINFO Press, 1994), 8.

²¹⁶ Aronson, *Age of*, 11.

reflective judgement.' Propaganda contains deception, and provides 'some false or unexamined premise in the picture of reality affecting a propagandee's action.'²¹⁷

Though Cunningham is less willing to provide a definition, he does select a list of various descriptors of the term, including:

[T]he propagandist's systematic preference for lesser epistemic modalities such as attention, mere credibility, and actual belief; propaganda's inherent indifference to truth and truthfulness, knowledge and understanding; the reduction of truth or information to the status of a mere strategy or utility. Add to these notions that (episodic) intention is a common but not necessary feature; and that, in ways yet to be spelled out, propaganda is widely viewed as something that somehow reduces freedom of choice and human agency in the propagandee.²¹⁸

Regarding such negative descriptions, John Corner has more recently argued that any value-free definition of propaganda actually struggles against the historical negative associations of the term, and causes propaganda to become too broad a category for analytical purposes.²¹⁹

These definitions represent amalgams of propaganda descriptions cultivated over the last 100 years. For instance, Cowan formulates his own comprehensive description of propaganda from a broad survey and synthesis of 20th century propaganda theories:

Propaganda is a systematic, ideologically driven, action-oriented manipulation and dissemination of information, intended for a specific target audience, and intended to influence the beliefs and the behaviour of that audience in a manner consonant with the aims of the propagandist.²²⁰

This study will also attempt to advance these efforts to coalesce the foremost definitions of propaganda. Surveying the breadth of descriptions touched upon within this chapter

²¹⁷ Marlin, *Propaganda and*, 22.

²¹⁸ Cunningham, *The Idea*, 134.

²¹⁹ John Corner, "Mediated Politics, Promotional Culture and the Idea of 'Propaganda'," *Media Culture Society* 29, no. 4 (2007): 671.

²²⁰ Cowan, "Bearing False", 162.

reveals several common definitional elements from which a functional definition of propaganda will be operationalized in order to examine EW mass media campaigns.

2.7 Common Definitional Elements

The proceeding analysis reveals a number of common elements that occur throughout 20th and 21st century definitions of propaganda. These are isolated and presented in table 2.1.

TABLE 2.1
Propaganda Definitional Elements

COMMON DEFINITIONAL ELEMENTS	ELEMENT DESCRIPTIONS
1. Conflict-Related Mass Communication	<ul style="list-style-type: none"> • Propaganda is deliberate, systematic communication to vast audiences, via mass media rather than mere one-to-one correspondence.²²¹ • This mass communication arises within the context of conflict and competition, whether real or perceived.
2. Persuasion	<ul style="list-style-type: none"> • The ultimate task of propaganda is persuasion. This includes the utilization of various persuasion tactics and strategies, such as rhetorical devices, emotional appeals, spreading falsehoods, and the use of influential socio-cultural symbols.

²²¹ For a brief description of what is meant by “mass media” see: Niklas Luhmann, *The Reality of Mass Media*, trans. Kathleen Cross (Cambridge: Polity, 2000), 2.

<p>3. Attitudes, Actions, and Perceptions of Reality</p>	<ul style="list-style-type: none"> • Propaganda’s persuasion efforts are designed to impact the attitudes and actions of particular audiences within conflict/competition contexts.²²² This may entail reinforcing pre-existing attitudes and actions, or promoting new ones. • In order to influence audience attitudes/actions, propaganda attempts to shape perceptions of reality, which are intrinsically linked to behaviour and belief. This can include manufacturing and/or fostering extant cultural mythologies.
<p>4. Equivocal Ethical Judgments</p>	<ul style="list-style-type: none"> • There is no clear consensus regarding whether propaganda is essentially a positive, negative, or neutral enterprise.

This list characterizes the principal definitional components most often ascribed to propaganda. These definitional elements can help delineate which research perspectives and methodologies may be especially suited for propaganda analysis. For instance, because propaganda is described as mass communication, it would seem appropriate to employ communications studies for its examination.²²³ While such research approaches are explored in the next chapter, the task of defining propaganda requires an antecedent look at the fourth common definitional element: Equivocal Ethical Judgements. This is

²²² Attitudes have been described as ‘general evaluations people hold in regard to themselves, other people, objects, and issues,’ as well as ‘a summary evaluation of an object’ that can often influence and predict behaviour. Richard E. Petty and John T. Cacioppo, *Communication and Persuasion: Central and Peripheral Routes to Attitude Change* (New York: Springer-Verlag, 1986), 4; John O’Shaughnessy and Nicholas O’Shaughnessy, *Persuasion in Advertising* (London: Routledge, 2004), 5.

²²³ It has been said that the academic study of mass communications started with 20th Century propaganda analysis. See: David K. Perry, *Theory and Research in Mass Communication: Contexts and Consequences*, 2nd ed. (Mahwah: Lawrence Erlbaum Associates, 2002), 14-15; Daniel Riffe, Stephen Lacy, and Frederick G. Fico, *Analyzing Media Messages: Using Quantitative Content Analysis in Research*, 2nd ed. (Mahwah: Lawrence Erlbaum Associates, 2005), 11.

one of the most noteworthy variances existing throughout definitions, and its implications for propaganda research cannot be overlooked. This is because whether researchers consider propaganda to be ethically positive, neutral, or negative can appreciably affect *what* is studied and *how* it is investigated.

Positive definitions of propaganda are undoubtedly rare, though such descriptions can be found in the work of Bernays, and gleaned from those who, like Lippmann and MacKenzie, conceded that propaganda should be employed for the preservation of democratic states. On the other hand, negative depictions of propaganda tend to stress the use of censorship for mass persuasion, the promotion of unethical actions or opinions, the concealment of intent, irrational and emotionally-fuelled arguments, the circumvention of freewill, deceit or the distortion of information, infringement upon autonomous thought, the misuse of power, the rewriting or radical reinterpretation of history, and psychological manipulation.²²⁴ These negative characteristics are also linked with the idea that propaganda is deemed *argumentum ad populum*, which is often considered a fallacious means of argumentation because it appeals to the masses.²²⁵ Through such scathing descriptions the claim has been made that the *only* appropriate characterization of propaganda is negative. Thus, Cunningham has forcefully declared that propaganda 'is not ethically neutral.'²²⁶

It is apparent that propaganda campaigns often do exhibit many of the negative traits described above. For instance, the mass communications efforts of the Third Reich, which incorporated deceit, emotionally charged hate-speech, and supported a

²²⁴ Lumley, *The Propaganda*, 79; Marjorie Van de Water, "Propaganda," *The Science News-Letter* 34, no. 15 (1938): 234-35; William Albig, *Public Opinion* (New York: McGraw-Hill, 1939), 286, 93; Doob, *Public Opinion*, 240; Ellul, *Propaganda*, vii-viii, xvi-xvii, 52-61, 159-77, 80-81; Sproule, *Channels of*, 8; Cunningham, *The Idea*, 127-28, 36, 41-42, 51-53; Marlin, *Propaganda and*, 18-23, 50, 170-1; Jowett and Heath, "Propaganda," 652; Douglas Walton, *Media Argumentation: Dialectic, Persuasion, and Rhetoric* (Cambridge: Cambridge University Press, 2007), 92-96.

²²⁵ Douglas Walton, "What is Propaganda, and What Exactly is Wrong with It?," *Public Affairs Quarterly* 11, no. 4 (1997): 388-90.

²²⁶ Cunningham, *The Idea*, 176.

homicidal government, obviously seem reprehensible. However, many of the unethical components of this propaganda were also used by the Allies in WWII, and they may not be interpreted quite so pessimistically when viewed as necessary tools employed by governments trying to struggle against Adolf Hitler's forces. For example, British mass media campaigns designed to conceal or thoroughly distort information about Operation Overlord, or other vital military plans, might not be considered wholly negative. One may ask whether it is entirely unethical to employ such techniques for the preservation of millions of people in the face of a genocidal threat. Though these types of ethical questions are complex, Willcox has maintained that if 'the propagandist's cause coincides with the advancement of the whole or part of society, it cannot be wholeheartedly condemned as being of doubtful value.'²²⁷

Furthermore, propaganda is not always comprised of entirely negative qualities, and *argumentum ad populum* does not necessitate fallacious logic. Even Cunningham has conceded that while 'propaganda is conventionally and stereotypically equated with falsehoods and lies, modern propaganda behaves with far greater restraint and sophistication.'²²⁸ Moreover, Ellul alleged that true facts are integral to propaganda, and Mackenzie acknowledged that propaganda 'should contain at least a kernel of truth.'²²⁹ In the same vein, Richard A. Nelson explained that 'while propagandists often willingly lie, much of what they create is factually truthful and perceived as interesting or valuable by those who form the target audiences.'²³⁰ Indeed, during WWII Robert H. Thouless noted that propaganda may simply disseminate 'facts' without deceit or obvious malicious intent:

²²⁷ Willcox, *Propaganda, the*, 13.

²²⁸ Stanley B. Cunningham, "Smoke and Mirrors: A Confirmation of Jacques Ellul's Theory of Information Use in Propaganda," in *Propaganda: A Pluralistic Perspective*, ed. Ted J. Smith, III (New York: Praeger, 1989), 152.

²²⁹ Ellul, *Propaganda*, 52-61; Mackenzie, *Propaganda Boom*, 56.

²³⁰ Richard Alan Nelson, *A Chronology and Glossary of Propaganda in the United States* (Westport: Greenwood Press, 1996), ix.

Men's opinions may be changed by telling them a perfectly true fact that was previously unknown to them. Thus a statement that British fighting aeroplanes have shot down thirteen German bombers with a loss of seven to themselves may serve the ends of propaganda by creating confidence on our side and alarm and despondency in the enemy (if he hears it). *Yet it may be perfectly true.* This is one honest and reasonable way in which propaganda may influence opinion; by giving new and true information.²³¹

Such claims raise uncertainty as to whether propaganda should be unconditionally labelled as simply negative or unethical.

Moreover, exclusively negative definitions of propaganda may introduce acute subjectivity into the research process. For instance, as Jowett and Heath have noted regarding negative characterizations of the term, 'People often see tactics they don't like as "propaganda," whereas when they approve of mass media campaigns they call them "preaching the truth."' ²³² Walton has correspondingly explained that 'people tend to see only the arguments of their opposition as describable with this label, as if their own arguments could never be.'²³³ Since researchers are not immune to personal bias, similar conclusions could influence research enterprises such that only phenomena distinguished by analysts as being unethical, or in contradiction with their own values, may be considered propaganda. In this way the term's functionality as an analytical category deteriorates to a subjective label of 'something done by other, less scrupulous people.'²³⁴

In consideration of these difficulties various scholars have proposed neutral definitions of the term. Black explains that 'if we consider propaganda in less value-laden terms, we may recognize ways all participants in the communications exchange can proceed intelligently through the swamp, and we can make informed judgments

²³¹ Robert H. Thouless, *Straight Thinking in War Time* (London: Hodder and Stoughton, 1942), 71. (my italics)

²³² Jowett and Heath, "Propaganda," 652.

²³³ Walton, *Media Argumentation*, 92.

²³⁴ Taylor, *Munitions of*, 2.

about the ethics of particular aspects of our communications rather than indicting the entire enterprise.²³⁵ Correspondingly, A. J. MacKenzie claimed that propaganda ‘*is ethically neutral*,’²³⁶ while Taylor has noted that it is ‘neither a “good” nor a “bad” thing; it merely *is*.’²³⁷ This provides a certain definitional plasticity in the recognition that propaganda’s aims can be both ethically innocuous and sinister.²³⁸ Similarly, international law has defined propaganda in broad, neutral terms; accepting that propaganda can be used to support equally ethical or unethical goals.²³⁹ This neutral perspective was endorsed by Fraser, who explained that:

It cannot be too strongly emphasised that propaganda is as such morally neutral. The propagandist as propagandist will use whatever method he believes to be most likely to achieve the desired effect on the behaviour of his target. These methods may be in themselves evil or good, just as the objects which the propagandist hopes to achieve may be evil or good; but neither of these alternatives affects the nature of propaganda as such.

Furthermore, he contended that it is not appropriate to ‘prove an instrument to be harmful merely by showing that it is sometimes applied to evil ends.’²⁴⁰ From this perspective propaganda is defined more generally as mass media for mass persuasion, which may or may not employ questionable techniques, and which can be used by groups for various purposes that one agrees or disagrees with.

Such a neutral representation of propaganda is fundamental to the present study’s understanding of the term. With this vital distinction in mind, and in conjunction with the common elements listed above, the following definition of propaganda is tendered as the foundation upon which this research project will be assembled:

²³⁵ Black, "The Ethics," 145.

²³⁶ Mackenzie, *Propaganda Boom*, 35. (his italics)

²³⁷ Taylor, *Global Communications*, 16. (his italics)

²³⁸ Smith, "What’s Old," 300.

²³⁹ "Propaganda," in *Black’s Law Dictionary*, ed. Bryan A. Gardner (St. Paul: West, 2009), 1335.

²⁴⁰ Fraser, *Propaganda*, 11, 198.

Propaganda is deliberate and systematic mass communication, engendered by conflict, designed to persuade target audiences and influence perceptions of reality, in order to yield specific attitudes and actions.

Accepting this neutral definition will allow EW mass media resources to be effectively researched in a descriptive, rather than purely normative manner. It is also important to note that the Darwin-sceptic materials analyzed within this project all fall within the bounds of this particular definition. These media are deliberately and systematically created by antievolutionist organizations in the EW conflict, with the express purpose of persuading audiences to accept Darwin-scepticism and to turn from evolution to either YEC or ID. These materials also serve to shape perceptions of reality about evolutionary theory, and are designed to stimulate antievolutionist activity and attitudes within the Evolution Wars.

2.8 Why Propaganda?: Considering Potential Substitutes

Having formulated a neutral definition of propaganda it may be asked why this particular term is being employed instead of various potential alternatives. For instance, why not adopt another commonly used idiom, such as public relations (PR), marketing, or advertising, which also imply persuasive mass communications, but at first glance may not necessarily embody propaganda's controversial history or negative associations?²⁴¹ In answer, it should be highlighted that these terms are often used within very limited contexts, such as business communications, and they are still customarily identified as subcategories of propaganda.²⁴² For instance, PR mainly

²⁴¹ For instance the similarities between these terms are apparent when comparing a definition of PR supplied by Ann R. Carden with previous descriptions of propaganda: 'One of the main goals of public relations is to persuade an organization's target publics to adopt a certain attitude, opinion, or behavior.' Ann R. Carden, "Persuasion Theory," in *Encyclopedia of Public Relations*, ed. Robert L. Heath (Thousand Oaks: Sage, 2005), 614.

²⁴² See: Julian Petley, *Advertising* (London: Hodder Wayland, 2002), 4; Bonnie J. Knutson, "Marketing," in *Encyclopedia of Public Relations*, ed. Robert L. Heath (Thousand Oaks: Sage, 2005), 507; Iain Macrury, *Advertising* (Abingdon: Routledge, 2009), 4; Jowett, "Propaganda and," 111.

connotes attempts by businesses to foster mutually beneficial relationships with potential clientele,²⁴³ and Taylor has clarified that it is ‘a branch of propaganda, albeit a nicer way of labelling it.’²⁴⁴ Also, such terms may still evoke negative practices, as they are commonly associated with mass manipulation. For instance, in one introductory textbook on marketing, readers are told that advertisers need to ‘Ambush the Customer’ with marketing messages for the greatest effect.²⁴⁵ Such language differs little from early 20th century discourse on propaganda coercion techniques, though it is now openly subsumed under the idiom of advertising. Consequently, these potential substitutes do not implicitly avoid the negative connotations popularly associated with the word propaganda, while also generally failing to adequately encompass the gambit of activity incorporated within definitions of the term. As such, it appears that there truly is ‘no adequate substitute for *propaganda*’ without producing a new and redundant appellation.²⁴⁶ With this in mind the current project will now leave behind the crucial task of defining propaganda, and consider methods and approaches used to examine it, including: communications studies, persuasion research, and the sociology of knowledge.

²⁴³ See: Shel Holtz, *Public Relations on the Net: Winning Strategies to Inform and Influence the Media, the Investment Community, the Government, the Public, and More!*, 2nd ed. (New York: Amacon, 2002), xiii; Alison Theaker, *The Public Relations Handbook* (New York: Routledge, 2001), 3-5.

²⁴⁴ Taylor, *Munitions of*, 6.

²⁴⁵ Tom Brannan, *A Practical Guide to Integrated Marketing Communications: Planning and Developing a Strategy*, 2nd ed. (London: Kogan Page, 1998), 2-5.

²⁴⁶ Miller, "Introduction," 15. (his italics)

CHAPTER THREE

Propaganda Analysis: Formulating a Methodological Synthesis

Analysis of propaganda is a complex undertaking that requires historical research, examination of propaganda messages and media, sensitivity to audience responses, and critical scrutiny of the entire propaganda process.

Jowett and O'Donnell²⁴⁷

Don't be stampeded.
Beware of your own prejudices.
Suspend your judgment until more sides of the issue are
presented.
Analyze them.

Lee and Lee²⁴⁸

3.1 Surveying Propaganda Analysis Research Methodologies

In 1939 the IPA scholars Alfred and Elizabeth Lee asserted, 'Because the action sought by a propagandist may be beneficial or harmful to millions of people, it is necessary to focus upon his activities the same searchlight of scientific scrutiny that the scientist invites.'²⁴⁹ What Lee and Lee identified was not only the need to define propaganda, but also the exigency of systematically analyzing it. To this end they developed the 'Seven ABC's of Propaganda Analysis,' as well as their exceedingly influential list of seven propaganda devices.²⁵⁰ Essentially, this research guideline acted as a call to be aware of propaganda, as well as an appeal for the objective scrutiny of its messages. Comparable research strategies were later offered by numerous propaganda researchers, including Alexander L. George, who attempted to 'codify propaganda-

²⁴⁷ Jowett and O'Donnell, *Propaganda and*, 289.

²⁴⁸ Lee and Lee, *The Fine*, 133.

²⁴⁹ *Ibid.*, 15.

²⁵⁰ *Ibid.*, 16-18.

analysis methodology.²⁵¹ Like his IPA forerunners, George proposed a seven-fold investigative framework, and explained, ‘Propaganda analysis, or the analysis of propaganda communications, has two general purposes: (a) the summary, or selective description, of what is being said by the propagandist and (b) the interpretation of the intentions, strategy, and calculations behind propaganda communications.’²⁵² Likewise, Jowett and O’Donnell have also supplied ten elementary methodological ‘divisions for propaganda analysis,’ which reflect and significantly aggrandize the concerns found within both the IPA’s and George’s recommendations.²⁵³ In brief, their basic analytical lattice has been designed to help direct those studying propaganda, and to aid researchers in answering the following questions:

To what ends, in the context of the times, does a propaganda agent, working through an organization, reach an audience through the media while using special symbols to get a desired reaction? Furthermore, if there is opposition to the propaganda, what form does it take? Finally, how successful is the propaganda in achieving its purpose?²⁵⁴

Correspondingly, Randal Marlin has suggested that systematic propaganda analysis must answer five essential questions: What is the source?; What is the message?; Who stands to gain?; What are the techniques used to impart the message?; and, What are the contexts?²⁵⁵

While a thorough review of these general research outlines will not be pursued here, Appendix One details five analytical steps that summarize the main points found within most 20th and 21st century propaganda research plans. These steps provide a rudimentary methodological template for propaganda analysis and this project will endeavour to engage each point, though particular emphasis will be given to step #4.

²⁵¹ George, *Propaganda Analysis*, vii.

²⁵² Ibid.

²⁵³ Jowett and O’Donnell, *Propaganda and*, 290.

²⁵⁴ Ibid.

²⁵⁵ Marlin, *Propaganda and*, 302-04.

Additionally, a unique investigative framework for propaganda analysis will be established by combining three research perspectives and methodologies: communication studies, persuasion research, and the sociology of knowledge. Each of these research perspectives are derived from, and linked with, the first three definitional elements catalogued in table 2.1. The research perspectives used to formulate this project's distinctive tripartite methodology, and their associations with this study's definition of propaganda, are detailed in table 3.1. It is in utilizing this threefold approach that a new propaganda analysis framework will be developed to systematically investigate EW propaganda materials.

TABLE 3.1
Propaganda Definitional Elements and Applied Research Perspectives

COMMON DEFINITIONAL ELEMENTS	ASSOCIATED RESEARCH PERSPECTIVES
①. Conflict-Related Mass Communication	Communications Studies
②. Persuasion	Persuasion Research
③. Attitudes, Actions, and Perceptions of Reality	The Sociology of Knowledge

3.2 Communications Studies and Propaganda

Modern communications research began with investigations of propaganda during the 20th century.²⁵⁶ In fact, many architects of communications research were propaganda theorists, such as Lasswell, who explained that communication studies should be concerned with answering the following questions: ‘Who, Says What, In

²⁵⁶ Riffe, Lacy, and Fico, *Analyzing Media*, 5; Perry, *Theory and*, 14-15.

Which Channel, To Whom, With What Effect?’²⁵⁷ Though Lasswell’s outline has been criticized for being far too simplistic, and ignoring ‘the “why”’ questions, this pithy research model still encapsulates much of the field’s investigative focus.²⁵⁸ It also concisely features several of the analytical steps represented in Appendix One, and therefore, the backbone of this project’s methodological focus is inseparable from communication studies.

Two primary research interests of mass communication studies have included attempting to gauge whether media has effects on audiences, and positing mass media effects models.²⁵⁹ A preliminary examination of this research is essential for propaganda analysis because, from the outset, it offers an assessment of the conceivable impact that propaganda may or may not have. This reveals whether propaganda even has the potential to *work*, or have influence, and whether it can be considered a key element of the EW.²⁶⁰ Communications studies media effects models have varied over time, but early versions tended to stress the potentially commanding influence and control that media may have on audiences.²⁶¹ These models were based upon pessimistic sociological hypotheses of mass society and J. B. Watson’s behaviourist psychology.²⁶² Described as the “direct effects theory,” as well as the “magic bullet” and “hypodermic syringe” models, these ideas were closely linked with the widespread fear that propaganda could manipulate passive spectators, and that the masses would

²⁵⁷ Harold D. Lasswell, "The Structure and Function of Communication in Society," in *The Communication of Ideas: A Series of Addresses*, ed. Lyman Bryson, *Religion and Civilization Series* (London: Institute for Religious and Social Studies, 1948), 37.

²⁵⁸ Perry, *Theory and*, 7-8.

²⁵⁹ Elizabeth M. Perse, *Media Effects and Society* (Mahwah: Lawrence Erlbaum Associates, 2001), 199; Everett M. Rogers, "Intermedia Processes and Powerful Media Effects," in *Media Effects: Advances in Theory and Research*, ed. Jennings Bryant and Dolf Zillmann (Mahwah: Lawrence Erlbaum, 2002).

²⁶⁰ Taylor, *Global Communications*, 6.

²⁶¹ For a critical examination of the relationships between propaganda analysts and the magic bullet model see: J. Michael Sproule, "Progressive Propaganda Critics and the Magic Bullet Myth," *Critical Studies in Mass Communication* 6, no. 3 (1989).

²⁶² Yvonne Jewkes, *Media and Crime* (London: Sage, 2004), 5, 7-11.

yield mechanistically to all media stimuli.²⁶³ Lippman and Lasswell advanced this view, along with Frederic Wertham, who championed a direct media stimulus-response effects model.²⁶⁴ Essentially, mass communications were perceived as ‘something someone does to someone else.’²⁶⁵ A quintessential study used to support this view was *The Invasion from Mars*, which examined panicked reactions to Orson Wells’ 1938 radio broadcast of *War of the Worlds*.²⁶⁶

The direct effects model was later questioned as a result of continued media research, and scholars such as Joseph Klapper suggested that mass media actually has minimal influence upon audiences.²⁶⁷ Reasons for this theorized lack of impact included an audiences’ ability to choose what media messages they are exposed to, determine the attention given to media broadcasts, regulate the interpretation of media messages, and to control what is learned from communications.²⁶⁸ Furthermore, research seemed to demonstrate that media’s influence was significantly mediated by personal contacts. Specifically, opinion leaders, or people with personal influence in a population, often appear more important in changing people’s attitudes and behaviours than direct media messages. Such individuals intervene between the media’s direct messages and the audience within his/her social sphere, and provide interpretations of these communications to personal contacts.²⁶⁹ Described as “limited effects” models, this concept assumes that mass media is generally only able to reinforce pre-existing

²⁶³ Dan Laughey, *Key Themes in Media Theory* (Maidenhead: Open University Press, 2007), 21.

²⁶⁴ Frederic Wertham, *Seduction of the Innocent* (London: Museum Press, 1955).

²⁶⁵ L. John Martin, "Recent Theory on Mass Media Potential in Political Campaigns," *Annals of the American Academy of Political and Social Science* 427(1976): 126.

²⁶⁶ Hadley Cantril, Hazel Gaudet, and Herta Herzog, *The Invasion from Mars: A Study in the Psychology of Panic* (Princeton: Princeton University Press, 1940).

²⁶⁷ Joseph T. Klapper, *The Effects of Mass Communication* (New York: Free Press, 1960).

²⁶⁸ See: John Fiske, *Television Culture*, 2nd ed. (London: Routledge, 2010); ———, *Understanding Popular Culture*, 2nd ed. (London: Routledge, 2010); ———, *Reading the Popular*, 2nd ed. (London: Routledge, 2011).

²⁶⁹ Paul F. Lazarsfeld, Bernard Berelson, and Hazel Gaudet, *The People's Choice: How the Voter Makes up His Mind in a Presidential Campaign* 3rd ed. (London: Columbia University Press, 1968 [1944]); Elihu Katz and Paul F. Lazarsfeld, *Personal Influence: the Part Played by People in the Flow of Mass Communications* (New Brunswick: Transaction Publishers 2005 [1955]).

audience opinions. Rather similarly, scholars also proposed the “conditional effects” model, which likewise emphasized the audience’s power of selectivity over media content, but asserted that media’s influence is not limited merely to reinforcement. Other concepts, including the “uses and gratifications” model, also denied that audiences were simply passive recipients, and envisaged that the audience’s selectivity has much more of an influence in media effectiveness than was conceived in the direct effects model.²⁷⁰

However, as the TV-set made its way into homes across North America and Europe, many communications researchers began to re-affirm a model of stronger mass media effects, in which media are seen to influence audiences despite selectivity and individual interpretations.²⁷¹ These influences have often been described as “indirect effects,” which are subtle yet influential, and which may perform an ‘agenda-setting’ function.²⁷² This agenda-setting function does not necessarily influence audiences by directly telling individuals *what to think*, but it sets an agenda about what people actually *think about* by selecting which topics are presented in broadcasts. Mass media has also been shown to help determine the value audiences place on certain concepts, such that what is presented in media as being important eventually becomes important to audiences. In relation to this, many researchers have also focussed upon the ubiquitous and multifaceted nature of modern mass media, which causes audiences to lose media exposure selectivity in the face of incredibly pervasive mass

²⁷⁰ Elihu Katz, Jay G. Blumler, and Michael Gurevitch, "Uses and Gratifications Research," *The Public Opinion Quarterly* 37, no. 4 (1973-1974); B. Aubrey Fisher, *Perspectives on Human Communication* (New York: Macmillan, 1978), 159.

²⁷¹ Denis McQuail, "Sociology of Mass Communication," *Annual Review of Sociology* 11(1985): 104-05.

²⁷² Maxwell E. McCombs and Donald L. Shaw, "The Agenda-Setting Function of Mass Media," *Public Opinion Quarterly* 36, no. 2 (1972); Howard Eaton, Jr., "Agenda-Setting with Bi-Weekly Content Data for Three National Media," *Journalism Quarterly* 66(1989); Maxwell E. McCombs and Amy Reynolds, "News Influence on Our Pictures of the World," in *Media Effects: Advances in Theory and Research*, ed. Jennings Bryant and Dolf Zillmann (Mahwah: Lawrence Erlbaum, 2002); James W. Dearing and Everett M. Rogers, *Agenda-Setting* (Thousand Oaks: Sage, 1996); Maxwell E. McCombs, Donald L. Shaw, and David Weaver, *Communication and Democracy: Exploring the Intellectual Frontiers in Agenda-Setting Theory* (Mahwah: Lawrence Erlbaum, 1997).

communications efforts. The consequence of such contemporary media saturation is the ‘cumulative exposure’ to messages, delivered in a variety of mass media channels that collectively and enduringly shape perceptions of reality in subtle but effective ways.²⁷³

Studies also began to reveal that repeated exposure to television programs seemed to ‘cultivate assumptions’ and unrealistic fears about violence in society.²⁷⁴ This “cultivation effect” can foster a media-based form of social reality in audiences, such that those who ‘spend more time “living” in the world of television,’ for example, ‘are more likely to see the “real world” in terms of the images, values, portrayals, and ideologies that emerge through the lens of television.’²⁷⁵ Also, cognitive psychology and communications research demonstrated how media can effectively prime cognitive schemas, inducing automatic reactions and opinions from audiences.²⁷⁶ This “priming effect” operates in mass media because being exposed to various types of messages ‘activates a concept, which for a period of time increases the probability that the concept, and thoughts and memories connected with it, will come to mind again.’²⁷⁷ As Perse explains:

Effective media messages can activate certain schemas that direct attention and influence the interpretation of and reaction to the stimuli. Advertisers know, for example, that putting a kitten or a baby in a commercial for toilet paper can associate a schema that includes the attribute “soft,” which then might be associated with the product. Beliefs in the acceptability of rape and interpersonal violence can be primed through observations of violent sexual films and evaluations of people’s hostility can be primed by observations of hostile behaviors.²⁷⁸

²⁷³ Perse, *Media Effects*, 43.

²⁷⁴ George Gerbner and Larry Gross, "Living with Television: The Violence Profile," *Journal of Communication* 26, no. 2 (1976): 193.

²⁷⁵ George Gerbner et al., "Growing up with Television: Cultivation Processes," in *Media Effects: Advances in Theory and Research*, ed. Jennings Bryant and Dolf Zillmann (Mahwah: Lawrence Erlbaum, 2002), 47.

²⁷⁶ Perse, *Media Effects*, 45-48.

²⁷⁷ Douglas M. McLeod, Gerald M. Kosicki, and Jack M. McLeod, "Resurveying the Boundaries of Political Communications Effects," in *Media Effects: Advances in Theory and Research*, ed. Jennings Bryant and Dolf Zillmann (Mahwah: Lawrence Erlbaum, 2002), 228.

²⁷⁸ Perse, *Media Effects*, 48.

Consequently, such observations have reinforced stronger effects models, and have led numerous scholars to seriously question limited media effects as well as the research methodologies used to derive limited effects conclusions.²⁷⁹

While this spectrum of models conveys varying degrees of communications influence, it is apparent that each articulates at least some media effects. Contemporary research has asserted that these effects are not simply mechanistic or uniform, and are generally contingent upon numerous factors. Such factors include community interactions, group norms, opinion leaders, social identities, personal biases, and even the types of media employed.²⁸⁰ Nonetheless, while gathering empirical data on the extent of such effects can be a complicated task, certain intended and unintended media influences seem undeniable.²⁸¹ For instance, media effects studies have demonstrated assorted levels of influence linked with political media campaigns,²⁸² media violence,²⁸³

²⁷⁹ J. G. Blumler and J. M. McLeod, "Communication and Voter Turnout in Britain," in *Sociological Theory and Survey Research: Institutional Change and Social Policy in Great Britain* ed. Timothy W. Leggart (London: Sage, 1974); Todd Gitlin, "Media Sociology: The Dominant Paradigm," *Theory and Society* 6, no. 2 (1978); Rogers, "Intermedia Processes," 212.

²⁸⁰ Phyllis A. Anastasio, Karen C. Rose, and Judith Chapman, "Can the Media Create Public Opinion? A Social-Identity Approach," *Current Directions in Psychological Science* 8, no. 5 (1999): 153-54; Perry, *Theory and*, 30-31; Rogers, "Intermedia Processes," 209-11; David W. Stewart, Paulos Pavlou, and Scott Ward, "Media Influences on Marketing Communications," in *Media Effects: Advances in Theory and Research*, ed. Jennings Bryant and Dolf Zillmann (Mahwah: Lawrence Erlbaum, 2002), 358-60; Katz and Lazarsfeld, *Personal Influence*; Riffe, Lacy, and Fico, *Analyzing Media*, 14; Michael M. Franz and Travis N. Ridout, "Does Political Advertising Persuade?," *Political Behavior* 29, no. 4 (2007): 467.

²⁸¹ Perse, *Media Effects*, 1-3, 8-16; Laughhey, *Key Themes*, 20; Perry, *Theory and*, 135-36.

²⁸² Edwin Emery, "Changing Role of the Mass Media in American Politics," *Annals of the American Academy of Political and Social Science* 427(1976); Franz and Ridout, "Does Political."; Gregory A. Huber and Kevin Arceneaux, "Identifying the Persuasive Effects of Presidential Advertising," *American Journal of Political Science* 51, no. 4 (2007); Jenny Lloyd, "Positively Negative: The Impact of Negativity Upon the Political Consumer," *International Journal of Nonprofit and Voluntary Sector Marketing* 13(2008); Agnieszka Dobrzynska, André Blais, and Richard Nadeau, "Do the Media Have a Direct Impact on the Vote?: The Case of the 1997 Canadian Election," *International Journal of Public Opinion Research* 15, no. 1 (2003).

²⁸³ Linda Heath, Linda B. Bresolin, and Robert C. Rinaldi, "Effects of Media Violence on Children: A Review of the Literature," *Archives of General Psychiatry* 46, no. 4 (1989); Wendy Wood, Frank Y. Wonga, and J.Gregory Chacherea, "Effects of Media Violence on Viewers' Aggression in Unconstrained Social Interaction," *Psychological Bulletin* 109, no. 3 (1991); Brandon S. Centerwall, "Television and Violence: The Scale of the Problem and Where to Go from Here," *The Journal of the American Medical Association* 267, no. 22 (1992); Haejung Paik and George Comstock, "The Effects of Television Violence on Antisocial Behavior: A Meta-Analysis," *Communication Research* 21, no. 4 (1994); Richard B. Felson, "Mass Media Effects on Violent Behavior," *Annual Review of Sociology* 22(1996); Perry, *Theory and*, 228-40; Glenn G. Sparks and Cheri W. Sparks, "Effects of Media Violence," in *Media Effects: Advances in Theory and Research*, ed. Jennings Bryant and Dolf Zillmann (Mahwah: Lawrence Erlbaum,

and healthcare communications.²⁸⁴ Furthermore, in addition to media effects models and communications studies that recognize mass media influence, it is evident that staggering quantities of money are being spent worldwide on consumer advertising, political media campaigns, and military mass persuasion operations.²⁸⁵ One wonders if such vast amounts of capital would be devoted to mass media efforts if there wasn't at least some discernible impact. Indeed, while most people state that they are impervious to media effects, which Karen E. Dill describes as the 'Media Manipulation Denial Syndrome,' studies demonstrate that these individuals are in fact influenced by media, and that practices such as advertising have proven to be effective media influences.²⁸⁶ As Robert Levine has asked, 'Why would businesses spend a million dollars to produce a commercial for the Super Bowl and another million and a half to screen it?' His answer is simple: 'Because they have figures to show that it will probably more than pay for itself.'²⁸⁷ Such figures are often gathered from correlations between mass

2002); L. Rowell Huesmann et al., "Longitudinal Relations between Children's Exposure to TV Violence and Their Aggressive and Violent Behavior in Young Adulthood: 1977-1992," *Developmental Psychology* 39, no. 2 (2003); L. Rowell Huesmann and Laramie D. Taylor, "The Role of Media Violence in Violent Behavior," *Annual Review of Public Health* 27(2006).

²⁸⁴ Akinrinola Bankole, German Rodriguez, and Charles Westoff, "Mass Media Messages and Reproductive Behavior in Nigeria," *Journal of Biosocial Science* 28, no. 2 (1996); Roger H. Secker-Walker et al., "A Mass Media Programme to Prevent Smoking among Adolescents: Costs and Cost Effectiveness," *Tobacco Control* 6, no. 3 (1997); Robert C. Hornik, ed. *Public Health Communication: Evidence for Behavior Change* (Mahwah: Lawrence Erlbaum, 2002); Neeru Gupta, Charles Katende, and Ruth Bessinger, "Associations of Mass Media Exposure with Family Planning Attitudes and Practices in Uganda," *Studies in Family Planning* 34, no. 1 (2003); Jennifer S. Barber and William G. Axinn, "New Ideas and Fertility Limitation: The Role of Mass Media," *Journal of Marriage and Family* 66, no. 5 (2004).

²⁸⁵ Robert Levine, *The Power of Persuasion: How We're Bought and Sold* (New Jersey: John Wiley & Sons, 2003), 18; Franz and Ridout, "Does Political," 465-66; Jason Motlagh, "Why the Taliban Is Winning the Propaganda War," *Time*, <http://www.time.com/time/world/article/0,8599,1895496,00.html>.

²⁸⁶ Timothy D. Wilson, Daniel T Gilbert, and Thalia P. Wheatley, "Protecting Our Minds: The Role of Lay Beliefs," in *Metacognition: Cognitive and Social Dimensions*, ed. Vincent Y. Yzerbyt, Guy Lories, and Benoit Dardenne (London: Sage, 1998), 178; Frank R. Kardes, "The Psychology of Advertising," in *Persuasion: Psychological Insights and Perspectives*, ed. Timothy C. Brock and Melanie C. Green (London: Sage, 2005), 281; Karen E. Dill, *How Fantasy Becomes Reality: Seeing through Media Influence* (New York: Oxford University Press, 2009), 22-24, 33.

²⁸⁷ Levine, *The Power of Persuasion*, 18.

marketing enterprises, statistics on consumer purchases, and data collected from split-cable tests.²⁸⁸

This survey of media effects research demonstrates that propaganda may conceivably influence audiences, and it provides a foundational incentive for studying propaganda within the EW. For instance, it is now possible to draw the following syllogistic conclusion: Media effects exist; propaganda is deliberate and systematic mass media; therefore, propaganda effects can exist. With specificity to the current project, it is subsequently reasonable to hypothesize that propaganda may be an important EW component; in the same way that advertising is considered a crucial element of modern business strategy and success, and military mass persuasion campaigns are recognized as a mainstay of contemporary warfare. In light of media effects models and communications studies, such propaganda influence is described here as *Composite Propaganda Effects*. This model accepts at least moderate media effects, while recognizing that propaganda influence is not entirely homogenous throughout populations. It acknowledges that propaganda effects may work through a composite of indirect processes, and that the efficacy of persuasive communications can depend upon audience selectivity, opinion leaders, and social influences. With regard to the Composite Propaganda Effects model this project will consider recurring persuasive themes in Evolution Wars propaganda, which may result in indirect influence through agenda-setting, cumulative exposure, cultivation, and the priming of cognitive schemas. To this end, a tool frequently used within communications and sociological research described as content analysis will be employed.

²⁸⁸ Timothy W. McGuire, "Measuring and Testing Relative Advertising Effectiveness with Split-Cable TV Panel Data," *Journal of the American Statistical Association* 72, no. 360 (1977); Magid M. Abraham and Leonard M. Lodish, "Getting the Most out of Advertising and Promotion," *Harvard Business Review* 68, no. 3 (1990); Leonard M. Lodish et al., "How T.V. Advertising Works: A Meta-Analysis of 389 Real World Split Cable T.V. Advertising Experiments," *Journal of Marketing Research* 32, no. 2 (1995); William D. Wells, ed. *Measuring Advertising Effectiveness* (Mahwah: Lawrence Erlbaum, 1997); Levine, *The Power of Persuasion*, 24-28.

3.2.1 Content Analysis and Propaganda

In addition to examining media effects, communication studies often incorporate content analysis, which has been described as ‘fundamental to mass communication research.’²⁸⁹ Broadly defined, this analytical technique involves the systematic examination of communications content with a concerted focus on objectivity and replicable observations. Such observations are derived through specific rules of analysis that entail the methodical coding of elements in discreet samples of communication content.²⁹⁰ This coding involves the ‘transcribing, recording, categorizing, or interpreting of given units of analysis into the terms of a data language so that they can be compared and analyzed.’²⁹¹ Frequently used in propaganda research,²⁹² content analysis is predicated upon the understanding that communications content ‘merits systematic examination because of its assumed role as cause or antecedent of a variety of individual processes, effects, or uses people make of it.’²⁹³ Content analysis research has been predominantly categorized into two major methodological streams: quantitative and qualitative. The foremost principally employs frequency studies of textual components, including the numerical occurrences of particular words or operationalized symbols, and the statistical analysis of such frequencies, in order to develop interrelationships, patterns, and comparisons of communication content. The latter, on the other hand, is less concerned with

²⁸⁹ Matthew Lombard, Jennifer Snyder-Duch, and Cheryl Campanella Bracken, "Content Analysis in Mass Communication: Assessment and Reporting of Intercoder Reliability," *Human Communication Research* 28, no. 4 (2002): 587.

²⁹⁰ Ole R. Holsti, *Content Analysis for the Social Sciences and Humanities* (London: Addison-Wesley, 1969), 3-4, 14; Bruce L. Berg, *Qualitative Research Methods for the Social Sciences*, 4th ed. (Boston: Allyn and Bacon, 2001), 240; Riffe, Lacy, and Fico, *Analyzing Media*, 23-24; Earl Babbie, *The Practice of Social Research*, 11th ed. (Belmont: Thomson Wadsworth, 2007), 320.

²⁹¹ Klaus Krippendorff, *Content Analysis: An Introduction to Its Methodology*, 2nd ed. (Thousand Oaks: Sage, 2004), 220.

²⁹² *Ibid.*, 8-11; Mike Conway, Maria Elizabeth Grabe, and Kevin Grieves, "Villains, Victims, and the Virtuous in Bill O'Reilly's "No-Spin Zone: Revisiting World War Propaganda Techniques," *Journalism Studies* 8, no. 2 (2007).

²⁹³ Riffe, Lacy, and Fico, *Analyzing Media*, 11.

enumerating what are often described as manifest entities, but instead concentrates on more latent content elements.²⁹⁴ These latent constituents include overall meanings and broader contextual themes that may not be identified in purely quantitative studies.²⁹⁵

While quantitative and qualitative approaches are somewhat different enterprises, all content is ‘essentially a coding operation.’²⁹⁶ Therefore, both methods share the following common analytical steps: 1. Selecting appropriate samples of investigated materials; 2. Creating suitable coding schemes, or detailed lists of artefacts that may appear within media content; 3. Coding communications materials; and, 4. Interpreting the coded data. Also, content analysis requires the verification of ‘reliability’ and ‘validity’ throughout research exercises; where reliability indicates the reproducibility of project findings, and validity is defined as the extent to which a coding scheme actually measures an intended concept.²⁹⁷

This study employs a combination of quantitative and qualitative research approaches for the examination of data. In particular, this project’s use of content can be essentially classified as an amalgam of both ‘Problem-Driven’ and ‘Method-driven’ research designs.²⁹⁸ The problem-driven component is actualized in the study’s predetermined goal of testing the three hypotheses listed in Chapter One. This project is also effectively method-driven, and qualifies as a ‘directed’ or ‘deductive’ research strategy, because it attempts to avoid the pitfalls of atheoretical research practices by methodologically embedding content analysis within a lattice of propaganda research and affiliated investigative perspectives.²⁹⁹ In order to isolate representative units of

²⁹⁴ For a brief description of manifest and latent content see: Babbie, *The Practice*, 325-26.

²⁹⁵ Krippendorff, *Content Analysis*, 15-17; Philipp Mayring, "Qualitative Content Analysis," in *A Companion to Qualitative Research*, ed. Uwe Flick, Ernst von Kardorff, and Ines Steinke (London: Sage, 2004), 266-67; Hsiu-Fang Hsieh and Sarah E. Shannon, "Three Approaches to Qualitative Content Analysis," *Qualitative Health Research* 15, no. 9 (2005): 1278.

²⁹⁶ Babbie, *The Practice*, 325.

²⁹⁷ Krippendorff, *Content Analysis*, 339-63.

²⁹⁸ *Ibid.*, 340-41.

²⁹⁹ Hsieh and Shannon, "Three Approaches," 1281-83; Riffe, Lacy, and Fico, *Analyzing Media*, 18-19, 22.

EW propaganda texts for analysis, relevance sampling is hierarchically employed. Units of analysis are first selected according to their source, then by the communications medium, and finally by the specific time period in which they were produced.³⁰⁰ This entails selecting units for analysis distributed by the Institute for Creation Research, Answers in Genesis, and the Center for Science and Culture. Only text-based media have been chosen to limit the sample size, and articles that specifically appear in ICR's *Acts and Facts* monthly magazine, Answers in Genesis' *Answers* quarterly, and CSC's online *Evolution News and Views* are used. Finally, articles published exclusively in 2009-2011 were selected.³⁰¹ This resulted in a total sample of 1426 articles, of which 436 are ICR materials, 522 represent AiG communications, and 468 are from CSC's archives.

Though determining reliability and validity in content analysis research can often be difficult to measure, I have attempted to address these issues in order to establish the project's 'trustworthiness' and rigor.³⁰² This has first involved 'prolonged engagement,' 'persistent observation,' and triangulating methodological and theoretical approaches to improve reliability and validity.³⁰³ Also, 'intraobserver inconsistencies' have been lessened by reanalyzing the same texts to ensure that the identical results are collected from multiple readings.³⁰⁴ For instance, the first 143 articles, or 10.0% of the total census, were individually coded on three separate occasions to verify observational consistency. The remaining 1283 articles were subsequently examined twice.

³⁰⁰ Krippendorff, *Content Analysis*, 118-20.

³⁰¹ Note: 1488 *Evolution News and Views* articles were actually produced from 2009 to 2011. From this total a representative sample of 468 articles (over 30% of the total census) were analyzed. 13 text-based articles from each month of CSC's *Evolution News and Views* archives that were randomly selected using random.org.

³⁰² Yvonna S. Lincoln and Egon G. Guba, *Naturalistic Inquiry* (Newbury Park: Sage, 1985), 289.

³⁰³ *Ibid.*, 301-12.

³⁰⁴ Krippendorff, *Content Analysis*, 215.

Furthermore, and perhaps most importantly, an intercoder reliability test was conducted to demonstrate the stability, potential reproducibility, and accuracy of observations.³⁰⁵

FIGURE 3.1
Krippendorff's α Equation³⁰⁶

$$\alpha = 1 - \frac{D_o}{D_e}$$

Where D_o is the observed disagreement among values assigned to units of analysis:

$$D_o = \frac{1}{n} \sum_c \sum_k o_{ck} \text{ metric } \delta_{ck}^2$$

And D_e is the disagreement one would expect when the coding of units is attributable to chance rather than to the properties of these units:

$$D_e = \frac{1}{n(n-1)} \sum_c \sum_k n_c \cdot n_k \text{ metric } \delta_{ck}^2$$

Intercoder reliability tests evaluate whether independent coders will retrieve similar results when using a project's coding scheme.³⁰⁷ As Lombard, et al, have explained, this is 'assessed by having two or more coders categorize units (programs, scenes, articles, stories, words, etc.), and then using these categorizations to calculate a numerical index of the extent of agreement between or among the coders.'³⁰⁸ The test employed for this study incorporated eight undergraduates from the University of Victoria, Canada, from the researcher's RS301: Science and Religion course. These students participated in a training seminar on how to apply this project's coding list, which is discussed below in section 3.3.1. Each coder subsequently received and coded a series of the same randomly selected articles from the census. The students'

³⁰⁵ Ibid., 219-21.

³⁰⁶ Klaus Krippendorff, "Computing Krippendorff's Alpha Reliability," *Departmental Papers (ASC)*(2011), http://repository.upenn.edu/asc_papers/43/.

³⁰⁷ Richard H. Kolbe and Melissa S. Burnett, "Content-Analysis Research: An Examination of Applications with Directives for Improving Research Reliability and Objectivity," *The Journal of Consumer Research* 18, no. 2 (1991): 248; Kimberly A. Neuendorf, *The Content Analysis Guidebook* (Thousand Oaks: Sage, 2002), 142-44.

³⁰⁸ Lombard, Snyder-Duch, and Bracken, "Content Analysis," 590.

observations were then evaluated alongside the researcher's own coding results using Krippendorff's α reliability equation. This equation is presented in figure 3.1, and it is generally regarded as the most robust means of determining content analysis reliability coefficients. It is an advantageous formula because it can be used with any number of coders, it accounts for numerous sample sizes, it factors in chance agreements, and it can also accommodate missing data.³⁰⁹

The online utility ReCal3 was employed to compute the Krippendorff α for each message variable coded. Early calculations resulted in a maximum coefficient of 0.806 for the variable described as Source Cues, and a minimum coefficient of 0.606 for the persuasive element designated Statistics and Technical Jargon.³¹⁰ As Krippendorff has noted, 'Generally, when variables are equally important to the research effort, any unreliable variable can become a bottleneck for confidence in the data as a whole,' and therefore, with 'multivariate data, the lowest α among the variables is the joint reliability of the data as a whole.'³¹¹ Researchers are also advised not to use any data with reliabilities less than 0.667, and consequently, this pre-test resulted in an unacceptably low value. However, during the later testing period one participant indicated repeated confusion about code meanings, and demonstrated an inability to properly identify message variables within materials even after receiving further guidance. The coder continued the task, but admitted that there remained misunderstandings regarding the coding exercise. Such participants have been described in content analysis literature as 'rogue coders,' because they 'simply cannot—

³⁰⁹ Krippendorff, *Content Analysis*, 221; Andrew F. Hayes and Klaus Krippendorff, "Answering the Call for a Standard Reliability Measure for Coding Data," *Communication Methods and Measures* 1, no. 1 (2007); Lombard, Snyder-Duch, and Bracken, "Content Analysis," 592-93.

³¹⁰ For more on ReCal3 see: Deen G. Freelon, "Recal: Intercoder Reliability Calculation as a Web Service," *International Journal of Internet Science* 5, no. 1 (2010); ———, "Recal: Reliability Calculation for the Masses," <http://dfreelon.org/utills/recalfront/>.

³¹¹ Krippendorff, *Content Analysis*, 242.

or will not—be trained to achieve reliability.’³¹² After removing this coder’s data, the maximum Krippendorff α was recalculated to be 0.893 for the variable Source Cues, and the minimum α was 0.842 for Message Repetition. Consequently, the minimum α coefficient exceeds the 0.800 value commonly accepted as demonstrating intercoder reliability.³¹³

Additionally, a control group sample has been included to provide another measure of content analysis reliability. The control group sample is derived from 2009-2011 editions of *New Scientist* magazine, which are coded in the same manner as ICR, AiG, and CSC materials. Comparing this study’s content analysis findings with the control data offers an added gauge to assess fundamental conclusions about EW propaganda. Moreover, in order to further assist in the reproducibility of observations, all of the analytical processes employed are reported here in their entirety, and the materials investigated are readily available for verification by other researchers. The web app Dedoose was also utilized to organize materials, systematize coding, and derive quantitative and qualitative analytics. The coding units used for this content analysis exercise are derived from persuasion research, which is detailed in the following section.

3.3 Persuasion Research and the Elaboration Likelihood Model

Persuasion has been succinctly described as ‘any change in attitudes that results from exposure to a communication,’ and ‘the process of trying to alter, modify or change the saliency of the values, wants, beliefs and actions of others.’³¹⁴ Importantly, persuasion can also involve attempts at cultivating pre-existing attitudes in order to maintain compliance with beliefs and behaviours in the face of opposition. For

³¹² Neuendorf, *The Content*, 145-46.

³¹³ Krippendorff, *Content Analysis*, 241.

³¹⁴ Petty and Cacioppo, *Communication and*, 5; O’Shaughnessy and O’Shaughnessy, *Persuasion In*, 5.

instance, a corporation may generate persuasive advertising campaigns, designed to sustain a client-base by fostering positive attitudes towards an already successful product experiencing marketplace competition. Though marketing and consumer research have often been occupied with investigating the nuances of persuasion, it is evident that its study has not been limited to a single discipline or theory.³¹⁵ Within this gamut of research the most robust and enduring persuasion theories have included dual-process models, such as the influential Elaboration Likelihood Model (ELM) established by Richard E. Petty and John T. Cacioppo.

The ELM postulates that there are two major avenues of persuasion which result from any exposure to communications: the ‘central’ and ‘peripheral’ routes.³¹⁶ The first route involves attitude change through an individual’s diligent scrutiny of a persuasive message. This is described as high “elaboration,” and it involves carefully examining the quality and cogency of a message’s arguments. In order for this to occur an individual must possess both the motivation and the ability to thoroughly study a communication’s claims. Motivation and processing ability increase elaboration likelihood, and result in the articulation of favourable or unfavourable cognitive responses to a message’s persuasive assertions. Some noteworthy variables that have been shown to influence motivation include the apparent personal relevance of a message, the number of message sources bolstering a position, and the use of rhetorical questions in a communication.³¹⁷ Additionally, a message recipient’s capacity to

³¹⁵ Walton, *Media Argumentation*, 48.

³¹⁶ Richard E. Petty and John T. Cacioppo, "The Effects of Involvement on Responses to Argument Quantity and Quality: Central and Peripheral Routes to Persuasion," *Journal of Personality and Social Psychology* 46, no. 1 (1984): 70.

³¹⁷ ———, "Issue Involvement Can Increase or Decrease Persuasion by Enhancing Message-Relevant Cognitive Responses," *Journal of Personality and Social Psychology* 37, no. 10 (1979); Richard E. Petty, John T. Cacioppo, and Martin Heesacker, "Effects of Rhetorical Questions on Persuasion: A Cognitive Response Analysis," *Journal of Personality and Social Psychology* 40, no. 3 (1981); Robert E. Burnkrant and Daniel J. Howard, "Effects of the Use of Introductory Rhetorical Questions Versus Statements on Information Processing " *Journal of Personality and Social Psychology* 47, no. 6 (1984); Petty and Cacioppo, *Communication and*, 81-88, 96-101; Douglas Q. Kaufman, Mark F. Stasson, and Jason W.

adequately process a communication's arguments can be increased through prior knowledge about the issues, eliminating distractions, and repeating the message.³¹⁸

Subsequently, when elaboration likelihood is high 'attitudes will be determined primarily by argument quality.'³¹⁹

The second route, on the other hand, involves low elaboration and it occurs when there is a lack of motivation and/or ability to thoroughly investigate and process a persuasive message's contentions. In such cases individuals rely upon various 'mental shortcuts,' or "cues," to help formulate responsive opinions and behaviours.³²⁰ These cues are described by Petty and Cacioppo as 'stimuli in the persuasion context that can affect attitudes without necessitating processing of the message arguments.'³²¹ Such cues can include the message's perceived credibility or likability. Though individuals desire to hold 'correct attitudes,' the sheer magnitude of persuasive messages frequently results in low elaboration likelihood and peripheral route persuasion.³²² Also, if an individual's central cognitive processing neither results in a positive nor a negative reaction, or if there is no clear change in that person's cognitive perceptions, peripheral processing may still ensue.

According to the ELM, central route persuasion culminates in attitude change that will often be more enduring, resistant, and predicative of behaviour than that

Hart, "Are the Tabloids Always Wrong or Is That Just What We Think? Need for Cognition and Perceptions of Articles in Print Media," *Journal of Applied Social Psychology* 29, no. 9 (1999).

³¹⁸ Richard E. Petty, Gary L. Wells, and Timothy C. Brock, "Distraction Can Enhance or Reduce Yielding to Propaganda: Thought Disruption Versus Effort Justification," *Journal of Personality and Social Psychology* 34, no. 5 (1976); Petty and Cacioppo, *Communication and*, 63, 67. 170-72; John T. Cacioppo and Richard E. Petty, "Effects of Message Repetition on Argument Processing, Recall, and Persuasion," *Basic and Applied Social Psychology* 10, no. 1 (1989).

³¹⁹ Petty and Cacioppo, *Communication and*, 142.

³²⁰ Anastasio, Rose, and Chapman, "Can the," 154.

³²¹ Petty and Cacioppo, *Communication and*, 18.

³²² *Ibid.*, 23; Anastasio, Rose, and Chapman, "Can the," 154; Perse, *Media Effects*, 85-86; Richard E. Petty, Joseph R. Priester, and Pablo Brinol, "Mass Media Attitude Change: Implications of the Elaboration Likelihood Model of Persuasion," in *Media Effects: Advances in Theory and Research*, ed. Jennings Bryant and Dolf Zillmann (Mahwah: Lawrence Erlbaum, 2002), 168.

derived via the peripheral route.³²³ Nonetheless, both prove to be crucial paths of persuasion, and empirical studies have demonstrated the effectiveness of the peripheral route for attitude formation.³²⁴ It is also important to note that within the ELM any single message variable can actually serve to influence both central and peripheral route processing. For instance, while messenger credibility generally acts as a peripheral cue when elaboration likelihood is low, such credibility can potentially induce motivation because an attractive or prestigious source might foster interest in a communication, resulting in subsequent central route analysis.³²⁵ Figure 3.2 illustrates the ELM's persuasion pathways.

The ELM has proven to be one of the most empirically-substantiated persuasion models, along with the relatively analogous, though less prominent, dual-process system known as the Heuristic-Systematic Model (HSM).³²⁶ The HSM is remarkably similar to the Elaboration Likelihood Model, as it includes two paths of persuasion that are described as 'systematic' and 'heuristic' processing, which are somewhat comparable to the ELM's central and peripheral routes.³²⁷ This model complements the ELM, however, by emphasizing that individuals willingly rely upon cognitive heuristic

³²³ Petty and Cacioppo, *Communication and*, 24; Richard E. Petty, Curtis P. Haugtvedt, and Stephen M. Smith, "Elaboration as a Determinant of Attitude Strength: Creating Attitudes That Are Persistent, Resistant, and Predictive of Behavior" in *Attitude Strength: Antecedents and Consequences*, ed. Richard E. Petty and Jon A. Krosnick (Mahwah: Lawrence Erlbaum, 1995), 93-130.

³²⁴ Paul W. Miniard, Deepak Sirdeshmukh, and Daniel E. Innis, "Peripheral Persuasion and Brand Choice," *The Journal of Consumer Research* 19, no. 2 (1992); Paul W. Miniard et al., "Picture-Based Persuasion Processes and the Moderating Role of Involvement," *Journal of Consumer Research* 18, no. 1 (1991); Richard E. Petty, John T. Cacioppo, and David Schumann, "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement," *Journal of Consumer Research* 10, no. 2 (1983).

³²⁵ Stephen G. Harkins and Richard E. Petty, "The Effects of Source Magnification Cognitive Effort on Attitudes: An Information Processing View," *Journal of Personality and Social Psychology* 40, no. 3 (1981); Petty and Cacioppo, *Communication and*, 204-15; Joseph R. Priester and Richard E. Petty, "Source Attributions and Persuasion: Perceived Honesty as a Determinant of Message Scrutiny," *Personality and Social Psychology Bulletin* 21, no. 6 (1995).

³²⁶ Shelly Chaiken, Akiva Liberman, and Alice H. Eagly, "Heuristic and Systematic Information Processing within and Beyond the Persuasion Contexts," in *Unintended Thought*, ed. James S. Uleman and John A. Bargh (New York: Guilford Press, 1989).

³²⁷ Serena Chen and Shelly Chaiken, "The Heuristic-Systematic Model in Its Broader Context," in *Dual-Process Theories in Social Psychology*, ed. Shelly Chaiken and Yaacov Trope (London: Guilford, 1999), 74.

shortcuts, or cues.³²⁸ This is because people are ‘minimalist information processors,’ who seek to exert the least amount of effort possible for the analysis of communications.³²⁹ Thus, the heuristic/peripheral route is most commonly engaged as individuals continuously seek to ‘strike a balance between minimizing cognitive effort on the one hand and satisfying their current motivational concerns on the other.’³³⁰ As Danny Axsom, Shelly Chaiken, and Suzanne Yates explain:

The heuristic model asserts that many persuasion cues are processed by means of simple schemas or decision rules. For example, if people have learned that experts’ statements are usually more veridical than are statements by persons who lack expertise, they may then apply the expert credo ‘statements by experts can be trusted’ in response to a cue conveying high expertise. According to the model, people use rules such as this in judging the probable validity of persuasive communications without fully absorbing the semantic content of the message. Consequently, persuasion cues such as communicator expertise may often influence persuasion without engendering much message- or issue-relevant thinking. Unlike systematic processing (engaging in a considerable amount of message- and issue-relevant thinking), which is effortful and may generally be avoided in the interest of cognitive economy, heuristic processing is relatively effortless and thus may predominate in many persuasion settings.³³¹

Furthermore, the HSM also emphasizes that both routes of persuasion are not mutually exclusive and can occur simultaneously. In consideration of these ideas, dual-process models of persuasion offer a well researched conceptual framework to adequately interpret and examine EW propaganda materials. In particular, the ELM helps to demonstrate which persuasion routes are most likely utilized by audiences in response to EW propaganda, and it illustrates specific message variables that can influence persuasion.

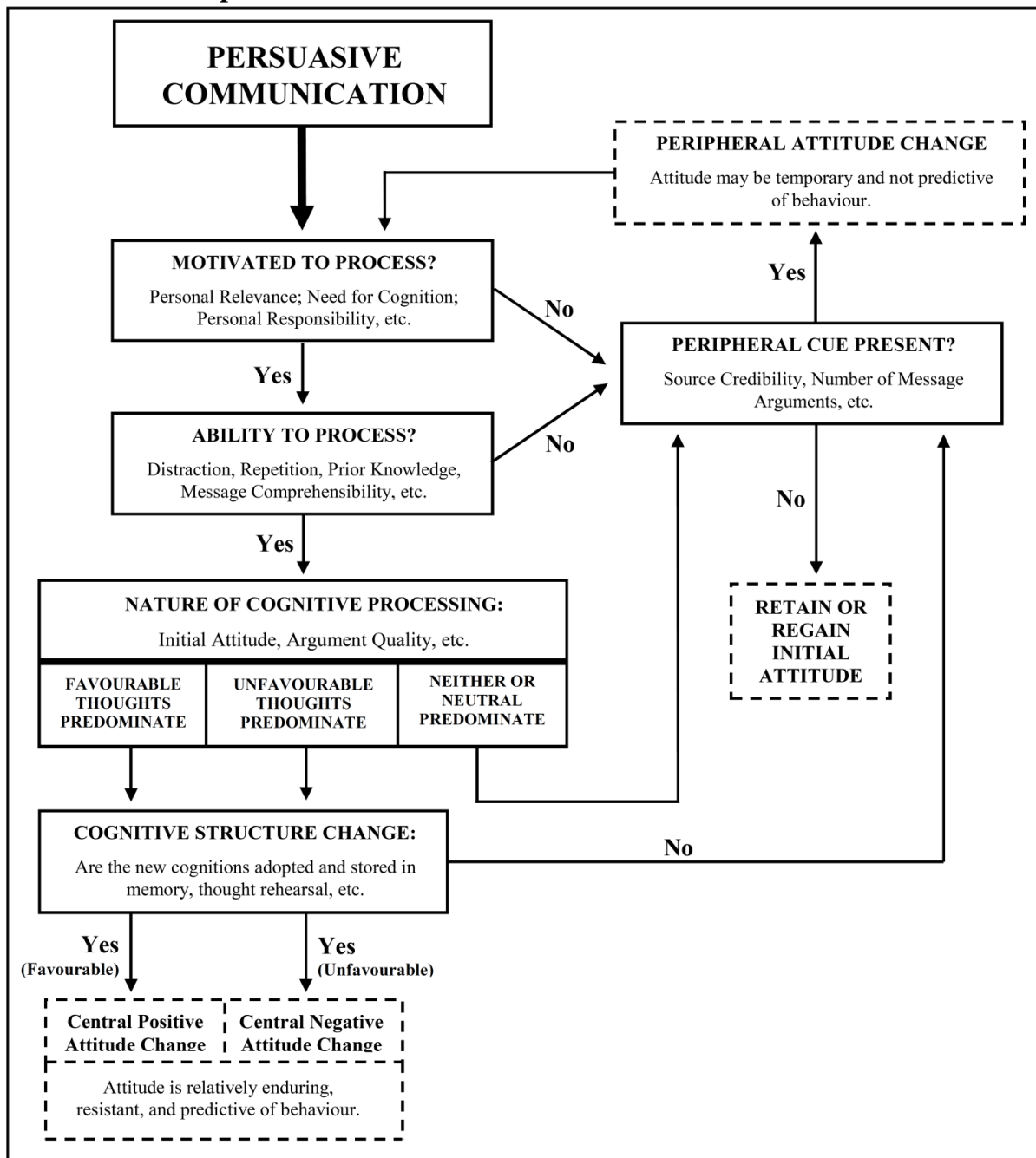
³²⁸ Danny Axsom, Shelly Chaiken, and Suzanne Yates, "Audience Response as a Heuristic Cue in Persuasion," *Journal of Personality and Social Psychology* 53, no. 1 (1987): 30-31.

³²⁹ James B. Stiff and Paul A. Mongeau, *Persuasive Communication*, 2nd ed. (New York: Guilford Press, 2003), 230.

³³⁰ Chen and Chaiken, "The Heuristic-Systematic," 74.

³³¹ Axsom, Chaiken, and Yates, "Audience Response," 30.

FIGURE 3.2
A Schematic Depiction of the Elaboration Likelihood Model³³²



3.3.1 The ELM, EW Propaganda, and Persuasion Techniques

Within the Elaboration Likelihood Model's context, motivation and ability are crucial determinants of how Evolution Wars propaganda materials may persuade audiences; whether via the central or peripheral routes. Though it is not possible to

³³² Adapted from Petty and Cacioppo, *Communication and*, 4.

establish the level of motivation and processing ability of each EW propaganda recipient, it is evident that if both elements are not considerably elevated then elaboration likelihood will be low-to-medium, and peripheral cues will assume a more significant role. Petty and Cacioppo have indicated that even during circumstances of moderate motivation and processing capacity, peripheral cues help guide reactions to persuasive communications.³³³ Also, if a message advocates a certain position but does not clearly offer any arguments in defence of this viewpoint to scrutinize, then peripheral cues ‘may determine the extent and direction of influence.’³³⁴ By integrating the HSM’s contention that individuals prefer to minimize cognitive exertion when faced with such messages, it is apparent that EW propaganda will often function through peripheral persuasion, and be broadcast to audiences expressing low-to-medium elaboration likelihood. This conclusion is especially poignant when taking into account the science-and-religion subject matter which lies at the heart of EW conflicts. Being able to rigorously process EW ideas and contentions requires at least a preliminary understanding of numerous scientific premises, as well as a functional grasp of important religious concepts. Hence, the central route processing ability of the large audiences for which EW propaganda is intended may not be commensurate with the population’s motivation. With these considerations in mind, this project will examine Evolution Wars propaganda as it would specifically affect audiences with low-to-medium elaboration likelihood.

Empirical research has demonstrated how an assortment of message elements, or persuasion techniques, can influence audiences that exhibit low-to-medium elaboration likelihood, and function as persuasive cues. Before examining these cues it is important to note that propaganda research has often been concerned with identifying and

³³³ Ibid., 206-07.

³³⁴ Ibid., 215.

categorizing explicit techniques of mass persuasion. Though supplying exhaustive descriptions of each of these is a sizeable task, Appendix Two provides concise definitions of the foremost techniques mentioned throughout propaganda scholarship. These techniques are here grouped into three broad categories, described as: 1. Data Delivery Options; 2. Offence-Defence; and, 3. Social Levers. The first encompasses techniques that generally describe how specific data are managed in communications, the second details tactics utilized to assault the opposition and reinforce the propagandist's assertions, and the third lists persuasion methods that chiefly employ social pressures, beliefs, and behaviours. These expansive categories overlap and their boundaries are porous, such that various techniques listed in one group can intersect with those in the other subdivisions.

While Appendix Two exhibits the majority of persuasion elements identified by researchers, it is evident that isolating many of these techniques in propaganda can prove to be both difficult and rather subjective. For instance, it may be impossible to grasp exactly how data has been censored or redacted without knowing precisely what data was available to the propagandist in the first place. Also, effectively recognizing such factors described as Distortion, Doublespeak, and Card Stacking may be dependent upon personal bias and individual opinions regarding what 'twisting' or 'fixing up' data actually means.³³⁵ At the same time, while such techniques may be recognizable in propaganda materials, it is not necessarily clear exactly *how* or even *if* such elements actually persuade audiences. Consequently, stating that propaganda materials include these aspects does not tell us anything about whether these features are successful persuasion techniques, nor does it explain why and how they operate. The inclusion of the ELM and modern persuasion research, however, serves to enhance objectivity and

³³⁵ Lumley, *The Propaganda*, 122.

precision concerning the identification of various techniques, while also providing a framework for comprehending if and how such techniques function.

It should also be noted that the items catalogued in Appendix Two have often been formulated from scholars' observations of various patterns and components distinguished in propaganda materials. That is, propaganda was initially examined and then these techniques were subsequently generated from such observations. Rather than attempting to do the same, this study will first develop an inventory of empirically-tested persuasion techniques, which can be situated within the ELM as persuasive cues when there is low-to-medium elaboration likelihood. This inventory is catalogued in table 3.2, which serves as this project's content analysis coding list, and outlines the specific characteristics that will be identified for each cue within the propaganda materials. These techniques are content-based and have already garnered sizeable experimental substantiation for their persuasiveness, which offer insight into the actual potency of the propaganda employing them. Furthermore, each listed technique has previously amassed widely agreed-upon definitions and are much more objectively identifiable. These techniques, or message variables that can serve as ELM cues, are subdivided into the same three broad categories described above.

TABLE 3.2

Code Descriptions: Message Variables that Serve as ELM Cues

1. DATA DELIVERY OPTIONS

i. Asking Questions

a. *Intention Questions*

Research has demonstrated that answering a 'seemingly innocuous question regarding future

intentions' can significantly persuade an audience's behaviour towards those same intentions.³³⁶ For instance, if individuals are simply asked to make predictions about their future actions, such as whether they would contemplate purchasing a commodity or be willing to predict how much time they may spend volunteering for a local charity, they are appreciably more likely to initially overcommit to, and then later carry out, that behaviour.³³⁷ Studies have continued to reveal that answering simple intention questions can cause 'automatic or nonconscious changes in cognitive structure that lead to behavioural changes of which the respondent is often not aware.'³³⁸

b. *Rhetorical Questions*

The use of rhetorical questions, also known as *erotema*, has been found to enhance message processing in audiences, especially in cases where individuals initially exhibit little interest in a communication's claims.³³⁹ Consequently, rhetorical questions can be used as a type of persuasive cue to stimulate thinking about message content in low elaboration likelihood contexts.³⁴⁰ This involves asking a question without expecting an answer because the answer itself is strongly implied within the question. The related rhetorical devices called *hypophora* and *anacoenosis* will also be included as part of this category. Hypophora entails asking a question and then immediately answering it, while anacoenosis involves asking the opinion of an audience in a way that implies common interest without requiring an answer.³⁴¹

³³⁶ Patti Williams, Gavan J. Fitzsimons, and Lauren G. Block, "When Consumers Do Not Recognize "Benign" Intention Questions as Persuasion Attempts," *The Journal of Consumer Research* 31, no. 3 (2004): 540.

³³⁷ Ibid.

³³⁸ Ibid.: 549-50.

³³⁹ John L. Swasy and James M. Munch, "Examining the Target of Receiver Elaborations: Rhetorical Question Effects on Source Processing and Persuasion," *The Journal of Consumer Research* 11, no. 4 (1985); Petty and Cacioppo, *Communication and*, 198-203; Burnkrant and Howard, "Effects of."

³⁴⁰ Rohini Ahluwalia and Robert E. Burnkrant, "Answering Questions About Questions: A Persuasion Knowledge Perspective for Understanding the Effects of Rhetorical Questions," *The Journal of Consumer Research* 31, no. 1 (2004): 27.

³⁴¹ Richard A. Lanham, *A Handlist of Rhetorical Terms*, 2nd ed. (London: University of California Press, 1991), 9-10, 71, 87

FIGURE 3.3
*Wer ist Adolf Hitler*³⁴²



ii. Disrupt-then-Reframe

This technique first incorporates a disruption by communicating something in an unexpected way, followed by reframing, which involves adding a persuasive statement. Barbara Price Davis and Eric S. Knowles have studied this technique in a research project that attempted to sell packages of note cards in support of a charity to potential customers. This experiment first involved a ‘small disruption’ in which the item’s price was stated in pennies rather than dollars, followed by ‘direct reframing’ through the declaration that this price was a bargain.³⁴³ The routine significantly increased sales, and the disruption component is theorized to lower the processing levels of individuals, and then the reframing acts as a peripheral cue. Research

³⁴² Translation:

Who is Adolf Hitler? The man from the people, for the people! The German front soldier who risked his life in 48 battles for Germany!
 What does Adolf Hitler want? Freedom and food for every decent working German! The gallows for profiteers, black marketeers and exploiters, regardless of religious faith or race!
 Why is Adolf Hitler not allowed to speak? Because he is ruthless in uncovering the rulers of the German economy, the international bank Jews and their lackeys, the Democrats, Marxists, Jesuits, and Free Masons!
 Because he wants to free the workers from the domination of big money!
 Working Germans! Demand the lifting of the illegal ban on his speaking!

Adolf Hitler, "Wer Ist Adolf Hitler?," Calvin College,
<http://www.calvin.edu/academic/cas/gpa/posters/1927.jpg>.

³⁴³ Barbara Price Davis and Eric S. Knowles, "A Disrupt-Then-Reframe Technique of Social Influence," *Journal of Personality and Social Psychology* 76, no. 2 (1999): 192.

suggests that using this technique causes persuasive requests to be accepted one-and-a-half to two times more often than if it had not been employed.³⁴⁴

iii. Message Repetition

An abundance of research has been dedicated to analyzing the effects of Message Repetition and its impact on audiences.³⁴⁵ While the results are complex, the Elaboration Likelihood Model sheds light onto the diversity of observed audience reactions. Petty and Cacioppo have found that message repetition increases message recall, and can actually stimulate motivation to process arguments by providing ‘recipients with a greater opportunity to consider the associations and implications of the advocacy in a relatively objective manner.’³⁴⁶ However, excessive repetitions can cause ‘tedium or reactance and bias recipients’ message processing—in particular, to cause them to counterargue even strong arguments and proattitudinal positions.³⁴⁷ Studies have consequently examined how adding some variation to repeated messages influences persuasion. It has been argued that cosmetic variation, which includes changes ‘in nonsubstantive features...across multiple presentations,’ such as the background pictures in advertisements or the rewording of an identical message, enhance product recall and peripheral persuasion in low elaboration contexts.³⁴⁸ Therefore, repetition with some cosmetic variation can effectively influence persuasion and reliance upon

³⁴⁴ Bob M. Fennis, Enny H. H. J. Das, and Ad Th. H. Pruyn, "If You Can't Dazzle Them with Brilliance, Baffle Them with Nonsense': Extending the Impact of the Disrupt-Then-Reframe Technique of Social Influence," *Journal of Consumer Psychology* 14, no. 9 (2003): 280-81.

³⁴⁵ Perry, *Theory and*, 150-51.

³⁴⁶ Petty and Cacioppo, *Communication and*, 69.

³⁴⁷ *Ibid.*, 131.

³⁴⁸ David W. Shumann, Richard E. Petty, and D. Scott Clemons, "Predicting the Effectiveness of Different Strategies of Advertising Variation: A Test of the Repetition-Variation Hypotheses," *The Journal of Consumer Research* 17, no. 2 (1990): 200-01.

peripheral cues.

Within this study repetition will be identified as the reiteration of a message at least three times within the same article.³⁴⁹ Observations of repetition with cosmetic variation will also be noted.

iv. The Number of Message Arguments

Petty and Cacioppo have explained that when there is low elaboration likelihood the number of message arguments appearing in communications ‘serve as a simple peripheral cue as to the validity of the message.’³⁵⁰ For instance, in one experiment 168 research subjects were exposed to communications that contained either three or nine arguments. When there was little motivation to study the message claims due to low topic relevance, increased agreement with the nine-argument over the three-argument message occurred ‘regardless of argument quality.’³⁵¹ Consequently, ‘when people are not thinking very carefully, even providing large amounts of *specious* information can enhance persuasion.’³⁵² Also, if messages do contain topics relevant to audiences, increasing the quantity of arguments aids peripheral route persuasion.³⁵³

This study will consider the use of six or more message arguments in support of a premise within a single article to be an occurrence of this persuasive variable.³⁵⁴ Only the number of arguments will be considered, rather than the potential strengths or weaknesses of its claims.

³⁴⁹ Petty and Cacioppo, *Communication and*, 72-73.

³⁵⁰ *Ibid.*, 151.

³⁵¹ *Ibid.*, 153.

³⁵² Zakary L. Tormala and Richard E. Petty, "Contextual Contrast and Perceived Knowledge: Exploring the Implications for Persuasion," *Journal of Experimental Social Psychology* 43, no. 1 (2007): 17. (their italics)

³⁵³ Petty and Cacioppo, "The Effects," 80.

³⁵⁴ See: ———, *Communication and*, 154.

v. The Scarcity Principle

This technique is based upon the fact that ‘we can often use an item’s availability to help us quickly and correctly decide on its quality.’³⁵⁵ Thus, research has demonstrated that when an item appears to be in limited supply its scarcity acts as a compelling peripheral shortcut, causing its perceived value and subjective desirability to be greatly increased.³⁵⁶

FIGURE 3.4
*Redeverbot*³⁵⁷



As Jae Min Jung and James J. Kellaris explain, ‘Because valuable objects are often scarce,

³⁵⁵ Robert B. Cialdini, *Influence: Science and Practice*, 5th ed. (Boston: Pearson Education, 2009), 204.

³⁵⁶ Stephen Worchel, Jerry Lee, and Akanbi Adewole, "Effects of Supply and Demand on Ratings of Object Value," *Journal of Personality and Social Psychology* 32, no. 5 (1975); Michael Lynn, "Scarcity Effects on Value: A Quantitative Review of the Commodity Theory Literature," *Psychology & Marketing* 8, no. 1 (1991); Michael Lynn and Paulette Bogert, "The Effect of Scarcity on Anticipated Price Appreciation," *1978-1984* 26, no. 22 (1996).

³⁵⁷ Translation: ‘Forbidden from speaking. Out of two billion people on the earth, he alone is not permitted to speak in Germany.’ Philipp Rupprecht, "Redeverbot," Calvin College, <http://www.calvin.edu/academic/cas/gpa/posters/hitlerfips.jpg>.

people tend to infer that scarce objects are valuable,' and subsequently, 'consumers often infer value in a product that has limited availability or is promoted as being scarce.'³⁵⁸ In relation to this, when items or ideas become banned or censored, appetites for these items and ideas are often intensified due to their perceived scarcity. Therefore, even the suggestion that information is being suppressed by a certain party augments an audience's desire for that same data, and significantly increases persuasion towards the censored information even if the audience initially disagreed with it.³⁵⁹

Within this study any assertions that a commodity is in short supply will be considered to be a case of the Scarcity Principle. Additionally, declarations that an opponent is seeking to unfairly force only one side of an issue, and claims that an idea is being censored or discriminated against by a censorial adversary, will also be considered as occurrences of this persuasive cue.

2. OFFENCE-DEFENCE

i. Arousal of Emotions (Fear)

Researchers have found that the stimulation of emotions, and in particular fear, can kindle persuasion. In certain circumstances fear may cause audiences to rely upon available peripheral cues within a message.³⁶⁰ A fear arousing message can include threats of physical and emotional harm, which may be linked with an enemy or opposing viewpoint. If a message provokes strong sensations of fear, and subsequently makes clear reassuring statements about the efficacy of a proposed solution to the fear-inducing problem, then message recipients seem

³⁵⁸ Jae Min Jung and James J. Kellaris, "Cross-National Differences in Proneness to Scarcity Effects: The Moderating Roles of Familiarity, Uncertainty Avoidance, and Need for Cognitive Closure," *Psychology & Marketing* 21, no. 9 (2004): 740.

³⁵⁹ Stephen Worchel, Susan Arnold, and Michael Baker, "The Effects of Censorship and Attractiveness of the Censor on Attitude Change," *Journal of Applied Social Psychology* 5, no. 3 (1975).

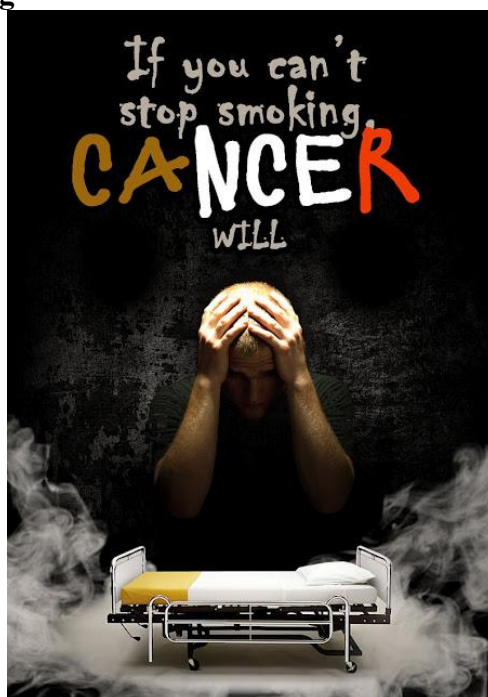
³⁶⁰ Faith Gleicher and Richard E. Petty, "Expectations of Reassurance Influence the Nature of Fear-Stimulated Attitude Change," *Journal of Experimental Social Psychology* 28(1992).

to rely upon peripheral cues for persuasion rather than engaging in central route processing. For instance, if a communication stimulates fear in an audience, and then clearly proposes a seemingly effective answer to the problem, audiences may simply rely upon the communicator's perceived Messenger Credibility when choosing to accept this recommended answer. However, if a clear reassuring solution to the fear-engendering message is not provided then fear itself serves as a sort of cue to induce central route message processing.

Throughout this project any explicit claims that a product/idea is unsafe or dangerous, including a threat to life or values, will be categorized as an attempt to arouse fear.

Observations will also be made concerning whether reassuring statements are associated with fear appeals.

FIGURE 3.5
If You Can't Stop Smoking³⁶¹



ii. The Contrast Principle and Negativity Effect

When two items or ideas are presented one after the other, the differences between the two are

³⁶¹ "If You Can't Stop Smoking, Cancer Will," Smoking Adverts, <http://www.smokingadverts.com/2011/09/8-anti-smoking-ads.html>.

accentuated. For instance, Cialdini has succinctly noted that ‘if we lift a light object first and then lift a heavy object, we will estimate the second object to be heavier than if we had lifted it without first lifting the light one.’³⁶² This can be used to persuade audiences towards a product/concept more effectively than if no comparison had been made. Such contrast is not only persuasive but it has been described as ‘virtually undetectable.’³⁶³ Consequently, contrast effects can notably colour choices and influence persuasion when there is low-to-mid message elaboration likelihood.³⁶⁴ Contrast may be unfairly structured to favour a particular product/concept, and include ridicule and biased caricatures of a competitor.³⁶⁵ For this reason, direct comparative advertising has occasionally been prohibited and is often legally regulated.³⁶⁶

Within this study, contrast that is antagonistic towards an opponent, and which emphasizes negative attributes of a competitor’s ideas or products, is associated with what has been described as the negativity effect. Research demonstrates that ‘negative information is often more powerful in creating attitudes (i.e., it is weighted more heavily) than is positive information of equal extremity.’³⁶⁷ Consequently, negative messages in opposition to a particular product or idea have stronger, relatively automatic, persuasion effects in comparison to positive information that supports goods or concepts.³⁶⁸ For instance, in public elections negative information and opinions regarding what voters disagree with prove to be more

³⁶² Cialdini, *Influence*, 12.

³⁶³ *Ibid.*, 13.

³⁶⁴ Cornelia Pechmann and Gabriel Esteban, "Persuasion Processes Associated with Direct Comparative and Noncomparative Advertising and Implications for Advertising Effectiveness," *Journal of Consumer Psychology* 2, no. 4 (1993).

³⁶⁵ Karen E. James and Paul J. Hensel, "Negative Advertising: The Malicious Strain of Comparative Advertising," *Journal of Advertising* 20, no. 2 (1991).

³⁶⁶ Francesca Barigozzi and Martin Peitz, "Comparative Advertising and Competition Policy," *Alma Mater Digital Library, Università di Bologna*(2004), <http://amsacta.cib.unibo.it/1563/1/524.pdf>.

³⁶⁷ George Y. Bizer and Richard E. Petty, "How We Conceptualize Our Attitudes Matters: The Effects of Valence Framing on the Resistance of Political Attitudes," *Political Psychology* 26, no. 4 (2005): 554.

³⁶⁸ In many ways the negativity effect corresponds with Mary Douglas’ anthropological theory of antagonistic consumerism. Douglas argues that consumers are actually driven not by what they desire, but by what they dislike. See: Mary Douglas, "In Defence of Shopping," in *The Shopping Experience*, ed. Pasi Falk and Colin Campbell (London: Sage, 1997).

influential than positive information in agreement with what electors actually support. Furthermore, attitudes that are expressed as being *against* something prove to be more resilient than those that are articulated as being *for* a position. In this way negative information that deliberately opposes an idea acts as a type of peripheral cue towards the contrary position.³⁶⁹

Contrast will be identified as any comparison made between an advocated product/concept with those supported by a potential competitor, and attention will be paid to comparisons that invoke the negativity effect. This can include personal defamatory attacks on the character of an opponent, and the derision of a rival's ideas when compared to those concepts a communicator is attempting to persuade an audience to accept.

FIGURE 3.6
I'm a Mac, I'm a PC³⁷⁰



i. Source Cues

a. *Messenger Credibility*

In situations of low elaboration likelihood the alleged expertise and perceived credibility of communicators has been demonstrated to act as a significant peripheral cue.³⁷¹ ‘Sources who

³⁶⁹ Bizer and Petty, "How We," 554-55.

³⁷⁰ Apple Inc., "I'm a Mac, I'm a PC," apple.com,
<http://upload.wikimedia.org/wikipedia/en/a/ab/Imamacimapc.jpg>.

are credible are ones with superior knowledge (expertise)' and this apparent knowledge is often relied upon when individuals decide to accept or reject persuasive messages.³⁷² If the same individual presents an identical message to different groups of people, the message's persuasive arguments are accepted far more readily by audiences who have been told that the speaker holds academic credentials from a prestigious university.³⁷³ Source credibility can also be increased through certain attire, such as a police uniform or lab coat, and even the presence of specific symbols and objects, such a microscope, can generate scientific authority and credibility. Statements professing that scientific data or evidence support a position can also be similarly used to cultivate this persuasive technique. Depending upon the intended audience, religious affiliations may also advance this cue. Claiming that God and scripture support the messenger provides a form of sacred credibility that enhances religious authority. Correspondingly, credibility is also a function of the messenger's ostensible trustworthiness, objectivity, and personal confidence, while societal status and prestige can further cultivate estimations of expertise.³⁷⁴

This study will identify Messenger Credibility as displays of academic qualifications and expertise in persuasion attempts, as well as claims that evidence and data support a specific cause. Furthermore, references to divine credibility will also be noted, such as statements that God and/or holy scripture champion a particular cause. Symbols and objects

³⁷¹ Richard E. Petty, John T. Cacioppo, and Rachel Goldman, "Personal Involvement as a Determinant of Argument-Based Persuasion," *Journal of Personality and Social Psychology* 41, no. 5 (1981); Petty and Cacioppo, *Communication and*, 142-43.

³⁷² Perse, *Media Effects*, 89.

³⁷³ Petty and Cacioppo, *Communication and*, 142-43.

³⁷⁴ Pamela M. Homer and Lynn R. Kahle, "Source Expertise, Time of Source Identification, and Involvement in Persuasion: An Elaborative Processing Perspective," *Journal of Advertising* 19, no. 1 (1990): 30-31; Joseph R. Priester and Richard E. Petty, "The Influence of Spokesperson Trustworthiness on Message Elaboration, Attitude Strength, and Advertising Effectiveness," *Journal of Consumer Psychology* 13, no. 4 (2003); Zakary L. Tormala and Richard E. Petty, "Source Credibility and Attitude Certainty: A Metacognitive Analysis of Resistance to Persuasion," *Journal of Consumer Psychology* 14, no. 4 (2004): 429; Uma R. Karmarkar and Zakary L. Tormala, "Believe Me, I Have No Idea What I'm Talking About: The Effects of Source Certainty on Consumer Involvement and Persuasion," *The Journal of Consumer Research* 36, no. 6 (2010).

that represent authority and potential trustworthiness will also be considered.

FIGURE 3.7
Luckies Are Less Irritating, and Science Discovered IT³⁷⁵



a. Source Attraction

A source's apparent likeability and physical attractiveness can also function as a persuasive cue.³⁷⁶ Professional athletes and Hollywood celebrities, for example, are generally perceived to be highly-likeable and attractive individuals, and their mere presence in communications readily affects peripheral persuasion. Attractive people are also often considered to be more intelligent and skilled, which can augment Messenger Credibility.³⁷⁷ In addition to likeability fuelled by celebrity status and attractiveness, it is evident that individuals also tend to be much more amenable to people who give them compliments, and who express even the most

³⁷⁵ "Luckies Are Less Irritating," *The New York Times*, http://www.nytimes.com/slideshow/2008/10/06/business/media/20081006_CigaretteAd_Slideshow_ready_index.html; "Science Discovered It—You Can Prove It," *The New York Times*, http://www.nytimes.com/slideshow/2008/10/06/business/media/20081006_CigaretteAd_Slideshow_ready_6.html.

³⁷⁶ Shelly Chaiken, "Communicator Physical Attractiveness and Persuasion," *Journal of Personality and Social Psychology* 37, no. 8 (1979); Petty and Cacioppo, *Communication and*, 144-46.

³⁷⁷ Ingrid R. Olson and Christy Marshuetz, "Facial Attractiveness Is Appraised in a Glance," *Emotion* 5, no. 4 (2005): 498.

incidental similarities to themselves; including shared names, birthdates, or the same style of clothing.³⁷⁸ This is associated with the classic propaganda technique labelled ‘plain folks,’ or the ‘man-in-the-street’ device, which involves a persuader’s attempts to ‘win our confidence by appearing to be people like ourselves—“just plain folk among the neighbours.”’³⁷⁹ The expression of shared values also acts in this way, as does the use of common cultural symbols. For instance, conveying similar cultural values as those cherished by a certain group, or displaying a country’s flag on products, can act as peripheral cues for specifically targeted communities.³⁸⁰ The attractiveness and positive emotional feelings affiliated with a familiar object, such as a flag or a religious symbol, can be transferred to, or conflated with, another object, person, or idea. Such attractiveness acts as a peripheral cue because its persuasiveness may ‘even occur outside of conscious awareness.’³⁸¹

Within this study the utilization of celebrity status, audience flattery, the man-in-the-street device, important religious-cultural symbols, as well as a focus on shared values will be considered appeals to Source Attraction. This includes cases in which a communicator stresses any potential commonalities between themselves and a target audience.

ii. Statistics and Technical Jargon

In his popular text on persuasion, Levine explains, ‘The inclusion of statistics, even when they’re meaningless, can signal expertise.’³⁸² Indeed, statistics seem to make use of people’s *innumeracy*, which is described as an audience’s ‘functional incompetence to understand and

³⁷⁸ Peter Suedfeld, Stephen Bochner, and Carol Matas, "Petitioner's Attire and Petition Signing by Peace Demonstrators: A Field Experiment," *Journal of Applied Social Psychology* 1, no. 3 (1971); Jerry M. Burger et al., "What a Coincidence! The Effects of Incidental Similarity on Compliance," *Personality and Social Psychology Bulletin* 30, no. 1 (2004); Cialdini, *Influence*, 149-51.

³⁷⁹ Lynette Finch, "The Man in the Street and Second World War Propaganda," *Journal of Australian Studies* 23, no. 60 (1999): 96.

³⁸⁰ O'Shaughnessy and O'Shaughnessy, *Persuasion In*, 64-67.

³⁸¹ Leonie Huddy and Anna H. Gunthorsdottir, "The Persuasive Effects of Emotive Visual Imagery: Superficial Manipulation or the Product of Passionate Reason?," *Political Psychology* 21, no. 4 (2000): 747.

³⁸² Levine, *The Power of Persuasion*, 33.

argue back to a statistic, and to draw accurate meaning from, and criticize, a statistical argument about the real world.’ In like manner, ‘Many people confronted by a marketer’s numbers or statistics suspend otherwise natural skepticism in favor of regressive obedience to argument by authority.’³⁸³ Consequently, statistics are a marker of expertise, and the inability to fully comprehend the nuances of statistical information lead audiences to peripherally depend upon the credibility of the communicator. As one study concludes, statistical information causes people ‘to rely on a peripheral cue—the character of the communicator—as a basis for judgment, so that an expert communicator induced greater persuasion than did a source of lower expertise.’³⁸⁴ Furthermore, when statistics are represented in the form of a graphic, such as a pie chart indicating poll results, they function as a sort of persuasive mental shortcut, especially for audiences that are not particularly well educated on the communicated topic.³⁸⁵

Technical jargon has been found to operate in a similar persuasive manner as statistics. This includes complex language that may be incomprehensible to non-specialists. Studies have shown that there is a complementary relationship between such indecipherable terminology and the perceived expertise of a communicator. For instance, when a communicator uses highly specialized scientific jargon, audiences tend to subsequently rely upon the broadcaster’s credentials to determine the persuasiveness of the message. If both jargon and credentials are present in tandem, the message is deemed persuasive, and the complex language actually seems to catalyze the influence of prestigious accreditations. However, if jargon is unaccompanied by impressive credentials, then such complex language

³⁸³ David M. Boush, Marian Friestad, and Peter Wright, *Deception in the Marketplace: The Psychology of Deceptive Persuasion and Consumer Self Protection* (New York: Routledge, 2009), 70, 71.

³⁸⁴ Richard F. Yalch and Rebecca Elmore-Yalch, "The Effect of Numbers on the Route to Persuasion," *Journal of Consumer Research* 11, no. 1 (1984): 526.

³⁸⁵ Barry A. Hollander, "Newspaper Graphics and Inadvertent Persuasion," *Visual Communication Quarterly* 1, no. 1 (1994).

becomes less persuasively compelling. In this sense, jargon triggers persuasion via Messenger Credibility and is also dependent upon it.³⁸⁶

This study will identify technical jargon as forms complex language and scientific nomenclature, such as the use of Latin taxonomical species classifications and specialist terms requiring an education in specific fields of study. Technical drawings and charts will also be included as a component of jargon. Statistics will include the use of numerical data in support of an argument, and particular attention will be given to graphical representations of such statistical information.

FIGURE 3.8
Perfectionist [CP+] Wrinkle Lifting Serum³⁸⁷



BENEFITS 61% reduction in the look of deep lines and wrinkles

More Collagen in 2 Hours

Exclusive Wrinkle Lift Restructuring Peptides™ begin to amplify collagen production in just 2 hours based on in vitro testing.

Instantly skin looks less lined.

- See a 36% reduction in the apparent length, depth and number of lines and wrinkles.
- Fills in and visibly immobilizes wrinkles with a flexible elastomer.
- Skin looks brighter, fresher, more lineless.

iii. Two-Sided Persuasion

Two-sided persuasion has been succinctly described as ‘a message that provides information

³⁸⁶ Joel Cooper, Elizabeth A. Bennett, and Holly L. Sukel, "Complex Scientific Testimony: How Do Jurors Make Decisions?," *Law and Human Behavior* 20, no. 4 (1996); Carolyn L. Hafer, Kelly L. Reynolds, and Monika A. Obertynski, "Message Comprehensibility and Persuasion: Effects of Complex Language in Counterattitudinal Appeals to Laypeople," *Social Cognition* 14, no. 4 (1996).

³⁸⁷ "Perfectionist [Cp+] Wrinkle Lifting Serum," Estée Lauder, <http://www.esteeauder.com/product/2664/3581/Product-Catalog/Whats-New/Must-Haves/Skincare/Perfectionist-CP/Wrinkle-Lifting-Serum/index.tmpl>.

about both positive and negative attributes of a product or service, with the negative information included voluntarily.³⁸⁸ The intentional inclusion of negative information about a product, or even positive information about a competitor's wares, acts as a peripheral cue that enhances the perceived honesty and overall credibility of the communicator. This is often far more persuasive than if only positive information supporting the communicator's claim would be provided. Interestingly, Petty and Cacioppo have suggested that individuals who are 'intelligent or well-educated' could be particularly susceptible to this cue, because 'these subjects may be more likely to reason that a source that is aware of both sides is more credible (intelligent or knowledgeable) than a source that presents only one side.'³⁸⁹

Statements that willingly demonstrate a negative attribute about the communicator's argument, or which include positive comments regarding the opposition, will be considered two-sided persuasion.

3. SOCIAL LEVERS

i. The Rule of Reciprocity

The sociologist Alvin W. Gouldner has claimed that the 'norm of reciprocity' appears to be universal in all cultures worldwide. This rule is composed of two simple demands: '(1) people should help those who have helped them, and (2) people should not injure those who have helped them.'³⁹⁰ Hence, when individuals are given something by another person, it is a social requirement to repay the benefactor with equal or greater compensation. Such reciprocation is often automatic, and it has even been linked with evolutionary group fitness.³⁹¹ The reflexive

³⁸⁸ Ayn E. Crowley and Wayne D. Hoyer, "An Integrative Framework for Understanding Two-Sided Persuasion," *The Journal of Consumer Research* 20, no. 4 (1994): 562.

³⁸⁹ Petty and Cacioppo, *Communication and*, 78.

³⁹⁰ Alvin W. Gouldner, "The Norm of Reciprocity: A Preliminary Statement," *American Sociological Review* 25, no. 2 (1960): 171.

³⁹¹ Martin A. Nowak and Sébastien Roch, "Upstream Reciprocity and the Evolution of Gratitude," *Proceedings: Biological Sciences* 274, no. 1610 (2007); David P. Watts, "Reciprocity and Interchange in the Social Relationships of Wild Male Chimpanzees," *Behaviour* 139, no. 2/3 (2002).

nature of reciprocation can be readily used for persuasion, such that when a communicator offers a free gift, or offers to assist the audience in some way, people feel obligated to comply with the communicator's requests. Even when consumers feel that a corporation has exerted special effort to market a product such perceived exertion is rewarded with reciprocation in the form of buying habits.³⁹² This seemingly irresistible pressure to reciprocate can even supersede feelings of distaste for persuaders, and because of its automatic nature it can act as a type of peripheral cue that initiates instinctive compliance.³⁹³

This study will classify offers of free gifts or services as the use of the Rule of Reciprocity. Also, any claims that a communicator is assisting the audience in some way will be included within this persuasive cue.

ii. Self-Referencing

Robert E. Burnkrant and H. Rao Unnava have explained that self-referencing 'occurs when information is processed by relating it to aspects of oneself (e.g., one's own personal experiences).'³⁹⁴ For instance, advertisers may encourage customers to personally consider what it would be like to use goods, or a communicator may solicit an audience to relate message arguments to their own life experiences. This can include providing subtle narratives that audiences can imagine themselves participating in.³⁹⁵ When individuals personally relate to a message it enhances learning, message recall, and causes attitudes to become more favourable towards the communication.³⁹⁶ This self-referencing can also induce message processing when elaboration likelihood is low. As Kathleen Debevec and Jean B. Romeo have

³⁹² Andrea C. Morales, "Giving Firms an "E" for Effort: Consumer Responses to High-Effort Firms," *The Journal of Consumer Research* 31, no. 4 (2005).

³⁹³ Cialdini, *Influence*, 23-24.

³⁹⁴ Robert E. Burnkrant and H. Rao Unnava, "Effects of Self-Referencing on Persuasion," *The Journal of Consumer Research* 22, no. 1 (1995): 17.

³⁹⁵ Jennifer Edson Escalas, "Self-Referencing and Persuasion: Narrative Transportation Versus Analytical Elaboration," *The Journal of Consumer Research* 33, no. 4 (2007).

³⁹⁶ Joan Meyers-Levy and Laura A. Peracchio, "Moderators of the Impact of Self-Reference on Persuasion," *The Journal of Consumer Research* 22, no. 4 (1996): 408.

stated regarding advertising, 'if consumers can relate commercial information to themselves, they will be more likely to process the information, thus enhancing the effectiveness of an ad.'³⁹⁷ Furthermore, self-referencing narratives can cause individuals to think about life experiences in the past, causing them to be transported, or immersed, into the story. This personal reflection acts in a peripheral manner to enhance persuasion without increasing message elaboration, leading 'to a favourable evaluation of the advertised product, regardless of argument strength.'³⁹⁸

iii. Social Consensus

a. Multiple Sources

Studies have demonstrated that hearing the same or similar messages from more than one source increases message processing in audiences, and can also serve as a peripheral cue.³⁹⁹

Though it is not understood exactly why listening to matching statements from several different sources influences persuasion, Petty and Cacioppo have explained that when elaboration likelihood is low 'people may use the number of people who support the issue as a simple cue as to the worth of the proposal.'⁴⁰⁰ People seem more likely to agree with a message stated by several different voices because it appears to reflect a social consensus. This study specifically demarcates this message variable as the presence of three or more sources that are stating an analogous message within a single communication.⁴⁰¹

b. Social Proof

It is evident that individuals 'use the opinions apparently held in their immediate social context to form judgments,' and most people 'tend to align their beliefs with the opinions of those

³⁹⁷ Kathleen Debevec and Jean B. Romeo, "Self-Referent Processing in Perceptions of Verbal and Visual Commercial Information," *Journal of Consumer Psychology* 1, no. 1 (1992): 83-84.

³⁹⁸ Escalas, "Self-Referencing and," 422.

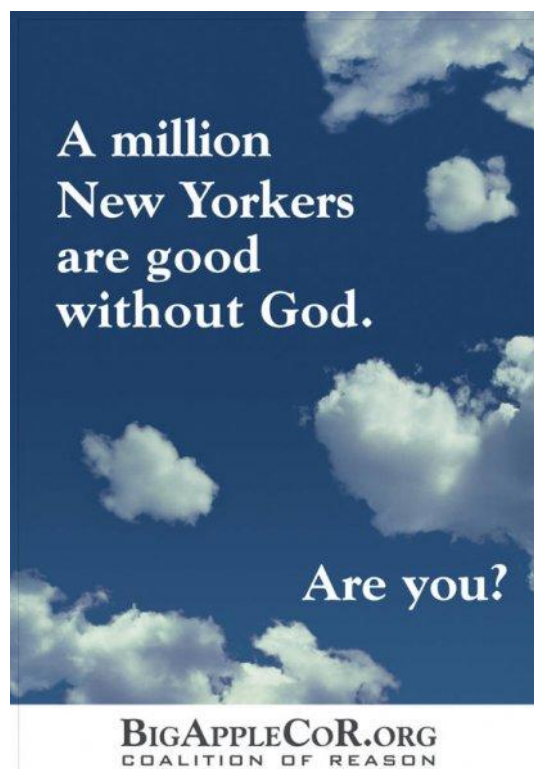
³⁹⁹ Petty and Cacioppo, *Communication and*, 96-101.

⁴⁰⁰ *Ibid.*, 212.

⁴⁰¹ See: *Ibid.*, 96-101.

around them.⁴⁰² Accordingly, persuasive communicators do not necessarily need to convince audiences that an idea actually merits reception, but simply that many other people believe that it does. Such appeals to social context can generate long-lasting opinions and serve as peripheral cues, especially when individuals are unfamiliar with information and unsure about how to act.⁴⁰³

FIGURE 3.9
A Million New Yorkers⁴⁰⁴



Advertising testimonials from satisfied customers function in this manner, as do public opinion polls, which tend to cause audience's to shift personal opinions to coincide with majority positions.⁴⁰⁵ Additionally, if message recipients exhibiting low elaboration likelihood simply hear a positive audience reaction to a communication it tends to cause the message to

⁴⁰² Janetta Lun et al., "(Why) Do I Think What You Think? Epistemic Social Tuning and Implicit Prejudice," *Journal of Personality and Social Psychology* 93, no. 6 (2007): 957, 58.

⁴⁰³ Gretchen B. Sechrist and Charles Stangor, "When Are Intergroup Attitudes Based on Perceived Consensus Information?: The Role of Group Familiarity," *Social Influence* 2, no. 3 (2007).

⁴⁰⁴ From: Eve Attermann, "Atheist Subway Ads: Ny Coalition of Atheist Groups Launches Subway Advertising Campaign," Huffington Post, http://www.huffingtonpost.com/2009/10/20/atheist-subway-ads-ny-coa_n_327613.html.

⁴⁰⁵ Perse, *Media Effects*, 115.

be perceived as more persuasive.⁴⁰⁶ Social Proofs do not necessarily need to appeal to the largest population groups in society, but with the majority of individuals in the specific community that a communicator is attempting to influence. For instance, a Christian leader may state that the greatest number of Christians adhere to certain principles or actions in order to convince a predominantly Christian audience.

b. *Underdog Effects*

In contrast with Social Proof, a communicator may purposefully stress the seemingly underdog nature of an idea, action, or group. Something can be described as being an underdog when it is expected to lose a contest due to a lack of ability or popularity, and/or when it is the victim of injustice. For persuasion purposes, such an underdog group is often characterized as an ensemble of righteous dissenters/victims, contesting against a domineering and even perfidious majority. Therefore, instead of being asked to join the majority, an audience is rallied to enlist with a seemingly noble minority social consensus. Underdog Effects are often less predictable than Social Proof's influence, though they can still prove to be influential. In particular, such effects appear most effective when elaboration likelihood can be described as being low due to a lack of information available to an audience, or when listeners are somewhat indifferent to the ideas being presented in a communication.⁴⁰⁷

If individuals become persuaded to support an ostensible underdog they are often more likely to defend it. For instance, during political elections voter turnouts are often appreciably higher among supporters of less popular candidates.⁴⁰⁸ Furthermore, biographical underdog stories, described as 'the marketing of disadvantage,' have proven effective in fostering

⁴⁰⁶ Axsom, Chaiken, and Yates, "Audience Response."

⁴⁰⁷ Daniel W. Fleitas, "Bandwagon and Underdog Effects in Minimal-Information Elections," *The American Political Science Review* 65, no. 2 (1971); Manfred Gartner, "Endogenous Bandwagon and Underdog Effects in a Rational Choice Model," *Public Choice* 25(1976): 83.

⁴⁰⁸ David K. Levine and Thomas R. Palfrey, "The Paradox of Voter Participation? A Laboratory Study," *The American Political Science Review* 101, no. 1 (2007).

consumer purchasing and brand loyalty.⁴⁰⁹ This involves referring to the apparent ‘humble origins, lack of resources, and determined struggle against the odds’ that may have been faced by a particular group in the quest for success.⁴¹⁰ In relation to product marketing, this underdog biography causes individuals to ‘react positively when they see underdog aspects of their own lives reflected in branded products.’⁴¹¹ Researchers have demonstrated how numerous corporations and political candidates have strategically enlisted this technique.⁴¹²

It is apparent that the persuasive cues listed above do in fact coincide with a number of the propaganda techniques catalogued in Appendix Two. Through the ELM and persuasion research, however, it is possible to better understand the ways that such message variables persuasively operate. While this list is not totally exhaustive, it does embody widely-researched persuasion variables that can be stationed within the ELM. It is also important to note that, besides these persuasive cues, a message’s modality, or media type used for communication, also influences elaboration likelihood. For instance, in comparison to written text, both audio and visual messages ‘give people less opportunity to process issue-relevant arguments because exposure is forced rather than self-paced.’⁴¹³ Consequently, if a message’s mode of communication is audio and/or visual, and if a particular media type somehow reduces the ability of an audience member to thoroughly regulate argument processing, it is more likely to persuade via the peripheral route.⁴¹⁴ For this reason, the current project will readily include nontextual occurrences of table 3.2’s message variables, which often appear lockstep

⁴⁰⁹ Neeru Paharia et al., "The Underdog Effect: The Marketing of Disadvantage and Determination through Brand Biography," *Journal of Consumer Research* 37, no. 5 (2011).

⁴¹⁰ *Ibid.*: 775.

⁴¹¹ *Ibid.*: 776.

⁴¹² *Ibid.*: 775.

⁴¹³ Petty and Cacioppo, *Communication and*, 164.

⁴¹⁴ Shelly Chaiken and Alice H. Eagly, "Communication Modality as a Determinant of Persuasion: The Role of Communicator Salience," *Journal of Personality and Social Psychology* 45, no. 2 (1983).

with written persuasion efforts. This is particularly important for propaganda analysis because visually-based persuasion efforts have repeatedly marked the use of propaganda over the last 100 years.⁴¹⁵

The use of the above code list for content analysis will be further augmented by contextualizing persuasion within the sociology of knowledge (SoK).

3.4 The Sociology of Knowledge and Propaganda

The SoK is a specialized subdiscipline of sociology that can be broadly defined as the analysis of human knowledge and the societal context in which it arises. This includes examining the social genesis, function, and impact of ‘whatever passes for “knowledge” in a society, regardless of the ultimate validity or invalidity (by whatever criteria) of such “knowledge.”’⁴¹⁶ Karl Mannheim is most often credited with having formally established the field, though aspects of the sociology of knowledge infuse the works of sociology’s leading pioneers.⁴¹⁷ Also, Peter L. Berger and Thomas Luckmann’s *The Social Construction of Reality* is recognized as one of the SoK’s modern epitomes. A chief premise of SoK is that knowledge is fundamentally human-bound and socially-determined, such that it cannot be fully understood without examining its social origins. As Mannheim explained, ‘The central thesis of the sociology of knowledge is that forms of thinking exist which cannot be adequately comprehended as long as their social origins remain obscured.’⁴¹⁸ Furthermore, this socially-articulated knowledge crucially assists in preserving social order and shaping people’s *Weltanschauung*, or worldview, which establishes collective perceptions of

⁴¹⁵ Moore, *Propaganda Prints*.

⁴¹⁶ Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* (New York: Anchor Books, 1966), 15.

⁴¹⁷ Antony J. Puddephatt and Neil McLaughlin, "The Sociology of Knowledge," in *21st Century Sociology: A Reference Handbook*, ed. Clifton D. Bryant and Dennis L. Peck (Thousand Oaks: Sage, 2007).

⁴¹⁸ Karl Mannheim, *Ideologie Und Utopie* (Frankfurt am Main: Vittorio Klostermann, 1995 [1929]), 4. (my translation)

reality. This understanding of reality is seen as a subjective assemblage of ‘what people “know” as “reality” in their everyday, non- or pre-theoretical lives,’ and, it is ‘precisely this “knowledge” that constitutes the fabric of meanings without which no society could exist.’⁴¹⁹ Therefore, knowledge is not only a societal product, but it also serves to maintain and act back upon the very social order from which it arises, and provides the framework for shared apprehensions of reality.

Though some have claimed that the SoK is outdated, its importance cannot be overlooked because the discipline ‘inquires into the consequences that knowledges have in politics and in people’s public and private lives.’⁴²⁰ As McCarthy has further explained:

Sociology of knowledge examines how objects of public attention arise, how social problems come to be defined and the functions particular knowledges play in this process. For example, the conflicts of nation-states and parties, between church and secular authorities, of rising classes and such interest groups as women and people of color, of medical and technical élites asserting social agendas for the unborn and the dying are all concerned with the question: *Whose knowledge should decide?*⁴²¹

This focus is particularly relevant for propaganda analysis, since propaganda is mass media for mass persuasion, engendered by conflict, and designed to influence perceptions of reality. Indeed, it is apparent that links exist between today’s seemingly ubiquitous mass media disseminations of *knowledge*, and the potential impact of these communications upon social constructions of reality.⁴²² Furthermore, the incorporation of SoK within propaganda analysis is especially fitting when taking into account its description of “symbolic universes” and their maintenance.

⁴¹⁹ Berger and Luckmann, *The Social*, 27.

⁴²⁰ E. Doyle McCarthy, *Knowledge as Culture: The New Sociology of Knowledge* (New York: Routledge, 1996), 3.

⁴²¹ *Ibid.*, 3-4.

⁴²² *Ibid.*, 10.

According to Berger and Luckmann, social constructions of reality underpin symbolic universes. These universes are conglomerates of the practical and theoretical social knowledge of communities. They provide the means to understand and order the world, guide social action, and make sense of such experiences as life and death. Symbolic universes need not be described as purely ‘mythological, religious, or metaphysical interpretations of reality.’⁴²³ For instance, ‘The modern atheist,’ state Berger and Luckmann, ‘who bestows meaning upon death in terms of a *Weltanschauung* of progressive evolution or of revolutionary history also does so by integrating death within a reality-spanning symbolic universe.’⁴²⁴ It is further explained that symbolic universes, which are ‘conceived of as the matrix of *all* socially objectivated and subjectively real meanings,’ serve to ‘integrate different provinces of meaning and encompass the institutional order in a symbolic totality.’⁴²⁵ Thus, they legitimate a society’s institutions, and cyclically impart stability to the social environment from which a symbolic universe’s constituents of knowledge first developed.

While symbolic universes are largely ‘self-maintaining’ and ‘self-legitimizing,’⁴²⁶ Berger asserts, ‘All socially constructed worlds are inherently precarious.’⁴²⁷ There are numerous threats to symbolic universes, including deviant versions of a universe, or exposure to incompatible universes that exist in other societies. When faced with such threats ‘conceptual machineries of universe-maintenance’ are employed to help ensure a universe’s survival.⁴²⁸ This machinery is designed to guard the universe’s constructed reality and it can include ‘mythology,

⁴²³ Berger and Luckmann, *The Social*, 101.

⁴²⁴ Ibid.

⁴²⁵ Ibid., 95, 96.

⁴²⁶ Ibid., 105.

⁴²⁷ Peter L. Berger, *The Sacred Canopy: Elements of a Sociological Theory of Religion* (New York: Anchor Books, 1990 [1967]), 29.

⁴²⁸ Berger and Luckmann, *The Social*, 105.

theology, philosophy, and science.⁴²⁹ Berger and Luckmann highlight two specific applications of these machineries of universe-maintenance: therapy and nihilation. Therapy involves attempting to keep people within a universe when opposing viewpoints jeopardize its congruity. As Berger and Luckmann note, therapy is ‘the application of conceptual machinery to ensure that actual or potential deviants stay within the institutionalized definitions of reality, or, in other words, to prevent the “inhabitants” of a given universe from “emigrating.”’⁴³⁰ Nihilation, on the other hand, entails using ‘similar machinery to liquidate conceptually everything *outside* the same universe.’⁴³¹ This process endeavours to delegitimize anything that attacks a constructed universe, and a threat’s ontological status is lowered by denying ‘the reality of whatever phenomena or interpretations of phenomena do not fit into that universe.’⁴³² Additionally, nihilation can include the total liquidation of discordant conceptions via annexation, which involves translating incongruous ideas into notions originating from the universe being defended.⁴³³ For example, if a constructed reality is threatened by a particular concept, that concept may be commandeered within the besieged universe, perhaps through redefinition and reinterpretation, so that its menace is neutralized by actually including it in the universe itself.

As Cowan has explained, propaganda can serve as a tool for such universe-maintenance.⁴³⁴ When a symbolic universe is challenged, propaganda can be employed to disseminate persuasive messages of therapy and nihilation in order to influence constructions of reality. This project will examine how the most recurrent persuasion tactics listed in table 3.2 are used in EW propaganda for universe-maintenance in these

⁴²⁹ Ibid., 110.

⁴³⁰ Ibid., 112-13.

⁴³¹ Ibid., 114. (their italics)

⁴³² Ibid., 113.

⁴³³ Ibid., 115.

⁴³⁴ Cowan, "Bearing False", 225.

two ways. Furthermore, it will explore how these applications are utilized to establish brands, which are themselves constructed realities of merchandise, ideas, and individuals.

3.4.1 Reality Construction/Maintenance, Brands, and Persuasion

Branding has become a fundamental concern in marketing, and it is recognized that brands are much more than simple logos. Indeed, ‘thinking of branding as being “to do with naming products,” or “about getting the right promotion with the name prominently displayed,” or “getting the design right,” is too myopic.’⁴³⁵ A brand may be conceived as a type of metaphor for a constructed ‘product reality’⁴³⁶ that can be affiliated not only with consumer goods but with a wide range of “products” that can include services, people, or political ideas.⁴³⁷ In its simplest form, a successful brand ‘*is a name, symbol, design, or some other combination, which identifies the “product” of a particular organization as having a sustainable differential advantage.*’⁴³⁸ A brand associates a product with both concrete and conceptual notions that may actually be extraneous to the product itself, such as friendship, security, sexual attraction, reliability, quality, and prestige.⁴³⁹ In this manner a brand ‘*is not only different from a product, it is much more than a product.*’⁴⁴⁰ The BMW brand, for instance, can embody abstract ideas and emotions that extend beyond a simple automobile. ‘When BMW drivers proudly turn the ignition keys for the first time in “the ultimate driving

⁴³⁵ Leslie de Chernatony and Malcolm McDonald, *Creating Powerful Brands: In Consumer, Service and Industrial Markets*, 3rd ed. (Oxford: Elsevier Butterworth-Heinemann, 2003), 21.

⁴³⁶ O’Shaughnessy and O’Shaughnessy, *Persuasion In*, 37.

⁴³⁷ Chernatony and McDonald, *Creating Powerful*, 12; Peter Doyle, "Building Successful Brands," in *Excellence in Advertising: The Ipa Guide to Best Practices*, ed. Leslie Butterfield (Oxford: Elsevier Butterworth-Heinemann, 2003), 3.











⁴³⁸ It is important to note that brands can also be well-known but become negative representations of products. Doyle, "Building Successfuls," 4. (his italics)

⁴³⁹ Leslie de Chernatony, *From Brand Vision to Brand Evaluation: The Strategic Process of Growing and Strengthening Brands*, 2nd ed. (Oxford: Elsevier Butterworth-Heinemann, 2006), 5-6.

⁴⁴⁰ John Bartle, "The Advertising Contribution," in *Excellence in Advertising: The I.P.A. Guide to Best Practices*, ed. Leslie Butterfield (Oxford: Elsevier Butterworth-Heinemann, 2003), 29. (his italics)

machine, ” explain Leslie de Chernatony and Malcolm McDonald, ‘they are not only benefiting from a highly engineered car with excellent performance, but also taking ownership of a symbol that signifies the core values of exclusivity, performance, quality and technical innovation.’⁴⁴¹ That symbol, which swiftly communicates noteworthy values and concepts, is a brand.

FIGURE 3.10
The Top Ten Most Valuable Global Brands of 2012⁴⁴²

#	Category	Brand	Brand Value 2012 (\$M)
1	Technology		182,951
2	Technology		115,985
3	Technology		107,857
4	Fast Food		95,188
5	Technology		76,651
6	Soft Drinks		74,286
7	Tobacco		73,612
8	Telecoms		68,870
9	Telecoms		49,151
10	Telecoms		47,041

In the context of the sociology of knowledge, a brand is a type of constructed reality designed around a product, which can become socially accepted and perpetuated. In many ways this constructed reality is an aggregate of all the various persuasion techniques used to endorse a product. For instance, if Messenger Credibility and Social

⁴⁴¹ Chernatony and McDonald, *Creating Powerful*, 20.

⁴⁴² BrandZ, "Brandz Top 100 Most Valuable Global Brands 2011 " Millward Brown, <http://www.millwardbrown.com/BrandZ/Default/Categories.aspx>.

Consensus are employed to persuade audiences, these techniques manifest a cumulative impression of the product through a brand; where in one emblem or slogan the brand connects these tactics, and exhibits the product as being socially appealing and advocated by trustworthy sources.⁴⁴³ Therefore, the combination of all persuasion techniques, and the sum of therapy or nihilation efforts, collectively fashion the brand's product reality as a synthesis of persuasion efforts. In this way, and from the perspective of the ELM, a brand represents an amalgam of *all* of the message variables that serve as persuasive cues used to support a product. As such it becomes, in and of itself, one single commanding persuasive element, or what may be described as a "meta-cue."

When potential customers or recipients of product information are deciding whether to purchase goods or accept a message, the presence of a brand meta-cue can act as a peripheral cognitive shortcut.⁴⁴⁴ The brand logo may reduce a consumer's 'need to obtain other information' because of what it cumulatively symbolizes.⁴⁴⁵ In this sense, brands 'encapsulate the reasons and emotions that cause us to buy one thing rather than something else,' and provide 'a route map through a bewildering variety of choices.'⁴⁴⁶ As marketing theorists have noted, a 'common cognitive shortcut is to depend on *brand names*,' since brands 'save us time, effort and worry,' enabling audiences to bypass the process of rigorously analyzing persuasive messages and intensely evaluating rival products.⁴⁴⁷

⁴⁴³ For instance, see: Tülin Erdem and Joffre Swait, "Brand Credibility, Brand Consideration, and Choice," *Journal of Consumer Research* 31, no. 3 (2004).

⁴⁴⁴ Doyle, "Building Successfuls," 5.

⁴⁴⁵ Chernatony and McDonald, *Creating Powerful*, 13.

⁴⁴⁶ Klaus Schmidt and Chris Ludlow, *Inclusive Branding: The Why and How of a Holistic Approach to Brands* (New York: Palgrave MacMillan, 2002), 1; Tom Blackett, "What is a Brand?," in *Brands and Branding*, ed. Rita Clifton and John Simmons (London: Profile Books, 2003), 18.

⁴⁴⁷ Walter McDowell and Alan Batten, *Branding TV: Principles and Practices* (Burlington: Elsevier, 2005), x (their italics); Simon Anholt, *Brand New Justice: The Upside of Global Branding* (Oxford: Butterworth-Heinemann, 2003), 3.

A number of scholars have, at least in part, associated the idea of branding with propaganda, the manufacture of constructed realities, and the maintenance of symbolic universes. For instance, in his discussion of WWII propaganda Nicholas O'Shaughnessy explains that that 'Nazis understood and manipulated the power of the brand, creating what amounts to a parallel universe of imagery and symbolism.'⁴⁴⁸ Because a brand is a combination of therapy and nihilation, when it is used in propaganda the brand's own constructed reality can act as a powerful tool for symbolic universe maintenance. In considering brand usage for such maintenance it is important to note that studies reveal how brand differentiation is one of the most significant determinants of a brand's persuasiveness. As David W. Stewart and David H. Furse concluded in their landmark analysis of over 1000 television adverts, 'The single most important advertising executional factor related to the persuasiveness of a commercial is the presence of a brand-differentiating message.'⁴⁴⁹ These messages are those that emphasize something unique about a brand, and which stress how a branded-product is better than other options, either because of its own characteristics or through some other qualities extrinsic to the product itself. 'A brand-differentiating claim,' explain Stewart and Furse, 'must introduce meaningful variation among alternatives, but it need not be directly related to unique product functions (for example, the only product approved for use by the U.S. Olympic team).' Such differentiating statements act as persuasive cues, because 'When products are perceived to be very similar, any basis for differentiation, whether or not related to product performance, may represent the basis for choice.'⁴⁵⁰

It is in light of this information that the present study will not only examine how persuasion techniques are used for therapy and nihilation, but how combinations of

⁴⁴⁸ O'Shaughnessy, "Selling Hitler," 55.

⁴⁴⁹ David W. Stewart and David H. Furse, *Effective Television Advertising: A Study of 1000 Commercials* (Lexington: Heath and Company, 1986), 119.

⁴⁵⁰ *Ibid.*, 124.

these two applications construct brand realities in the EW, and how such brands are persuasively differentiated from alternatives.

3.5 The Methodological Synthesis

Propaganda's definitional elements have served to reveal which research methods and perspectives are the most apposite for propaganda analysis. These include communication studies, persuasion research, as well as the sociology of knowledge, and this chapter has broadly considered elements from all three. The amalgamation of these research strategies results in a unique methodological synthesis for propaganda analysis, which involves the following three interconnected steps:

1. *Employing Content Analysis.* Using the Elaboration Likelihood Model as a framework for comprehending persuasion, table 3.2's coding list will be applied for the content analysis of ICR, AiG, and CSC propaganda. Reporting the observations gathered from this inquiry will engage most of this project, while also providing the foundational data that will be utilized within this study.
2. *Considering Composite Propaganda Effects.* Conceptualizations will be made regarding the possibility of EW propaganda media effects influences, including how specific persuasion techniques may serve to affect agenda-setting, cumulative exposure, and cultivation effects.
3. *Examining Therapy, Nihilation, and EW Branding.* In the context of the sociology of knowledge and persuasion research, the content analysis data will be further investigated to reveal how persuasion techniques are being used for therapy and nihilation. Such an analysis will reveal how the sum of these efforts formulate specific EW brands.

This study will now endeavour to complete every aspect of these three steps, which will provide an important context for assessing H1-3 and their EW implications.

CHAPTER FOUR

Institute for Creation Research Propaganda

God has called Christians to be soldiers in His army and to fight His battles. As a scientific organization, He has called us to bring scientific armaments to the battlefield, demonstrating Scripture's scientific accuracy, and to support other warriors with different specialties. Together we can win the battle. He has already won the war.

John D. Morris⁴⁵¹

Using scientific research as the basis to uncover and communicate the wondrous evidence of His matchless creation, ICR is uniquely positioned to counter the evils of evolutionary thought that keep many from a saving knowledge of our Lord. You will not find another ministry that does what ICR does, and does it as well as ICR can.

Henry Morris IV⁴⁵²

4.1 ICR Message Variable Frequencies

This study begins its content analysis data reporting by first examining the most ubiquitous ELM cues exhibited by ICR propaganda. Following this review, the next two chapters will then detail prevalent message variables found throughout AiG and CSC materials. Before engaging in this analysis, however, it must be noted that within the current project the number of times each persuasive message cue occurs per 1000 words will act as the principal measure of variable frequency. Additionally, the number of occurrences per average article will be supplied to help illustrate the prevalence of ELM cues. All message variables that demonstrate at least 0.400 incidents per 1000 words will be considered regularly-occurring enough to merit further analysis and

⁴⁵¹ John D. Morris, "Modern Samaritans," *Acts&Facts* 39, no. 3 (2010): 15.

⁴⁵² Henry Morris IV, "The Silent Multitude," *Acts&Facts* 39, no. 1 (2010): 21.

discussion. For such variables there is at least a 0.400 single event probability that they will occur in any 1000 word selection of text. Also, each variable with an incident rate ≥ 0.400 exhibits on average at least one or more occurrences every 2500 words.

Accordingly, such variables will appear a minimum of once every 2.79 ICR, 3.57 AiG, and 2.80 CSC articles; where the mean article word count for each group is 894 words for ICR, 701 for AiG, and 892 words for CSC.⁴⁵³ This average rate of recurrence indicates that these variables would be found in at least 35.8% of all ICR articles, 28.0% of AiG articles, and 35.7% of CSC articles.

TABLE 4.1
Frequency of Message Variables in ICR Materials

Number of Articles: 436 Total Word Count: 389655 Mean Article Word Count: 894				
Message Variable		Total Incidents	Incidents per 1000 Words	Incidents per Article (Avg.)
1. Data Delivery Options	Asking Questions	763	1.958	1.751
	Disrupt-then-Reframe	0	0.000	0.000
	Message Repetition	63	0.162	0.145
	Number of Message Arguments	29	0.074	0.067
	The Scarcity Principle	74	0.190	0.170
2. Offence-Defence	Arousal of Emotions (Fear)	58	0.149	0.133
	Source Cues	1328	3.408	3.047
	Statistics and Technical Jargon	308	0.790	0.707
	The Contrast Principle and Negativity Effect	741	1.902	1.700
	Two-Sided Persuasion	23	0.059	0.053
3. Social Levers	Self-Referencing	15	0.038	0.034
	Social Consensus	408	1.047	0.936
	The Rule of Reciprocity	6	0.015	0.014
TOTAL		3817	9.796	8.757

It is also important to consider that by their very nature some variables tend to require more words to implement than others. For instance, Message Repetition and the Number of Message Arguments often necessitate greater textual real estate per incident than might Asking Questions or the expression of various Source Cues. Nevertheless,

⁴⁵³ Endnotes have not been included in the calculation of article word counts.

this project measures the occurrence of every variable equally, without allocating differing coding weights in relation to the quantity of words used. The variable incident counts and frequencies for ICR propaganda materials are detailed in table 4.1.

Persuasive cues exhibiting ≥ 0.400 occurrences per 1000 words are subsequently catalogued from the greatest to least frequency in table 4.2.

TABLE 4.2
ICR Message Variables Exhibiting ≥ 0.400 Incident Rates per 1000 Words

Message Variable	Incidents per 1000 Words
1. Sources Cues	3.408
2. Asking Questions	1.958
3. The Contrast Principle and Negativity Effect	1.902
4. Social Consensus	1.047
5. Statistics and Technical Jargon	0.793

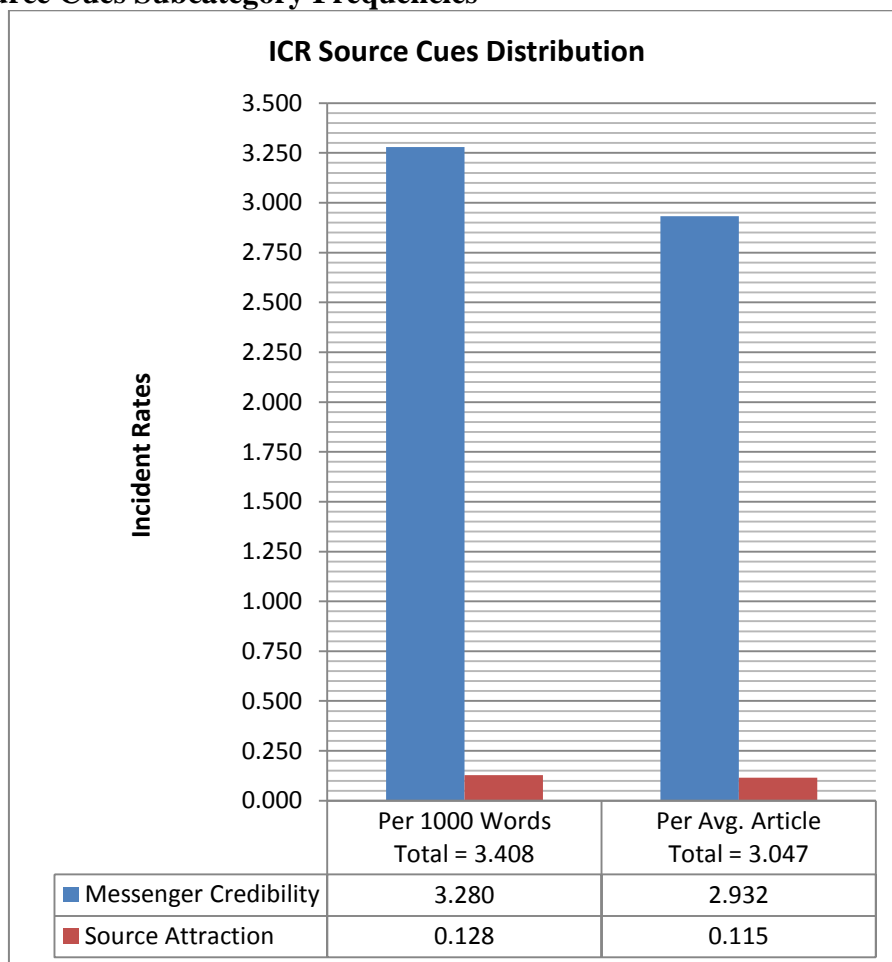
Each of the five message variables detailed in table 4.2 will be analyzed successively. In regards to this, it is evident that often individual statements can articulate multiple persuasive cues simultaneously. For example, consider the following query found in an ICR article intended to persuade audiences of Genesis' historicity: 'So why would thousands of highly-trained scientists not only believe Genesis to be reliable history, but base their scientific research on the details and implications of that history?'⁴⁵⁴ In addition to being a rhetorical question, this sentence's references to 'thousands of highly-trained scientists' conducting 'scientific research' express both Social Consensus and forms of Source Cues. Since message variables can exist synchronously in this way, they cannot be examined in total isolation from one another. As a result, some persuasive cues that display fewer than 0.400 occurrences per 1000 words may still occasionally be discussed when they coexist with more plentifully-occurring variables.

⁴⁵⁴ Andrew A. Snelling, "Genesis: Real, Reliable, Historical," *Acts&Facts* 38, no. 9 (2009): 13.

4.2 ICR and Source Cues

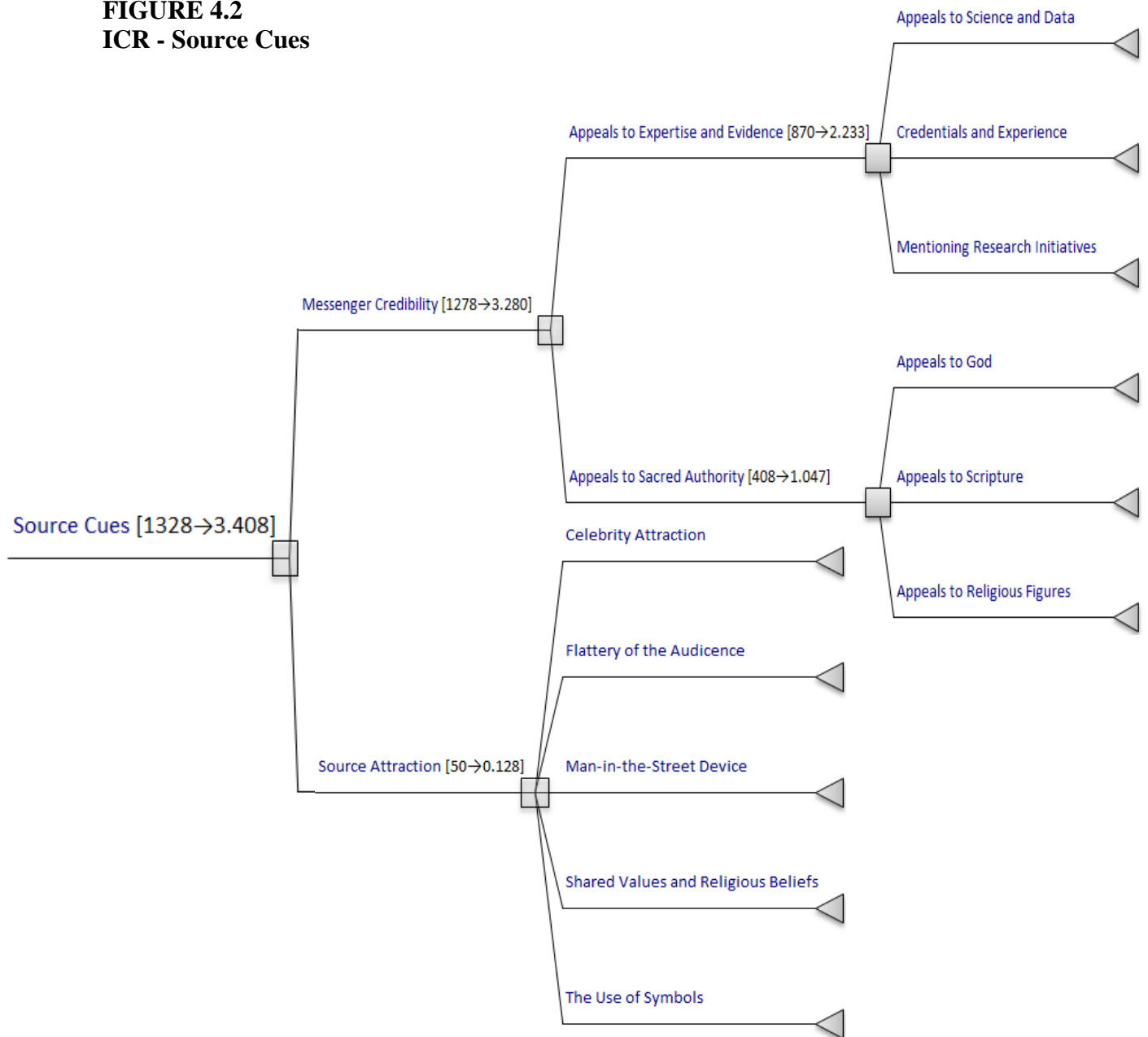
Undoubtedly, Source Cues represent the most readily occurring message variable observed in Institute for Creation Research propaganda. This persuasive cue represents 34.8% of all ICR message variable appearances, and with a frequency rate of 3.408 incidents per 1000 words the average ICR article contains at least three occurrences of this element in one form or another. As was delineated in Chapter Three, Source Cues can be divided into two principal subcategories, named Messenger Credibility and Source Attraction. The distribution of frequency rates associated with these two primary varieties of Source Cues is represented in figure 4.1.⁴⁵⁵

FIGURE 4.1
ICR Source Cues Subcategory Frequencies



⁴⁵⁵ Note: Chapter Seven includes graphs comparing ICR, AiG, and CSC frequency rates.

FIGURE 4.2
ICR - Source Cues



Additionally, Messenger Credibility and Source Attraction are situated in figure 4.2.

This figure displays key incident numbers and the corresponding occurrence rates of major Source Cue subdivisions in square brackets (where, [# of incidents → frequency per 1000 words]), while illustrating further branches of this message variable that will be identified here. It is evident that the first of these subcategories is the most prevalent within ICR materials; representing 1278 of the total 1328 recorded Source Cues incidents. This accounts for 96.2% of ICR Source Cues appearances, meaning that

Messenger Credibility alone boasts 3.280 occurrences per 1000 words of text.

Examining ICR's use of this specific persuasion technique reveals how it is employed in two major ways that are here classified as appeals to sacred authority, and appeals to expertise and evidence.

Appeals to sacred authority are religiously-based forms of Messenger Credibility, which have already been discussed briefly in table 3.2. These may include attempts at gaining credibility by insisting that God sanctions a message and the messenger's cause, or that religious scripture and sacred individuals are message partisans. Alternatively, appeals to expertise and evidence refer to various forms of credibility that are built upon secular knowledge and competencies. These may include references to a messenger's prestigious education and academic prowess, or to the overwhelming evidential data supporting a message's arguments. Within Institute for Creation Research materials this second variety of Messenger Credibility occurs far more readily than do appeals to sacred authority. In fact, 870 incidents, or 68.1% of the total ICR Messenger Credibility occurrences, are clear appeals to expertise and evidence in comparison with 408 appeals to sacred credibility. The intricacies of these two Messenger Credibility subdivisions will now be examined.

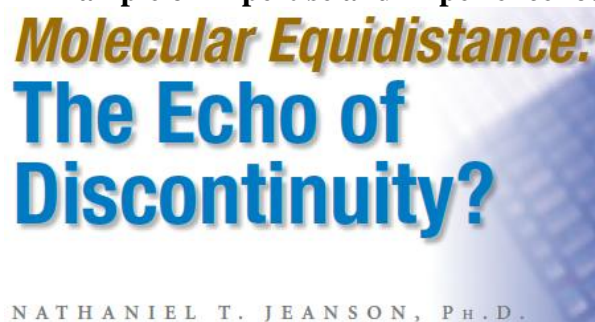
4.2.1 ICR Messenger Credibility I: Appeals to Expertise and Evidence

There are three significant ways that appeals to expertise and evidence are manifested within ICR propaganda. The first and foremost of these methods includes simple references to the credentials and experience possessed by those who are said to support ICR's Darwin-scepticism. Occurring 465 times, and corresponding to a frequency rate of 1.193 occurrences per 1000 words, such references to credentials often appear within ICR member profiles that accompany *Acts&Facts* articles. These summaries provide an ICR writer's name and basic educational titles below the article

header, followed by a picture and a brief description of the author's qualifications at the end of each piece. Credentials and academic experience are listed repeatedly for the same writer, irrespective of the number of times that this individual has contributed to *Acts&Facts*, even within a single issue. Also, ICR members are almost always referred to by their academic titles, and their credentials are regularly supplied even when their names are just briefly mentioned by other ICR writers.⁴⁵⁶ For instance, Nathaniel Jeanson became an ICR research associate in 2009 after receiving a PhD in cell and developmental biology from Harvard Medical School. He is invariably referred to as 'Dr. Jeanson' in *Acts&Facts* articles, and any mention of his name consistently includes descriptions of his Harvard credentials and research experience.⁴⁵⁷

FIGURE 4.3

An Example of Expertise and Experience found in ICR Articles⁴⁵⁸



Dr. Jeanson is Research Associate and received his Ph.D. in Cell and Developmental Biology from Harvard University.



This is expressed in the magazine which first introduces Jeanson to audiences: "Don't forget to read the profile of Dr. Nathaniel Jeanson... A recent graduate of Harvard University, Dr. Jeanson comes with great credentials and experience in stem cell research—a wonderful asset to ICR's science staff. Welcome, Dr. Jeanson!"⁴⁵⁹ In fact, of the 29 times that he is mentioned in Institute for Creation Research materials, either as the author of an article or within another contributor's work, only once is Jeanson not

⁴⁵⁶ Note: Within this study the use of an academic title or rank alone is not enough to merit being considered a Source Cue. Additional descriptions of an individual's credentials and experience are also required.

⁴⁵⁷ See: Lawrence E. Ford, "A Year in Review, a Legacy in Perspective," *Acts&Facts* 39, no. 1 (2010): 4-5; ———, "Communicating the Message of the Creator," *Acts&Facts* 39, no. 2 (2010): 5.

⁴⁵⁸ Nathaniel T. Jeanson, "Molecular Equidistance: The Echo of Discontinuity?," *Acts&Facts* 40, no. 2 (2011): 6.

⁴⁵⁹ Lawrence E. Ford, "Concrete Adversity," *Acts&Facts* 38, no. 9 (2009): 3.

described as possessing a Harvard education or addressed as ‘Dr’. Incidentally, this one exception appears in a letter to the editor still explaining how church members were ‘all greatly informed and inspired by [Jeanson’s] presentations’ delivered at local event.⁴⁶⁰

Occasionally, *Acts&Facts* magazines also include a profile section dedicated almost exclusively to underscoring the academic qualifications of its contributing writers.⁴⁶¹ This focus on specifying and reiterating ICR members’ credentials is further exhibited when references to ICR’s founder, Henry M. Morris, are investigated. Morris’ name appears a total of 206 times within 94 *Acts&Facts* articles, which represent 21.6% of ICR’s sample. In 167 of these cases he is referred to as ‘Dr,’ and/or at least some aspect of his credentials and experience is listed. These qualifications include a PhD in hydraulic engineering and serving as a professor at Virginia Tech. Even Morris’ own sons, John and Henry III, refer to him by his academic title.⁴⁶² Furthermore, out of the 39 occasions when Morris’ title and qualifications are not mentioned directly, they are still described somewhere else in the same article 25 times. Consequently, Morris’s doctorate and academic experience rarely go unmentioned, even though he is one of the Institute for Creation Research’s most consistently discussed individuals.

References to qualifications and experience are also linked with ICR claims that legions of scientific pioneers were in some way creationist allies, if not Darwin-sceptics. For instance, eminent scientists, whose numerous credentials and discoveries are synonymous with their very names, are often cited as having maintained creationist

⁴⁶⁰ R.F.R., "Letters to the Editor," *Acts&Facts* 40, no. 12 (2011): 20.

⁴⁶¹ See: Christine Dao, "Dr. Rhonda Forlow: ICR's New Education Specialist," *Acts&Facts* 40, no. 3 (2011); ———, "Larry Vardiman " *Acts&Facts* 39, no. 8 (2010); ———, "Dr. Brad Forlow, Associate Science Editor," *Acts&Facts* 40, no. 11 (2011); ———, "New ICR Research Associate: Nathaniel T. Jeanson, Ph.D.," *Acts&Facts* 38, no. 9 (2009); ———, "New ICR Director of Events: Charles Morse," *Acts&Facts* 39, no. 3 (2010).

⁴⁶² See: Henry Morris III, "Fighting the Dragon," *Acts&Facts* 39, no. 9 (2010); John D. Morris, "The Vital Doctrine of a Global Flood," *Acts&Facts* 38, no. 4 (2009); Henry Morris III, "An Inconvenient Truth," *Acts&Facts* 39, no. 10 (2010); John D. Morris, "The Creation Movement's Firm Foundation," *Acts&Facts* 40, no. 2 (2011).

perspectives. The achievements of these scientific leaders are then used to enhance ICR's creationist credibility. In Henry Morris' own words, '[T]he great founding fathers of true science (Kepler, Galileo, Pascal, Newton, Boyle, Brewster, Faraday, Linnaeus, Ray, Maxwell, Pasteur, Kelvin, etc.) were almost all creationists and believed they were glorifying God as they probed His works.'⁴⁶³ Similarly, Randy J. Guliuzza contends that, 'Many of the giants in medicine--Edward Jenner, Gregor Mendel, Louis Pasteur, Howard Florey and Ernst Chain, Selman Waksman--did pioneering work (including in genetics and antimicrobial resistance) while either rejecting Darwinism or ignoring it altogether.'⁴⁶⁴ ICR's work is also depicted as being truly aligned with the opinions and scientific enterprises held by such renowned scientists. 'But what a joy to do creationist research,' concludes one article, 'when we believe God's Word and, like Isaac Newton and Johann Kepler from previous generations, think God's thoughts after Him.'⁴⁶⁵

Such efforts frequently coincide with the persuasive cue called Social Consensus that will be addressed in section 4.5. Specifically, ICR's references to acclaimed scientists often correspond with Social Proof, as they attempt to demonstrate how numerous highly-accredited researchers have shared creationist perspectives.

Individuals such as Louis Agassiz, a 'Harvard professor' regarded as 'one of the 19th century's leading paleontologists,' and Sir John Ambrose Fleming, 'a leader in the electronics revolution' who 'taught at both Cambridge University and the University of Nottingham,' are enthusiastically added to a tally of amply-credentialed creationists.⁴⁶⁶

At the same time, the academic qualifications of contemporary scientists are used in a

⁴⁶³ Henry M. Morris, "Creation Is the Foundation " *Acts&Facts* 39, no. 9 (2010 [1983]): 20.

⁴⁶⁴ Randy J. Guliuzza, "Darwinian Medicine: A Prescription for Failure," *Acts&Facts* 38, no. 2 (2009): 33.

⁴⁶⁵ "Raising the Banner for Creation Truth ", *Acts&Facts* 38, no. 12 (2009).

⁴⁶⁶ Jerry Bergman, "Louis Agassiz: Anti-Darwinist Harvard Paleontology Professor," *Acts&Facts* 40, no. 3 (2011): 14; ———, "Sir Ambrose Fleming: Father of Modern Electronics," *Acts&Facts* 38, no. 11 (2009): 13-14.

similar fashion, which is exemplified in an article concerning Benjamin Carson, an eminent neurosurgeon and professed creationist. This piece underscores Carson's distinguished education and celebrated medical abilities:

A graduate of Yale and the University of Michigan Medical School, he was rated by a Time issue titled "America's Best" as a 'super surgeon.' Dr. Carson was also selected by CNN and Time as one of the nation's top 20 physicians and scientists, and by the Library of Congress as one of 89 'living-legends.'⁴⁶⁷

These accolades are then associated with Carson's public support of creationism. As the author explains, 'Ben Carson, one of the most respected and successful neurosurgeons in the world today, is a creationist who is not afraid of openly voicing his conclusions to august audiences the world over.'⁴⁶⁸

This concern with reporting the credentials and experience of YEC-friendly individuals often does not extend to ICR's opponents. For instance, creationism's arch-villain Richard Dawkins is mentioned 17 times within 12 articles. In contrast with ICR staff, Dawkins is never addressed by his academic title, and only once is there the slightest, though erroneous, mention of Dawkins' university affiliations: 'Researchers would not be pressured by popular evolutionary authorities such as Cambridge's Richard Dawkins, who insists that "biology is the study of complicated things that have the appearance of having been designed for a purpose."⁴⁶⁹ Such references to individuals like Dawkins regularly coincide with the Contrast Principle and Negativity Effect reviewed in section 4.4, and therefore, it is not entirely surprising that the credentials and experience of ICR's adversaries are left unstated. Nonetheless, the academic qualifications of noncreationist supporters of evolution *are* oftentimes cited

⁴⁶⁷ Jerry Bergman, "Benjamin Carson: The Pediatric Neurosurgeon with Gifted Hands," *Acts&Facts* 38, no. 1 (2009): 10.

⁴⁶⁸ *Ibid.*: 11.

⁴⁶⁹ Randy J. Guliuza, "Evaluating Real vs. Apparent Design," *Acts&Facts* 40, no. 1 (2011): 11.

when their words seem to validate creationism, or can be used to expose weaknesses in Darwinism.⁴⁷⁰

In addition to documenting credentials, ICR materials also often include references to “science” or “data.” Occurring 256 times, and exhibiting 0.657 incidents per 1000 words, these types of statements derive credibility by using relatively vague allusions to science and evidential facts. For instance, an ICR writer may simply claim that ‘science has clearly validated’ the historical events recorded in Genesis, or argue, ‘Whether the evidence is large or small, related to the physical sciences or the life sciences, recent discoveries shout “creation.”’⁴⁷¹ Essentially, this involves generating Messenger Credibility by co-opting the authority insinuated by the expansive terms science and scientific evidence. In relation to this, the Institute for Creation Research is repeatedly characterized as a scientifically-based establishment, and creationism is presented as the most evidentially-grounded perspective. For not only is there a God, but there ‘is a factual account of His mighty work, and it is believable and backed up by science.’⁴⁷²

Audiences are frequently told that science undergirds ICR’s mission, and articles persistently stress that ICR’s conclusions are rooted firmly in authentic and reliable science.⁴⁷³ In fact, the scientific evidences for creationism are said to be so definite that Christians are entitled to ‘be confident in claiming that the power of the Lord Jesus Christ is the best explanation for complex design found in nature,’ and that there is ‘an excellent scientific basis’ for creationist ideas.⁴⁷⁴ ‘The certainty of this evidence,’ states Morris III, ‘from DNA studies, from sedimentary flood geology, from radioisotopic

⁴⁷⁰ See: Henry M. Morris, "The Vanishing Case for Evolution," *Acts&Facts* 38, no. 2 (2009 [1986]).

⁴⁷¹ Frank Sherwin, "Research That Demonstrates Design and Unearths Flood Deposition," *Acts&Facts* 39, no. 11 (2010); Frank Sherwin and Brian Thomas, "Genesis Flood Insights More Relevant Today," *Acts&Facts* 40, no. 2 (2011).

⁴⁷² John D. Morris, "Compromise in the Pulpit," *Acts&Facts* 38, no. 2 (2009): 5.

⁴⁷³ IV, "The Silent," 21.

⁴⁷⁴ Randy J. Guliuzza, "Natural Selection Is Not 'Nature's Intelligence'," *Acts&Facts* 39, no. 5 (2010).

research, from forensic paleontological analysis, etc.--is unmistakable.⁴⁷⁵ Also, readers are told that scientific substantiation for creationism has continued to accrue over time. 'The more evidence that science uncovers, the more it supports the biblical account of earth's history.'⁴⁷⁶ And, while some people choose to oppose the literal account of creation found in the Bible, 'science continues to prove them wrong.'⁴⁷⁷

Not only is creationism validated by science, but it is argued that all the available facts correspond more readily with YEC than evolution.⁴⁷⁸ As Morris contended, the belief that 'the creation took place in six literal days several thousand years ago' actually fits 'all the facts of science much better than the long-age evolutionary scenario does.'⁴⁷⁹ In this way, creationism is framed as being more scientifically congruent, and therefore, the most credible option. Plus, ICR's work is based on 'real,' 'sound,' or 'true' science and evidence, as opposed to evolutionary theory, which relies upon unverifiable speculations. 'All true science points to creation,'⁴⁸⁰ explained Morris, and 'all the real scientific evidence (as distinct from similarities and other circumstantial evidences) strongly favors creation over evolution.'⁴⁸¹ While cultivating Messenger Credibility, such statements also intersect with the Contrast Principle and Negativity Effect because they assert that, in comparison to YEC, Darwinism is not based on reliable data:

The scientists working with ICR in its labs and on the field are men and women who are specially trained in the disciplines of

⁴⁷⁵ Henry Morris, III., "Discovering and Defending the Certainties of Creation," *Acts&Facts* 38, no. 6 (2009): 8.

⁴⁷⁶ John D. Morris, "A Classic Polystrate Fossil," *Acts&Facts* 38, no. 10 (2009): 15.

⁴⁷⁷ Steven A. Austin, "The Scientific and Scriptural Impact of Amos' Earthquake," *Acts&Facts* 39, no. 2 (2010): 8.

⁴⁷⁸ See: John D. Morris, "The Biggest Problems for Evolution," *Acts&Facts* 40, no. 4 (2011); Henry Morris IV, "Commitment to a Timeless Message," *Acts&Facts* 40, no. 2 (2011); Guliuzza, "Evaluating Real," 10; Lawrence E. Ford, "Pioneering a Global Movement," *Acts&Facts* 39, no. 10 (2010); Brian Thomas, "Did Dinosaurs Die from an Impact?," *Acts&Facts* 39, no. 5 (2010).

⁴⁷⁹ Henry M. Morris, "Old-Earth Creationism," *Acts&Facts* 38, no. 3 (2009 [1997]): 10.

⁴⁸⁰ _____, "Creation & Resurrection," *Acts&Facts* 39, no. 4 (2010 [1984]): 13.

⁴⁸¹ _____, "Reflections on a Legacy: Four Decades of Creation Ministry," *Acts&Facts* 39, no. 1 (2010 [2005]): 10.

geology, genetics, paleontology, astro/geophysics, astronomy, and other fields of science. Their work through the years has uncovered a multitude of evidence that supports the truth of the Genesis record, while at the same time confirming that the origins-by-accident story (a.k.a. evolution) cannot possibly be verified by sound scientific principles...⁴⁸²

FIGURE 4.4
Biology and the Bible⁴⁸³



HENRY M. MORRIS, P.H.D.

Another article by Morris concludes that ‘The real bottom line of the entire question of biological origins is that the biblical record fits all the real scientific facts, and evolution does not.’⁴⁸⁴ In addition to claiming that empirical evidence better supports creationism, this article also includes a collage of scientific and religious imagery, which is presented in figure 4.4. Such images represent pictorial allusions and associations to science that can influence Messenger Credibility by visually evoking scientific practice and its credibility. Throughout *Acts&Facts*, similar imagery incorporates pictures of scientific artefacts and *science-in-action*, including laboratory instruments and images of researchers performing experiments. These types of pictures

⁴⁸² Morris, "Discovering and," 8.

⁴⁸³ Henry M. Morris, "Biology and the Bible," *Acts&Facts* 39, no. 11 (2010 [1999]): 4.

⁴⁸⁴ *Ibid.*: 5.

are often included in the title headers of articles that specifically discuss creationist research endeavours, and which report on procreationist evidence.

FIGURE 4.5
New Frontiers⁴⁸⁵

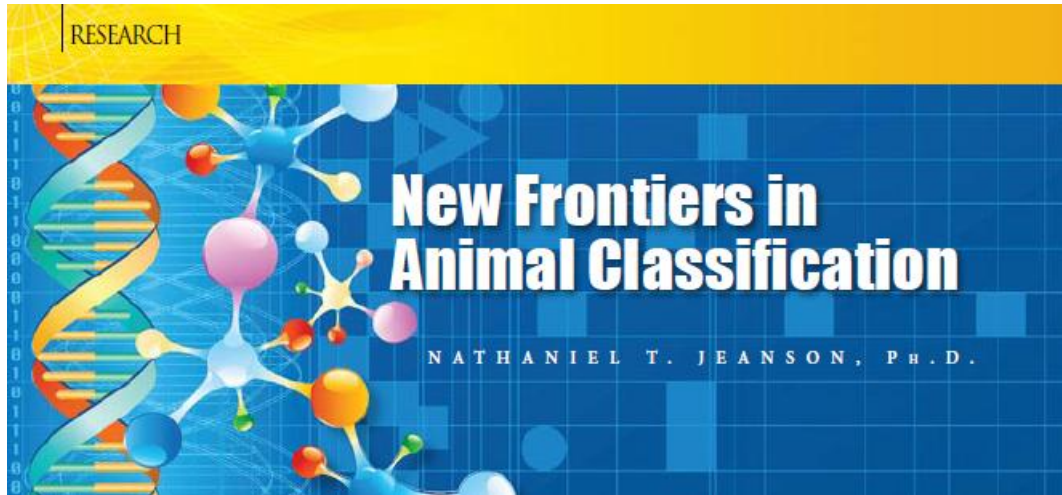


FIGURE 4.6
Similar Features⁴⁸⁶



Notably, such imagery is almost totally exclusive to ICR propaganda, aside from a handful of comparable cases that can be found in *Answers in Genesis* articles. With regard to ICR's use of these visual depictions of science, the most commonly occurring images in *Acts&Facts* are DNA strands, other stylized molecules, chemistry glassware, and pictures of human anatomy. These images can even appear in articles whose subject matter is not directly related to the type of research conjured by the pictures themselves. For instance, in "Life Sciences Research: Year One in Review" a partly

⁴⁸⁵ Nathaniel T. Jeanson, "New Frontiers in Animal Classification," *Acts&Facts* 39, no. 5 (2010).

⁴⁸⁶ Randy J. Guliuzza, "Similar Features Demonstrate Common Design," *Acts&Facts* 39, no. 11 (2010): 10.

filled erlenmeyer flask is depicted beside the title of an article that discusses ICR's new life sciences initiative. The actual research mentioned, however, is effectively a literature review accompanied by some computer modeling; neither of which requires any sort of chemistry lab work.

FIGURE 4.7
Life Sciences Research Erlenmeyer Flask⁴⁸⁷



Similar imagery often occurs within articles that also articulate the third major, but least manifested, way in which expertise and evidence are communicated throughout *Acts&Facts*. This consists of developing Messenger Credibility by indicating that ICR is fervently conducting successful, paradigm-shifting research. Representing 149 of the total 870 recorded appeals to expertise and evidence, such claims exhibit 0.382 incidents per 1000 words. Rather than directly appealing to credentials, or stating that science supports creationism, this involves demonstrating how earnestly the Institute for Creation Research is actually occupied with the important task of doing hands-on science. In a sense, this acts as a sort of proof of credibility; validating the organization's scientifically-oriented nature by stating that ICR is credible because it actually *does* science. Such incidents incorporate descriptions of the

⁴⁸⁷ Nathaniel T. Jeanson, "Life Sciences Research: Year One in Review," *Acts&Facts* 40, no. 4 (2011).

‘impressive slate of research projects underway’ at ICR, as well as the notable teams of scientists conducting ‘incredibly fruitful’ studies.⁴⁸⁸

The scientific work conducted by ICR is generally referred to as ‘creation science research,’ and as one article states, ‘For almost 40 years, ICR has distinguished itself as the leader in creation science research and education, ably assisted by the many fine scientists whom God has led to work here.’⁴⁸⁹ Such research is described as being pioneering, totally ‘relevant to the nature of science and scientific inquiry,’ and involving ‘original research projects in the lab or field that the secular world is not addressing or is avoiding because of its potential to produce results that go against evolutionary philosophy.’⁴⁹⁰ Therefore, ICR is doing unique research that even top-level scientists are declining to consider. ICR’s contributors further stress that these projects are substantial multiyear, research intensive undertakings, dedicated to generating peer-reviewed results. An article by Morris III typifies this in a subsection entitled ‘ICR is Committed to Peer Review’:

Sometimes the very scope of the investigation requires long consideration and many months prior to its completion. Our RATE (Radioisotopes and the Age of the Earth) project consumed eight years before the results were published in 2005. The current efforts of our biological research team are focused on key research questions they have identified in the field of origins biology. They have begun to evaluate the scope of the research and will require several years to bring the project to completion.⁴⁹¹

Together, such messages portray ICR as a credible, science-conducting organization that is dedicated to pursuing exceptional research ventures.

⁴⁸⁸ John D. Morris, "ICR Research Advances with the Ncsf," *Acts&Facts* 38, no. 1 (2009): 8; Henry Morris IV, "All Your Need, Version 2009," *Acts&Facts* 38, no. 1 (2009): 17.

⁴⁸⁹ "Raising the," 4.

⁴⁹⁰ *Ibid.*: 6.

⁴⁹¹ Henry Morris, III., "Achieving Accuracy," *Acts&Facts* 40, no. 5 (2011): 5.

4.2.2 ICR Messenger Credibility II: Appeals to Sacred Authority

Appeals to sacred authority embody 39.2% of the Institute for Creation Research's total Messenger Credibility occurrences, and demonstrate a frequency rate of 1.047 incidents per 1000 words. Such efforts represent an important element within *Acts&Facts* articles, and generally involve appeals to God's authority, as well as credibility-building references to holy scripture and significant religious figures. It is important to note that these assorted sources of ICR credibility often appear en masse; such that appeals to God, scripture, and religious persons are frequently referenced within a single statement. Therefore, it is impractical to completely distinguish and enumerate each appeal to sacred authority according to its religious sources. Instead, this study will simply reveal general trends related to how these authoritative sources are used in concert to establish ICR's Messenger Credibility.

Unsurprisingly, both God and the Bible are repeatedly cited together as principal sources of credibility. They are often mentioned in tandem to validate ICR's messages before Christian audiences encountering rival, noncreationist perspectives. In light of such competition, *Acts&Facts* writers often stress that their approach to the Bible, or their method of reading and interpreting scripture, is far more credible in the eyes of God than the hermeneutical techniques employed by their opponents. This is because, unlike many noncreationists, ICR *fully* accepts scripture in a literalistic fashion, and truly takes 'God at his Word'; allowing the Bible's genuine message to be communicated without hindrance.⁴⁹² This creationist modus operandi for handling scripture is referred to in a similar fashion as are academic credentials. For instance, in the same way that an article might list a creationist's prestigious degrees, *Acts&Facts* writers frequently catalogue ICR's superior means of interpreting scripture, which stem

⁴⁹² Lawrence E. Ford, "Taking God at His Word," *Acts&Facts* 38, no. 4 (2009).

from an abounding 'loyalty to the living Word of God (the Lord Jesus Christ) and to the written Word of God (the Holy Bible).'⁴⁹³

Regarding ICR's extolled approach to the bible, Henry Morris explained that:

We who believe in a recent, six-day, literal creation of all things believe that Christians *ought* to take God at His Word, allowing the Bible to say what its writers, guided by the Holy Spirit, intended it to say... When one holds this high view of Scripture, he necessarily must accept Genesis at face value. This not only means six literal days of creation, but also *no* geological ages...⁴⁹⁴

Therefore, ICR asserts greater scriptural credibility because its members sincerely 'accept the Bible as the Word of God' and are committed to its original message, as evidenced in the organization's unadulterated literalism.⁴⁹⁵ Put simply, *Acts&Facts* articles insist ICR adheres most closely to the authentic, changeless message that God intended for humanity. It is from this untainted sacred authority that much of ICR's credibility is derived.

Furthermore, the credibility educed from the institute's literalism is also connected with portrayals of God and his divine characteristics. For instance, it is explained that God is both an omnipotent and perfectly good Deity. As such, he is fully capable of speaking plainly to humankind, and would never try to confuse or deceive people about the universe's origins. Indeed, why would a genuinely good God deliberately confound his followers? So in accordance with God's nature, the most obvious and unambiguous reading of Genesis is taken to be the literal one.

Consequently, if an individual does not accept this literal interpretation they are declaring God's word to be untrustworthy, and are effectively calling God a liar. But of

⁴⁹³ James J. S. Johnson, "Tackling Charges of Biblical Inconsistency: Putting the Pieces Together to Form the Big Picture," *Acts&Facts* 39, no. 7 (2010): 9.

⁴⁹⁴ Henry M. Morris, "Global Flood, Global Impact: The Legacy of the Genesis Flood," *Acts&Facts* 40, no. 2 (2011 [1995]): 11.

⁴⁹⁵ Larry Vardiman, "Has Einstein's Limit on the Speed of Light Been Broken?," *Acts&Facts* 40, no. 12 (2011): 23.

course God cannot possibly lie, so YEC must be correct. In this way, ICR's Messenger Credibility is enhanced through sacred authority originating in God's very nature.

Andrew Snelling tells *Acts&Facts* readers:

The Bible never claims to be a textbook on history or science, but if God is who He claims to be, then He has all knowledge and power, and never makes mistakes. Therefore, if the Bible is the Word of God, then it must be truthful, even when it touches upon matters of history and science. Otherwise, this Creator God is a liar. The very character of God requires the first eleven chapters of Genesis to be a trustworthy record.⁴⁹⁶

Moreover, 'If the Creator God of the Bible is who He says He is, then not only is He capable of accurately telling us about the early universe, the earth, and man, but He is capable of having the details truthfully recorded and transmitted through successive generations.'⁴⁹⁷

ICR's Associate Science Editor fosters similar connections between Young Earth Creationism, the Bible, and God's character when he answers the question 'But, could God have used the processes of evolution in His creation?' with a definite *no*. 'Evolutionary development by definition requires billions of years of chance, chaos, confusion, and *death*,' he tells readers. Because of this, 'Evolutionary processes are incompatible and inconsistent with the nature of God (holy, perfect, ordered, and good). God could not have used processes contrary to His nature as He is not the author of death.'⁴⁹⁸ As a result, only YEC is truly in agreement with God's character, and for that reason creationism alone legitimately possesses biblical and divine endorsement. ICR's credibility, then, is firmly embedded in God's very attributes, and Larry Vardiman even tells readers that Henry Morris was correct to insist, '...God is not an evolutionist and

⁴⁹⁶ Snelling, "Genesis," 13.

⁴⁹⁷ Ibid.

⁴⁹⁸ Brad Forlow, "Genesis under the Microscope," *Acts&Facts* 40, no. 10 (2011): 5. (his italics)

His Word does not contain evolutionary ideas like the Big Bang, millions and billions of years, common ancestry, death before sin, etc.⁴⁹⁹

Acts&Facts articles also assert that Jesus interpreted Genesis literally. Readers are then told that if this was Jesus' approach to the biblical creation account it should certainly be ours, in the same way that it already is ICR's. Snelling communicates the substance of this argument:

If Jesus was (and is) both the Creator God and a perfect man, then His pronouncements are always and absolutely trustworthy. And Jesus referred directly to details in each of the first seven chapters of Genesis fifteen times... If He, as the Creator, was actually a witness to the events of Genesis 1-11, then we have no alternative but to regard these opening chapters of the Bible as reliable history.⁵⁰⁰

Jesus' biblical hermeneutic is described as being wholly supportive of YEC, and it is explained that Jesus' literal reading of Genesis would have been the same, *ipsisimis verbis*, as ICR's. Plus, if this source of credibility were not enough, *Acts&Facts* writers indicate that all of the biblical authors adhered to an identical form of literalism. For instance, it is argued that Moses accepted a literal understanding of the Noahic deluge, 'and it was he whom God chose to prophetically record the account about what happened during the one and only worldwide catastrophic Flood.'⁵⁰¹ James J. S. Johnson uses the following question and response to exemplify this point: 'How did Jesus treat Genesis? As real history, just like Paul.'⁵⁰² The credibility-building corollary is: *How does ICR treat Genesis? As real history, just like Jesus and Paul.*

Amid *Acts&Facts'* numerous references to the bible, God's character, and the hermeneutics employed by Jesus and the biblical writers, articles are also peppered with

⁴⁹⁹ Ford, "Pioneering a," 3.

⁵⁰⁰ Snelling, "Genesis," 13.

⁵⁰¹ James J. S. Johnson, "Biblical Devastation in the Wake of a 'Tranquil Flood'," *Acts&Facts* 40, no. 9 (2011): 9.

⁵⁰² _____, "Genesis Is History, Not Poetry: Exposing Hidden Assumptions About What Hebrew Poetry Is and Is Not," *Acts&Facts* 40, no. 6 (2011): 9.

claims that ICR is experiencing divine blessing. These comments make it clear that God is personally championing ICR's mission and expressly using the organization to serve his divine purposes. 'Looking back on four decades of research, teaching, and communicating the wonders of God's creation,' notes Ford, 'all of us are humbled at how God has used ICR to impact millions around the world with biblically based scientific truth and apologetics.'⁵⁰³ Often accompanying fund-raising appeals, such remarks explain that 'God has indeed blessed the work of ICR in marvelous ways,' and as a result 'ICR has experienced many remarkable evidences of God's special provision.'⁵⁰⁴ Accordingly, the Institute for Creation Research's credibility as an organization is validated through enduring divine succour, and the fact that God has explicitly given ICR a 'specialized and a "frontline" assignment' in his spiritual battle for souls.⁵⁰⁵

Finally, appeals to sacred authority also occur within ICR's frequent explanations of the natural world. For instance, an article that discusses the complexities associated with long-distance bird migration states, 'These birds are purposefully preprogrammed to operate by these schedules; God fitted them to do so.'⁵⁰⁶ In such cases both God and scripture are used as authoritative sources to explain natural phenomena, usually as a religiously-credible substitute for natural selection. These instances generally blend together scientific data with appeals to the divine, and are typically constituents of the Contrast Principle and Negativity Effect. In order to refute evolution, articles will list scientific facts that 'provide providential proof of the divine pre-programming "selections" that were intelligently planned and, during

⁵⁰³ Lawrence E. Ford, "Celebrating 400 Years of Influence," *Acts&Facts* 40, no. 4 (2011): 8.

⁵⁰⁴ Henry Morris IV, "40 Years of Blessing," *Acts&Facts* 39, no. 10 (2010): 19; ———, "Christmas Gratitude," *Acts&Facts* 40, no. 12 (2011): 21.

⁵⁰⁵ Henry Morris, III., "An Inconvenient Truth," *Acts&Facts* 39, no. 10 (2010): 23.

⁵⁰⁶ James J. S. Johnson, "Survival of the Fitted: God's Providential Programming," *Acts&Facts* 39, no. 10 (2010).

creation week, skillfully implemented by none other than the Lord of hosts.⁵⁰⁷ Then scripture is employed as the ultimate sacred authority to verify the initial claims of design. Often writers simply state that what is observed in nature exists not as a result of natural selection, but because God took pleasure in designing things in such a way. This intermingling of scientific and sacred authorities to explain nature is apparent in the following selection by Randy J. Guliuzza, which concludes an article that criticizes the theory of natural selection:

Creatures have intelligence-based systems to reproduce variable heritable traits that comprise their endogenous power to solve environmental problems, enabling them to fill the earth. That the Lord Jesus would design abilities into His creation to do His good pleasure—that is, multiply and fill the earth (Genesis 1:22; 8:17; 9:1) via designed reproductive abilities (Genesis 1:11)—demonstrates His Lordship and creation's dependence. To say that 'creatures are programmed to fill the earth' is measurable, scientifically accurate, and biblical—it is no wonder, therefore, that 'it happens.'⁵⁰⁸

The credibility for Guliuzza's attack on natural selection, therefore, is found not only in science, but in God's creative disposition.

4.2.3 ICR Source Attraction

Incidents related to Source Attraction represent only 3.77% of all ICR Source Cue occurrences, exhibiting a meagre 0.128 appearances per 1000 words. For that reason, this Source Cue subcategory will only receive brief consideration. Celebrity attraction, audience flattery, and the man-in-the-street device demonstrate a sum total of 8 Source Attraction incidents. The expression of shared values, on the other hand, occurs 19 times, while the use of important symbols constitute 23 incidents. Although still a small fraction of ICR's persuasive elements, these last two represent the majority

⁵⁰⁷ _____, "Slow Death for a Tarantula: A Lesson in Arachnid Apologetics," *Acts&Facts* 40, no. 10 (2011): 11.

⁵⁰⁸ Randy J. Guliuzza, "Darwin's Sacred Imposter: The Illusion That Natural Selection Operates on Organisms," *Acts&Facts* 40, no. 9 (2011): 15.

of Source Attraction occurrences, and warrant at least some attention. With regards to this, it is important to note that the appeals to sacred authority described in section 4.2.2 could also correspond with Source Attraction for a Christian audience. As table 3.2 indicates, messenger likability can be fostered by even the most incidental similarities, so shared Christian beliefs would act as an important persuasive cue while also simultaneously promoting credibility. However, within this study Source Attraction has been limited to the five subdivisions found in figure 4.2, which are further detailed in Chapter Three. This, of course, includes direct claims that the propagandist shares specific values with a targeted audience, and the use of important socio-cultural symbols within communications.

FIGURE 4.8
Our Day in Court⁵⁰⁹



FIGURE 4.9
Christian Heritage of Liberty⁵¹⁰



⁵⁰⁹ James J. S. Johnson, "Our Day in Court: ICR Graduate School V. Thecb Et Al," *Acts&Facts* 39, no. 6 (2010). Image located at: <http://www.icr.org/article/our-day-court-icr-graduate-school-v/>

⁵¹⁰ Henry Morris IV, "Christian Heritage of Liberty," *Acts&Facts* 39, no. 7 (2010): 21.

In ICR materials the expression of shared values is exhibited in two chief ways. The first method includes communicating shared religious beliefs and principles. In particular, *Acts&Facts* writers emphasize that ICR members maintain commonly shared Evangelical Christian values concerning the importance of Jesus Christ and his atonement, as well as doctrines regarding humankind's divine image and intrinsic worth. The second manifestation includes articulating shared values and cultural myths associated with the United States. Aimed at an American audience, these generally characterize the U.S. as a country that epitomizes and defends such ideals as "liberty" and "freedom." For instance, in article that references 4th of July celebrations and the apparently privileged nature of America, Ford states boldly that, 'If one word could describe the major characteristic of the United States, that word would be *freedom*.'⁵¹¹

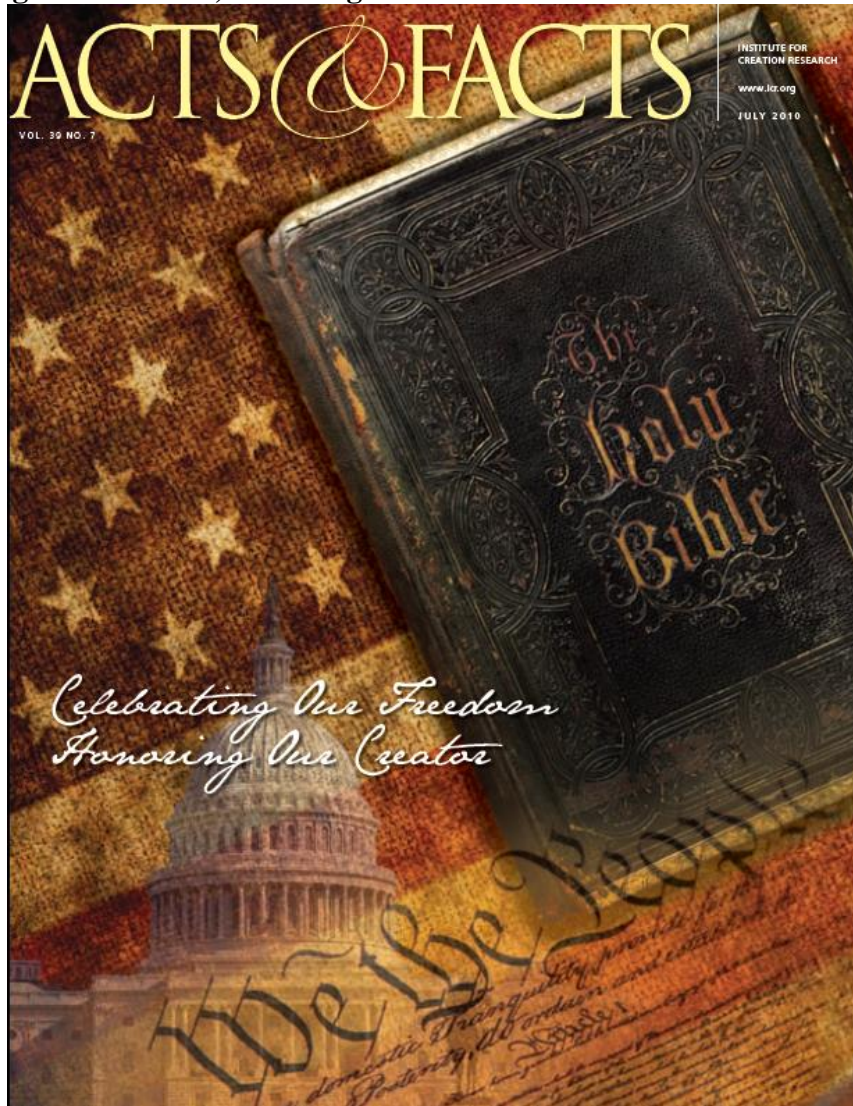
The use of important symbols in *Acts&Facts* reflects ICR's communication of these same shared values. For example, as figures 4.8-9 demonstrate, some articles display images of the U.S. flag, the American constitution, and the iconic liberty bell, which are all nationalistic symbols of the country's popular mythos and ideals. Certain religious symbols can also be found throughout *Acts&Facts*, mainly in the form of bibles.⁵¹² On a few occasions these religious images are combined with America's national emblems to form the sort of illustration found in figure 4.10, which was brandished on both a cover of *Acts&Facts* and within an article bearing the same name. Therefore, while such cases of Source Attraction are far less common than incidences related to Messenger Credibility, each incorporates something that is culturally esteemed within ICR's messages. In the next most frequently occurring ELM cue,

⁵¹¹ Lawrence E. Ford, "Celebrating with Gusto and Gratitude," *Acts&Facts* 39, no. 7 (2010): 3. (his italics)

⁵¹² See: ———, "Confronting Evolutionary Ideas," *Acts&Facts* 40, no. 1 (2011): 4; Morris, "Creation Is," 20.

however, rhetorical questions are often used not to support YEC, but are instead regularly employed for the castigation of evolution and its advocates.

FIGURE 4.10
Celebrating our Freedom, Honoring our Creator⁵¹³



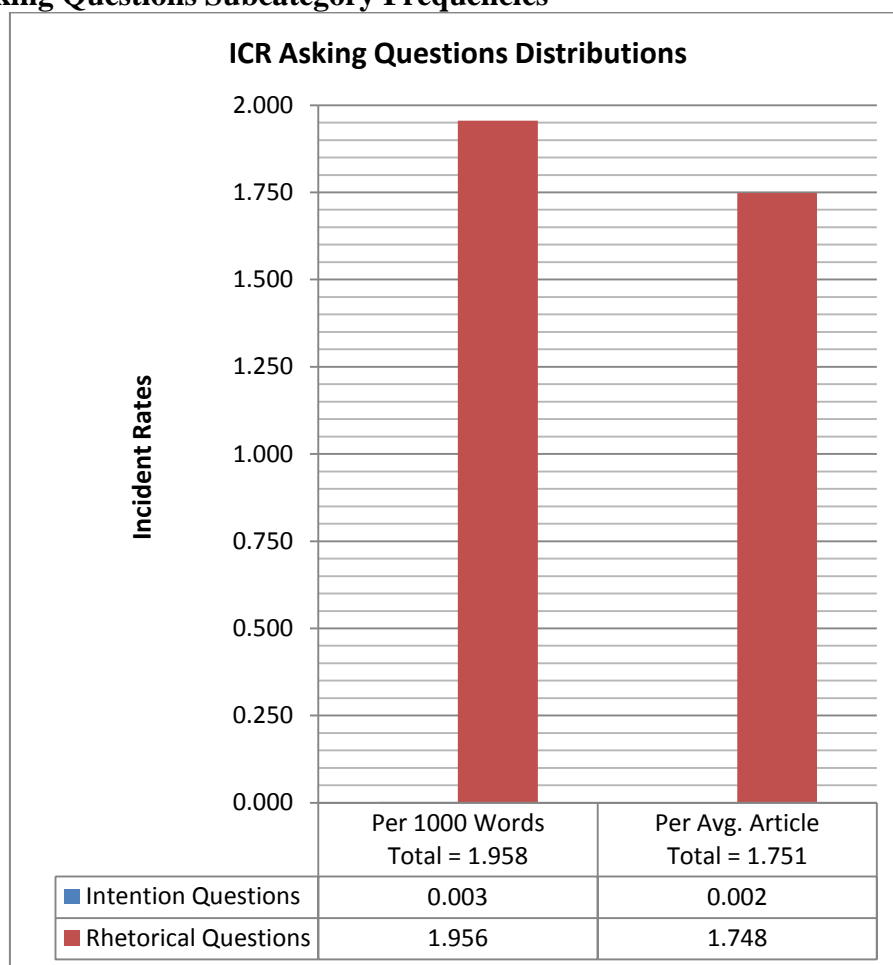
4.3 ICR and Asking Questions

The persuasive message variable called Asking Questions demonstrates a frequency rate of 1.958 incidents per 1000 words within Institute for Creation Research propaganda. Intriguingly, Asking Questions is also the second most frequently-occurring ELM cue in both AiG and Center for Science and Culture propaganda. In this

⁵¹³ ICR, "Celebrating Our Freedom, Honoring Our Creator," *Acts&Facts* 30, no. 7 (2010).

respect it is unique, because when they are ordered from greatest to least frequency, no other message variable occupies the same ranking for all three groups. ICR propaganda exhibits the lowest Asking Questions incident rate in comparison to the other organizations, while AiG's *Answers* magazine boasts the greatest number of occurrences per 1000 words. Even so, this message variable is still an important factor in *Acts&Facts* articles.

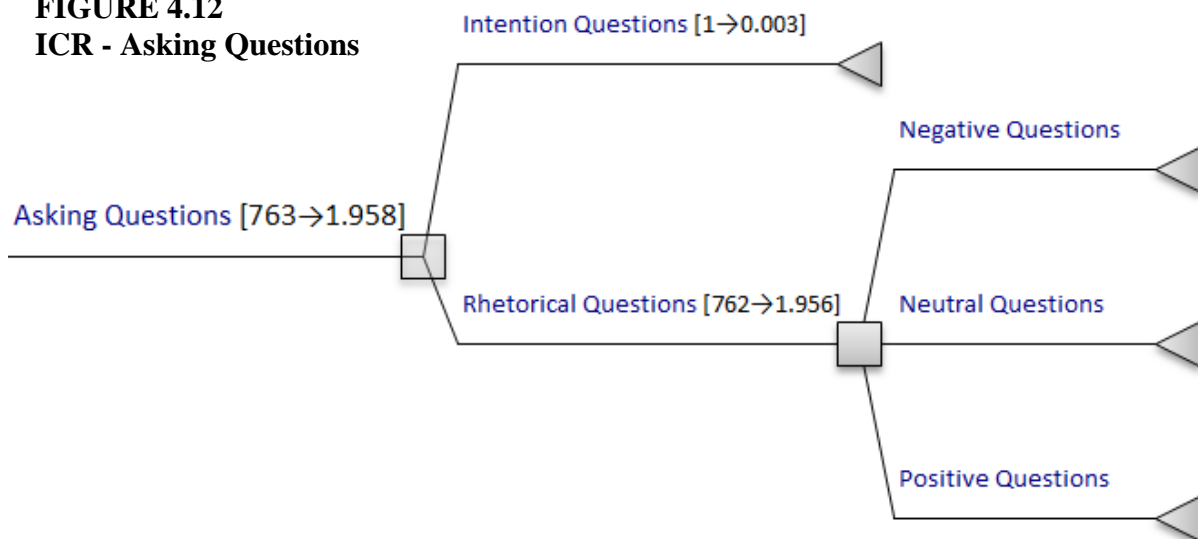
FIGURE 4.11
ICR Asking Questions Subcategory Frequencies



Rhetorical questions represent the vast majority of ICR's Asking Questions incidents, comprising 99.9%, or 762 of the variable's total 763 occurrences. For that reason, this study will only examine ICR's specific use of such rhetorical queries. On average, 1.748 rhetorical questions appear in each *Acts&Facts* article. These persuasive

enquiries can be categorized into three broad classes, described here as negative, neutral, and positive rhetorical questions.

FIGURE 4.12
ICR - Asking Questions



This study groups questions into these three subdivisions according to their context and apparent objective. For instance, negative rhetorical questions are classified as inquiries used in conjunction with the Contrast Principle and Negativity Effect to criticize an enemy or adversarial idea. Such queries call into question the strength of a rival's claims, or introduce uncertainty about the motivations of an enemy. An article by Ford illustrates this negative use of rhetorical questions, in which he first explains to *Acts&Facts* readers, 'A few years ago on the campus of Southern Methodist University in Dallas, the entire science faculty of SMU refused to sit down, behind closed doors, with scientists from the Intelligent Design Movement to dialogue about science.' He then asks, 'What were they afraid of? Were they not confident enough in their own understanding of scientific data to enter into a friendly discussion about the evidence? What about examining evidence and analyzing data to discover truth?'⁵¹⁴ Positive rhetorical questions, on the other hand, are inquiries designed to affirm a

⁵¹⁴ Lawrence E. Ford, "New Voices in Evolution Activism: From Madalyn Murray O'Hair to Eugenie Scott," *Acts&Facts* 38, no. 7 (2009): 4.

communicator's message, while neutral questions are those demonstrating no obvious negative or positive contextual intentions.

Neutral rhetorical questions are the least common variety of these queries found throughout *Acts&Facts*. These questions are commonly used as expository devices, helping ICR writers to move from one topic to another within sequential, nonnormative descriptions of data. For instance, in an article describing the human reproductive system, the author states, 'A high concentration of the male hormone testosterone in the testes is essential to make normal sperm,' before asking readers, 'Where does it come from?' This question simply aids in shifting the author's discussion from the acrosomal body to the gonadotropin-releasing hormone and sperm production.⁵¹⁵ It is evident that there are no directly observable positive or negative implications found in the immediate context of such inquiries.

While neutral questions appear relatively intermittently throughout *Acts&Facts* articles, ICR materials are essentially permeated with negative erotema, hypophora, and anacoenosis. These are often linked with attacks against an opponent's understanding of scripture, and they provoke readers to question the sincerity of an adversary's religious faith. For instance, in an article that criticizes the proevolutionist organization BioLogos, John D. Morris states that 'a well-respected and well-funded group of scientists claiming to be Christians and Bible-believers have joined forces to teach that the Bible and evolution agree. Their view, which is essentially identical to the atheistic view, twists and shreds the Bible and is wholly improper for a Christian.' He then completes this denunciation with the following rhetorical question: 'I don't have the authority to question anyone's salvation, and am not doing so here, but isn't this how

⁵¹⁵ Randy J. Guliuzza, "Made in His Image: Human Reproduction," *Acts&Facts* 38, no. 1 (2009): 14.

the Bible describes false teachers?’⁵¹⁶ In a similar appraisal of theistic evolutionists, who are described as ‘exalting the words of men over the Word of God,’ Ford asks, ‘And when these men and women are hailed as leaders in the evangelical world--as progressive, as sophisticated, as harmonious, etc.--what does that say about the present state of Christianity?’⁵¹⁷ Ford likewise discharges a procession of rhetorical questions in a december 2010 article that reflects upon Christmas:

So why do so many “Christians” and “churches” waver on the fundamental doctrines of the Bible? How can they deny God the power and might to create the world in six days? Why do they deny the detailed account of a flood that covered the entire world? When will they realize that they are treading on dangerous ground by turning God’s inerrant and inspired Word into a supposedly flawed book of myths mixed with history?

When “the reason for the season” is torn away from the pages of the Bible, why should we be surprised that Christian teachers—some calling themselves evangelicals—describe God as an evolutionist? May God have mercy on them!⁵¹⁸

The previous examples reveal how negative rhetorical questions are especially prevalent whenever proevolutionist Christians are mentioned. In addition to being part of the Contrast Principle and Negativity Effect, such queries often coincide with attempts at inciting fear. Though the Arousal of Emotions exhibits only 58 incidents in ICR materials, it is worth noting that these religiously-associated questions are often structured to develop foreboding about what might happen to Christianity if the bible were rejected, or to America if the next generation of Christians were to carelessly accept evolution. This is intimated in an article that asks whether conversations hosted on BioLogos’ website forum are ‘Civil conversation or dangerous discourse?’ Ford tells readers, ‘Civil? To a certain degree. Dangerous? Absolutely... this is dangerous conversation that preys on the uninitiated Christian in the pew.’ He then asks, ‘Do you want your children to be subjected to “Bible curriculum” authored by a theologian who

⁵¹⁶ John D. Morris, "Reading the Fossil Record," *Acts&Facts* 39, no. 11 (2010): 17.

⁵¹⁷ Lawrence E. Ford, "Taking God Seriously," *Acts&Facts* 39, no. 6 (2010): 3.

⁵¹⁸ ———, "Stand Up! Stand up for Jesus!," *Acts&Facts* 39, no. 12 (2010): 3.

doesn't believe that Adam and Eve really existed or who suggests the Bible has errors?⁵¹⁹ This unease with the potential mishandling of scripture animates many other negative rhetorical questions, whose unspoken answers point to YEC as an obvious solution to these evoked fears. Even when they are assayed outside of their immediate context, the following sample helps to enunciate this concern:

- ‘If you cannot open your Bible and believe that “in the beginning God created...,” then how will you trust any other miracle described in the Bible?’⁵²⁰
- ‘How can a Christian believe Christ's words and then reject Moses' words?’⁵²¹
- ‘Why would anyone even pretend that Genesis 1-11, or any part of Genesis, is Hebrew poetry?’⁵²²
- ‘Why does Dembski reject a plain reading of Genesis and of Romans 5:12?’⁵²³

Negative rhetorical questions also accent critiques of evolution and the individuals who approve of it. For instance, *Acts&Facts* writers often document evolutionary claims, and then leave readers with questions about whether enough reliable evidence exists to support these scientific precepts. ‘But where is the evidence that they evolved at all?’ asks J. Morris after discussing the theory of punctuated equilibrium.⁵²⁴ In an article discussing hypothetical models of human evolution and *Australopithecus sediba*, the writer asks incredulously, ‘All those precise alterations by

⁵¹⁹ ———, “Civil Conversation or Dangerous Discourse?,” *Acts&Facts* 39, no. 9 (2010): 3.

⁵²⁰ ———, “Counting Our Blessings: A Year in Review, a Legacy in Perspective,” *Acts&Facts* 39, no. 1 (2010): 7.

⁵²¹ Morris, “Creation &,” 15.

⁵²² Johnson, “Genesis Is,” 9.

⁵²³ James J. S. Johnson, “Culpable Passivity: The Failure of Going with the Flow,” *Acts&Facts* 40, no. 7 (2011): 10.

⁵²⁴ Morris, “The Biggest,” 15.

randomly occurring natural forces in only 77,000 years?’⁵²⁵ Another article by the same author reviews evolutionary theories regarding the origins of wood, and wonders without providing an answer, ‘But which came first, the extra carbon dioxide required to build the woody pipelines, or the woody pipelines required to gather the extra carbon dioxide?’⁵²⁶

Other negative rhetorical questions target the integrity and academic competencies of proevolutionists, often insinuating that evolutionary scientists commonly practice deceitful activities in order to avoid criticism. For instance, in an article that examines preserved soft dinosaur tissue and dinosaur-bird evolutionary models, the author asks, ‘But did the data demonstrate a dinosaur to bird transition, or was it possibly manipulated in the spirit of academic politics?’⁵²⁷ A different article that addresses the same topic, suggests that the evolutionary science community ‘has a dirty little secret regarding the manner in which that research is handled.’ The writer explains that this furtive activity involves discarding or hiding data that is incongruent with evolution. The author’s allegations, which also coincide directly with the Scarcity Principle, are emphasized in two successive rhetorical questions: ‘How will anyone really know what dinosaur DNA sequences look like until uncensored data from dinosaur bones are published for public scrutiny? And how will such data be published at all if “embarrassing” research results are routinely discarded as anomalous, simply because they didn’t “look like chicken”?’⁵²⁸

Similar claims that proevolutionists are suppressing information and purposefully broadcasting misinformation is exhibited in a question asked of Karl Giberson in

⁵²⁵ Brian Thomas, "Evolutionary 'Game Changer' Doesn't Change Anything," *Acts&Facts* 40, no. 12 (2011): 17.

⁵²⁶ _____, "Thank God for Wood," *Acts&Facts* 40, no. 10 (2011): 17.

⁵²⁷ Jeffrey Tomkins, "Dinosaur Protein Sequences and the Dino-to-Bird Model," *Acts&Facts* 38, no. 10 (2009): 13.

⁵²⁸ James J. S. Johnson, Jeffrey Tomkins, and Brian Thomas, "Dinosaur DNA Research: Is the Tale Wagging the Evidence?," *Acts&Facts* 38, no. 10 (2009): 6.

response to statements made on his website regarding the lack of genuine scientific leaders in creationist circles:

Is Dr. Giberson ignorant of the scientific contributions of scientists such as Dr. Henry Morris, Dr. Duane Gish, Dr. Ken Cumming, Dr. Steve Austin, Dr. Andrew Snelling, Dr. Jason Lisle, Dr. Russ Humphreys, Dr. John Baumgardner, Dr. Larry Vardiman, Dr. A. E. Wilder-Smith, and many other credentialed and evangelical members of academia who are ‘leading scholars in their respective fields’?⁵²⁹

This is followed directly by yet another accusatory inquiry, which conjointly appeals to Social Consensus:

Perhaps Dr. Giberson is unaware that “Bible believing” Christians in America prefer teachers who actually believe in the authority and authenticity of the Word of God, who will instruct them in truth without constantly instilling doubt about the foundational book of Christianity, the inspired and inerrant Bible.⁵³⁰

Equally contemptuous questions infuse ICR’s treatment of such adversaries as Eugenie Scott of the National Centre for Science Education. Scott is berated for not ‘doing science or defending the evidence,’ while the article’s writer asks rhetorically, ‘And while many of her opponents make their living conducting actual evidence-based science research, what has Eugenie Scott contributed to the advancement of science knowledge?’⁵³¹

Negative rhetorical questions also exist particularly often within *Acts&Facts* articles that attack the theory of natural selection. In relation to this, ICR writers repeatedly insist that the very idea of natural selection necessitates some sort of cognizant “selector,” whose existence runs contrary to evolution’s naturalistic tendencies. It is also declared that no genuine evidence to support natural selection actually exists, aside from the loss of biological traits, and consequently, evolutionary

⁵²⁹ Lawrence E. Ford, "Christianity on the Public Stage: Dr. Francis Collins and the Dangerous Doctrines of Biologos," *Acts&Facts* 38, no. 9 (2009): 5.

⁵³⁰ Ibid.

⁵³¹ Ford, "New Voices," 5.

scientists are simply clinging to a fatuous theory. The following selection of queries demonstrates how rhetorical questions are employed within the context of such incriminations:

- ‘Since when is the loss of a useful structure an evolutionary development?’⁵³²
- ‘Do evolutionists really recognize the intricacies of molecular machines yet attribute their origins to ill-defined forces?’⁵³³
- ‘Is it logical to attribute such overwhelmingly complicated machinery to genetic mistakes "guided" by natural happenstance?’⁵³⁴
- ‘Does this imaginary mechanism actually “do” anything?... It might appear to be a textbook case of natural “selection,” but is it? Did any selection process even operate at all?’⁵³⁵
- ‘Is the conclusion “it happens” scientifically satisfying? Shouldn’t that raise red flags about the validity of selection? And shouldn’t researchers be prompted to look for better explanations?... Isn’t it wise to show that the use of the word “selection” has never been justified, but is just the ruse to slip intelligence back into a design process after taking God out?’⁵³⁶
- ‘What does nature actually “select” anyway?’⁵³⁷
- ‘If the evidence points to the fact that “natural selection” is merely a figure of speech, and thus impotent, should not honest scientists put aside their passionately held beliefs and accept reality?’⁵³⁸

⁵³² John D. Morris, "Galapagos: Showcase for Creation," *Acts&Facts* 38, no. 5 (2009): 8.

⁵³³ Randy J. Guliuzza, "Life's Indispensable Microscopic Machines," *Acts&Facts* 39, no. 8 (2010): 11.

⁵³⁴ Frank Sherwin, "Cells: Sophisticated and God-Designed," *Acts&Facts* 39, no. 8 (2010): 17.

⁵³⁵ John D. Morris, "Selected by Nature or Designed to Fill?," *Acts&Facts* 40, no. 3 (2011): 17.

⁵³⁶ Randy J. Guliuzza, "Darwin's Sacred Imposter: Recognizing Missed Warning Signs," *Acts&Facts* 40, no. 5 (2011): 13, 15.

⁵³⁷ Lawrence E. Ford, "As a Matter of Fact," *Acts&Facts* 40, no. 7 (2011): 3.

- ‘Some might interpret this event as “natural selection” in action, but if that were the case, who actually did the “selecting”?’⁵³⁹

Such questions underscore precisely how ICR materials use negative rhetorical queries to cast doubt not only upon evolutionist data, but also upon the reputations of those who promote it.

It is evident that the inquiries listed above are typically designed as erotema. The Institute for Creation Research’s positive rhetorical questions are often structured similarly, but instead shepherd readers in the direction of procreationist inferences. For instance, after describing how the playful behaviour of animals seems to contradict Darwinism, the author asks readers near the end of the piece, ‘Could creation suffice as an alternative explanation?’⁵⁴⁰ Elsewhere, Ford first indicates, ‘Now, 150 years later, Darwin’s critics are arising even among devout evolutionists who can no longer reconcile the evidence of real science with this metaphorical imposter called “natural selection,”’ before asking provocatively, ‘Is it a God-designed process, as some creation scientists have stated?’⁵⁴¹ In a similar fashion, Johnson uses a rhetorical question as the final sentence in an article that compares various interpretations of the word Hebrew word *yom*: ‘So consider this: Which meaning of the word “day” matches the demonstrated intent of our *truth*-loving God to provide His creatures with true, non-misleading, understandable information?’⁵⁴²

These positive rhetorical questions are significantly less common than ICR’s negative variety, and they often appear within articles that attempt to reinforce creationist interpretations of scripture, implore Christians to avoid alternative

⁵³⁸ Randy J. Guliuzza, "Darwin's Sacred Imposter: How Natural Selection Is Given Credit for Design in Nature," *Acts&Facts* 40, no. 7 (2011): 15.

⁵³⁹ Johnson, "Slow Death," 11.

⁵⁴⁰ Brian Thomas, "Why Do Animals Play?," *Acts&Facts* 39, no. 1 (2010): 16.

⁵⁴¹ Lawrence E. Ford, "Unmasking Darwin's Deception," *Acts&Facts* 40, no. 5 (2011): 3.

⁵⁴² James J. S. Johnson, "What a Difference a Day Makes," *Acts&Facts* 38, no. 3 (2009): 13. (his italics)

hermeneutical approaches, and which encourage readers to actively share YEC with others. In the context of such goals, Henry Morris rallies the audience through a series of questions: ‘Do we really believe the Bible to be the inspired Word of God? Do we believe that God speaks clearly? Do we really think that current scientific majority opinion is always right?... [W]e must defend the faith; for what would have become of us if our fathers had not maintained it?’⁵⁴³ In a similar tact, Johnson asks:

If we truly believe that Christ is the Creator (the “Intelligent Designer”) that the Holy Bible says He is, what excuse is there for not proudly proclaiming His creatorship to others? Are we ashamed to profess Him before men? Are we less confident of Genesis' accuracy than Jesus was? Are we ingrates, unwilling to publicly own Him as our Maker? Or are we like the few who heartily received Him for who He really was and is--Christ the Intelligent Designer and Redeemer, who came to earth so that those who believe in Him can have life eternal.⁵⁴⁴

While these questions are classified as positive rhetorical inquiries due to their support of ICR’s position, it is evident that Johnson’s mention of ‘ingrates’ is not particularly complimentary. Appreciably more pronounced criticisms are the true substance of the next prevalent variable; the Contrast Principle and Negativity Effect.

4.4 ICR’s Use of the Contrast Principle and Negativity Effect

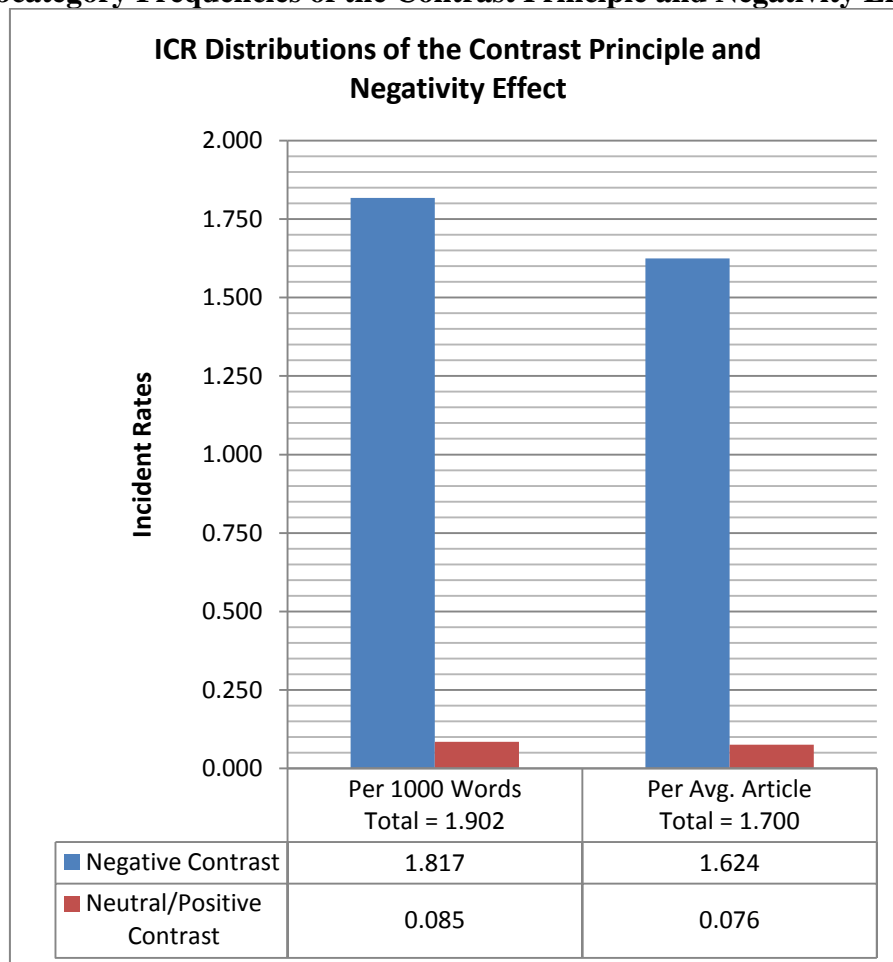
The Contrast Principle and Negativity Effect exhibit only 22 fewer occurrences in ICR materials than does Asking Questions. Indeed, both message variables often overlap within *Acts&Facts* articles, and the Contrast Principle and Negativity Effect demonstrate a comparable 1.902 incidents per 1000 words. This equates to 1.700 appearances in the average ICR article, and each recorded occurrence of this ELM cue can be classified as either a case of neutral/positive or negative contrast. The first category incorporates comparisons without using manifestly critical language. These

⁵⁴³ Henry M. Morris, "Defending the Faith," *Acts&Facts* 40, no. 4 (2011 [1997]): 14.

⁵⁴⁴ James J. S. Johnson, "The Intelligent Designer Movement," *Acts&Facts* 39, no. 2 (2010): 19.

statements may still employ biased and inequitable comparisons, but they do not openly reprimand any of the contrasted constituents. Alternatively, negative contrast involves comparisons that *do* articulate explicit criticisms of a compared party. To clarify, neutral/positive contrast may state that $A=1$ in comparison with $B=4$ to emphasize that B indicates a greater numerical value. Negative contrast, on the other hand, might also communicate that $A=1$ in comparison with $B=4$, but then further mention that A is promoted by unattractive, racist cowards. In this way the negativity effect is most pronounced in the latter expression of this message variable.

FIGURE 4.13
ICR Subcategory Frequencies of the Contrast Principle and Negativity Effect



Only 33 of the total 741 recorded Contrast Principle and Negativity Effect cases can be classified as neutral/positive contrast. These statements usually describe a

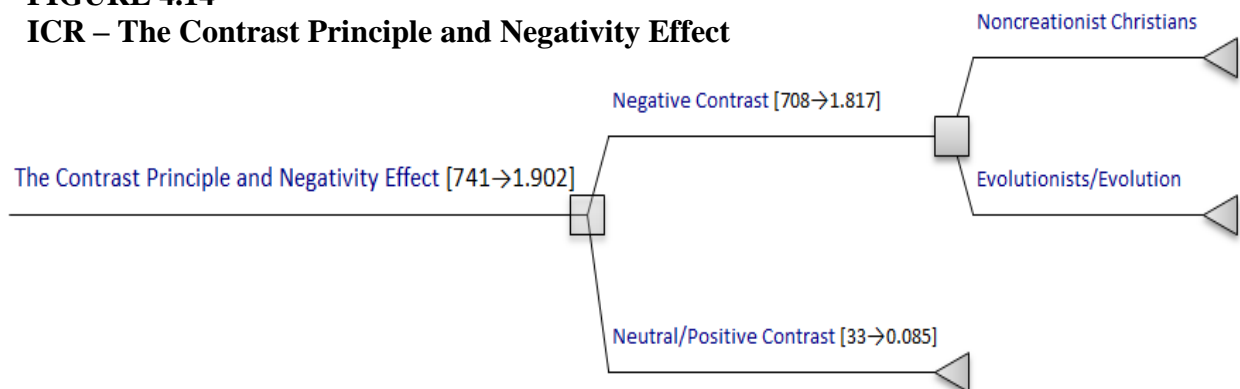
noncreationist perspective, and then articulate the divergent YEC viewpoint. Though these excerpts do not overtly attack the evolutionist perspective, they still frequently include language that stresses how the creationist perspective is the better option, perhaps because it features sacred approval or greater scientific credence. This is evident in an article written by Albert Mohler, president of The Southern Baptist Theological Seminar:

The major scientific assumption controlling the long ages of the earth and the universe is the idea of uniformitarianism, a theory made in the early 19th century by Charles Lyell and others that suggests the processes we observe today are a constant guide to how physical processes have always operated. If processes appear slow and gradual today, and if these processes have always operated in this manner, then the earth must be much, much older than religious texts, such as Genesis, suggest.

In contrast, the inference and consensus of the church through all of these centuries is that the earth and the universe are very young, only several thousand years old.⁵⁴⁵

The authoritative, sacred ‘consensus of the church,’ is unmistakably compared with the mere thoughts of men, even though Lyell’s uniformitarianism is not insulted outright.

FIGURE 4.14
ICR – The Contrast Principle and Negativity Effect



Other articles draw similar distinctions between the secular nature of evolution and the religious qualities of Young Earth Creationism. ‘The hypothesis of evolution claims that all life descended from one common ancestor (or a few) over the past three

⁵⁴⁵ R. Albert Mohler, "Why Does the Universe Look So Old?: The Theological Costs of Old-Earth Thinking," *Acts&Facts* 39, no. 10 (2010): 5.

to four billion years,' explains Jeanson, 'In contrast, Scripture clearly teaches the supernatural creation of distinct creatures in six days roughly 6,000 years ago.'⁵⁴⁶ Here evolution, described as only a 'hypothesis,' is neutrally contrasted with the clear, incontrovertible teachings of the bible. Relatively analogous occurrences of neutral contrast describe evolution as being confounded by certain facts, in direct comparison to YEC, which can readily explain all observed data:

Since beards are routinely shaved, it seems there is no pragmatic biological function for them. Yet according to Darwinian evolution, nature selects individuals with novel, advantageous features. If, for vertebrates in general, 'the developmental origin of hair is...mysterious' for evolution, then the specification of androgenic hair on male humans is even more so.

On the other hand, if everything was created by a God who exists outside the physical world, there is a ready answer, one with broad application: beards present a certain appearance. Aesthetic features were employed by Someone who knew how things look in addition to how things work. Beards do not confer any selectable survival advantage to humankind, but they do serve to add distinction to men, perhaps as different features distinguish women.⁵⁴⁷

Negative contrast, which alone boasts a frequency rate of 1.817 incidents per 1000 words, principally compares YEC and its adherents to noncreationist Christians of all varieties, as well as with evolution/evolutionists in general. These two primary comparative focuses occasionally overlap, because of course, numerous Christians are noncreationist evolutionists. Many of the significant themes that appear in the Institute for Creation Research's use of negative contrast have already surfaced throughout this chapter's examination of Source Cues and Asking Questions. This includes assessments of ICR's purportedly superior approach to the bible, which is contrasted directly with the treatment of scripture by noncreationist Christians. Unlike ICR's

⁵⁴⁶ Nathaniel T. Jeanson, "Common Ancestry and the Bible--Discerning Where to Draw the Line," *Acts&Facts* 39, no. 6 (2010): 6.

⁵⁴⁷ Brian Thomas, "The Apobetics of Aesthetics: A Hairy Problem for Evolution," *Acts&Facts* 38, no. 4 (2009): 18.

unwavering commitment to correct, divinely intended hermeneutics, these Christians are said to hold ‘compromise theories’ or ‘accommodationist views’ that corrupt the biblical narrative through nonliteralist interpretations.⁵⁴⁸ ‘Positions that reinterpret the Genesis account to incorporate evolutionary science,’ notes Forlow, ‘compromise God’s Word, God’s nature, and the gospel message.’⁵⁴⁹ Moreover, while ICR’s work and hermeneutics are described as being God-approved and linked with the biblical writers, noncreationist Christians are associated with Balaam and such individuals as the oft-ridiculed Harold Camping:

But Balaam had an appetite for monetary success and a desire for secular recognition (2 Peter 2:15; Jude 11). He willfully embraced error in spite of the Lord’s warnings and with clear knowledge beforehand that he was doing wrong (Numbers 22–24). In so doing, he foreshadowed the likes of the foolish teachings of Harold Camping, the damnable writings of Rob Bell, the oily compromise of Peter Enns, and the open betrayal of Scripture by “evangelical” academics like Bruce Waltke and the fellows of BioLogos.

How do “good” people become ‘enemies of the cross of Christ’ (Philippians 3:18)?⁵⁵⁰

By contrasting ICR with such descriptions of noncreationist falsity, *Acts&Facts* writers accentuate the organization’s own Messenger Credibility.

FIGURE 4.15
Conveying ID’s “Closed-Bible” Approach⁵⁵¹



⁵⁴⁸ Forlow, "Genesis Under," 4; John D. Morris, "Doubt Versus Unbelief," *Acts&Facts* 40, no. 8 (2011): 15.

⁵⁴⁹ Forlow, "Genesis Under," 5.

⁵⁵⁰ Henry Morris, III., "Balaam's Error and Today's Evangelicals," *Acts&Facts* 40, no. 8 (2011): 4.

⁵⁵¹ James J. S. Johnson, "The Failed Apologetic of the Wedge Strategy: How the Intelligent Design Movement Treats the Bible as Irrelevant," *Acts&Facts* 40, no. 8 (2011): 10.

Fear emotions are also provoked as ICR writers warn readers to be vigilant against the many deviant shapes of noncreationist Christianity. ‘Today Christendom faces new breeds of Trojan horses (e.g., BioLogos, Intelligent Design deism, day-age “progressive creation,” framework hypothesis, etc.),’ cautions Johnson, ‘which lie in wait to attack our understanding of Genesis and what it teaches about the Flood. Beware—and keep your Bible open!’⁵⁵² Audiences are told that many Intelligent Design ‘adherents are active Christians who maintain a strong personal testimony of their faith in Christ,’ yet this movement ‘treats the bible as irrelevant,’ and ‘denies the Bible’s authoritative relevance to our knowledge of how God created everything.’⁵⁵³ While ICR members revere the bible and let God’s word speak for itself, ID hinders it by using a “closed-bible approach” to science, which is insinuated by the picture in figure 4.15. Christian ID proponents are also accused of ‘culpable passivity’ and ‘going with the flow,’ because they do not preserve biblical literalism and timorously yield to non-Christian ideas espoused by secular academics.⁵⁵⁴ This is contrasted with those courageous Christians who challenge ‘the status quo that routinely denigrates God and His Word,’ rather than simply listening ‘to the voices of “experts” who boisterously brag of their “science” (falsely so-called).’⁵⁵⁵

Similar charges are repeatedly levelled against theistic evolutionists, and readers are told that this form of non-YEC Christianity leads to nothing less than the rejection of the same sacred and scientific authority from which ICR draws its Messenger

Credibility:

The resurgence of the various theistic evolution theories, led by groups such as BioLogos that espouse the “creation by evolution” mantra, would be theologically irrelevant if it were

⁵⁵² _____, "Just Say No to Trojan Horses: Worldview Corruption Is Lying in Wait," *Acts&Facts* 40, no. 2 (2011): 18.

⁵⁵³ Morris, "An Inconvenient," 23; Johnson, "The Failed," 10, 11.

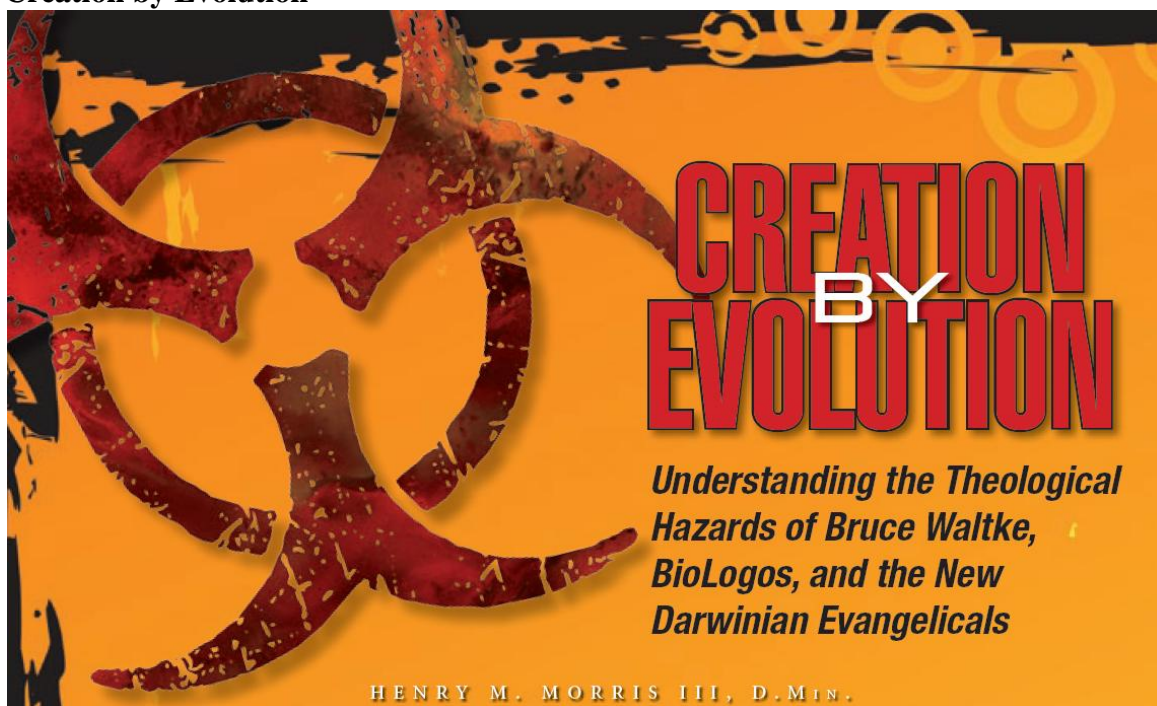
⁵⁵⁴ Johnson, "Culpable Passivity."

⁵⁵⁵ *Ibid.*: 8.

not that embracing evolution requires a rejection of the doctrine of inerrancy, the revealed nature of God Himself, and much of obvious science as well.⁵⁵⁶

Acts&Facts fear appeals are especially pronounced in relation to such discourse on theistic evolution. This can be observed in an article by Morris III, which emphasizes the danger of theistic evolution by using the biohazard symbol, and warns readers that BioLogos' ideas can be particularly destructive to a Christian's faith.⁵⁵⁷ Through such descriptions, the Institute for Creation Research's creationism and faithfulness are contrasted with religiously calamitous accommodationist views that lead directly to apostasy. As Morris warns, 'The road of compromise, however attractive it seems, is a one-way street, ending in a precipice and then the awful void of "rational religion," or atheism.'⁵⁵⁸

FIGURE 4.16
Creation by Evolution⁵⁵⁹



⁵⁵⁶ Henry Morris, III., "Naturalizing the Supernatural: How Evolutionary Ideas Steal Glory from God " *Acts&Facts* 40, no. 3 (2011): 4.

⁵⁵⁷ ———, "Creation by Evolution: Understanding the Theological Hazards of Bruce Waltke, Biologos, and the New Darwinian Evangelicals," *Acts&Facts* 39, no. 6 (2010).


⁵⁵⁸ Henry M. Morris, "Dangerous Turn Ahead: Traveling Down the Road to Compromise," *Acts&Facts* 38, no. 6 (2009 [1988]): 4.

⁵⁵⁹ Morris, "Creation By," 4.


FIGURE 4.17
BioLogos Can Be
Hazardous⁵⁶⁰

BioLogos Can Be Hazardous to Your Faith


(Editor's note: Below are just a few hazards found on the BioLogos website.)

 **Hazard #1**


BioLogos is funded by the Templeton Foundation, which has awarded prizes and grants to Hindus, Buddhists, Muslims, Catholics, evangelical Christians, and atheists. Its support of evolution-based science research is ongoing.

 **Hazard #2**


BioLogos is preparing to develop and market science curricula for homeschool and Christian school education, teaching "creation by evolution" to your children.

 **Hazard #3**

BioLogos is teaching "creation by evolution" to Christian high school teachers in southern California this summer (paying them a stipend to attend), described as "professional development" in biology.

 **Hazard #4**

BioLogos is launching "Resources for Pastors" to persuade your pastor that it's okay to believe in evolution and teach it to your church.

 **Hazard #5**

BioLogos represents a new front in the drift and demise of evangelical Christianity, having as its leaders and spokespersons men and women who identify themselves as born-again believers, who teach in Christian colleges and seminaries, while at the same time questioning the accuracy and historicity of the biblical accounts of creation, Adam and Eve, the Fall, the Flood, and much more.

Believer, beware!

⁵⁶⁰ Ibid.: 5.

ICR's descriptions of theistic evolution coincide with *Acts&Facts*' overall treatment of both evolutionary theory and its many supporters. These cases of negative contrast often juxtapose creationism's authentic scientific and biblical nature, which is validated by both empirical data and scripture, alongside natural selection's apparently illusory evidence. For instance, YEC is consistently described as being substantiated by 'real science,' while natural selection is marked as an 'evolutionary fairy tale,' 'only an illusion,' or simply an imaginary 'mystical process' that lacks genuine scientific corroboration.⁵⁶¹ Furthermore, natural selection is not only represented as an unempirical fiction, but also as Satan's instrument that is used to oppose God's purposes. With regards to this, Morris stated the following in relation to Satan's attempts to seize America's educational system:

Because of its key importance in God's plan for His creation, Satan has sought very successfully to gain control of education—especially higher education. His system of evolution is the key weapon in his control of education and he bitterly opposes all who presume to teach against that system. ICR was founded with this very issue in mind.⁵⁶²

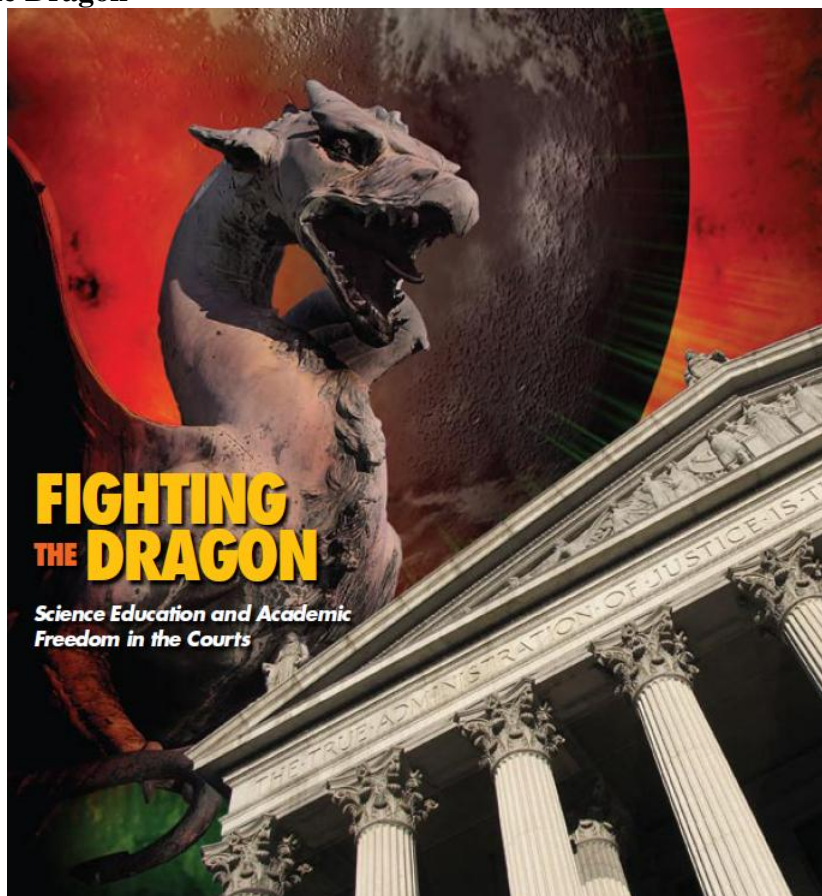
Such associations between evolution and Satan are further demonstrated in a piece entitled "Fighting the Dragon," which reports on an unsuccessful legal battle fought to reverse the Texas Higher Education Coordinating Board's ruling preventing ICR from granting science degrees. The article includes a picture of an imposing dragon looming over a courthouse, and it opens with the following excerpt: 'The Bible describes our ultimate Enemy as "the dragon, that old serpent, which is the Devil, and Satan" (Revelation 20:2), who wages war against the saints with his many "ministers"

⁵⁶¹ Frank Sherwin and Brian Thomas, "Do 'New Species' Demonstrate Darwinism?," *Acts&Facts* 38, no. 2 (2009); Brian Thomas, "The Ida Fossil: A Clever Campaign for a Lackluster 'Link'," *Acts&Facts* 38, no. 7 (2009); Lawrence E. Ford, "Science Education Roundup," *Acts&Facts* 38, no. 7 (2009); Guliuzza, "Darwin's Sacred," 15; James J. S. Johnson, "Quintillions of Creation Witnesses: Blood Service Agents Testify for Creation," *Acts&Facts* 40, no. 5 (2011): 9; Frank Sherwin, "Insects in Darwin's Ointment," *Acts&Facts* 40, no. 4 (2011): 16.

⁵⁶² Morris, "Reflections on," 10, 13.

(2 Corinthians 11:15) who do his bidding. What is his primary strategy? To thwart the impact of God's Word.⁵⁶³ The article distinctly implies that Satan has been working in several court cases to legally frustrate Darwin sceptics, and before he asks the audience for financial donations the author assures readers that ‘while ICR's legal battle is over, we will not retreat from other public efforts to fight the “Dragon” and his minions. The battle is raging as never before.’⁵⁶⁴

FIGURE 4.18
Fighting the Dragon⁵⁶⁵



Naturally, ICR materials also link the satanic tool of evolution with what its members describe as horrendous evils. *Acts&Facts*' Associate Editor explains, ‘Having witnessed slavery aboard the *Beagle*, Darwin didn't like it, yet his ideas have been used to justify practices ranging from laissez-faire capitalism, racism, colonialism, Francis

⁵⁶³ Henry Morris, III., "Fighting the Dragon," *Acts&Facts* 39, no. 9 (2010): 4.

⁵⁶⁴ *Ibid.*: 5.

⁵⁶⁵ *Ibid.*

Galton's eugenics, and social Darwinism.⁵⁶⁶ Evolution's harm-inducing characteristics are subsequently contrasted with the professed beneficial outcomes of creationism:

Consider also the fruit test. Jesus said, 'By their fruits ye shall know them' (Matthew 7:20). The fruits of evolution include atheism, communism, fascism, and all kinds of harmful behavior and evil philosophy, but not one good fruit in the form of real scientific advance in either living standards or altruistic behavior. Belief in primeval supernatural creation, on the other hand, was the motivating conviction of practically all the founding fathers of modern science, of the American nation, and of the original education system of this country. All the basic doctrines of Christianity are founded on the truth of primeval special creation. Creationism certainly scores much higher than evolutionism on the fruit test.⁵⁶⁷

This evolution-creation dissimilitude is epitomized in following proclamation:

It is high time that people in general, and Bible-believing Christians in particular, recognize the foundational significance of special creation. Creation is not merely a religious doctrine of only peripheral importance, as many people (even many evangelical Christians) seem to assume. Rather, it is the basis of all true science, of true American ideology, and of true Christianity.

Evolutionism, on the other hand, is actually a pseudo-science masquerading as science. As such, it has been acclaimed as the "scientific" foundation of atheism, humanism, communism, fascism, imperialism, racism, laissez-faire capitalism, and a variety of cultic, ethnic, and so-called liberal religions, by the respective founders and advocates of these systems.⁵⁶⁸

Readers are also told that unlike creationism, the evil-inciting theory of natural selection is truly an idolatrous, deliberately god-denying concept. 'Selection is idolatrous in the basest of ways' contends Guliuzza, 'Not only does it ascribe intelligence-like powers to unconscious environmental features, like any other idol, but it induces people not to give the Lord credit for the incredible intelligence and machinery He has built into His creatures that enable them to adapt to environmental

⁵⁶⁶ Christine Dao, "Charles Darwin: The Man Behind the Monkey," *Acts&Facts* 38, no. 2 (2009): 12.

⁵⁶⁷ Morris, "Reflections on."

⁵⁶⁸ ———, "Creation Is," 20.

features.⁵⁶⁹ This idol, labelled ‘Darwin's substitute god’ as well as ‘a substitute “gospel” of godlessness and death,’ has apparently been conscientiously employed in an single-minded effort to remove the supernatural as an explanation for obvious cases of design in nature.⁵⁷⁰ Correspondingly, *Acts&Facts* writers further stress that as an unproven, scientifically frail theory, evolution is primarily an expression of anti-Christian religious faith, though ‘an inferior faith, indeed’.⁵⁷¹

The faith of the evolutionist...is a splendid faith indeed, a faith not dependent on anything so mundane as evidence or logic, but rather a faith strong in its childlike trust, relying wholly on omniscient Chance and omnipotent Matter to produce the complex systems and mighty energies of the universe. The evolutionist's faith is not dependent on evidence, but is pure faith--absolute credulity.⁵⁷²

In this vein, ICR materials refer to ‘Evolutionary belief’ as a ‘remarkable and largely unexplained phenomenon,’ and simply a form of ‘blind faith.’⁵⁷³ This is compared directly with ICR’s ostensible dependence on scientific empiricism and verifiable facts, which matches the scrupulous ‘eyewitness accounts’ provided by both biblical characters and God himself.⁵⁷⁴

Allegations concerning evolution’s religious nature are supplemented by images that integrate evolutionary caricatures within religious motifs, such as those represented in figure 4.19. Furthermore, it is claimed that allegiance to this scientifically unfounded

⁵⁶⁹ Randy J. Guliuzza, "Darwin's Sacred Imposter: Natural Selection's Idolatrous Trap," *Acts&Facts* 40, no. 11 (2011): 15.

⁵⁷⁰ ———, "All-or-Nothing Unity," *Acts&Facts* 39, no. 9 (2010): 11; James J. S. Johnson, "Human Suffering: Why This Isn't the 'Best of All Possible Worlds'," *Acts&Facts* 40, no. 11 (2011): 9; Guliuzza, "Darwin's Sacred," 12.

⁵⁷¹ John D. Morris, "The Language of Evolution," *Acts&Facts* 40, no. 7 (2011): 16.

⁵⁷² Henry M. Morris, *Some Call It Science: The Religion of Evolution* (Institute For Creation Research, 2006), 7. in Christine Dao, "Man of Science, Man of God: Henry M. Morris," *Acts&Facts* 38, no. 2 (2009): 21.

⁵⁷³ Morris, "The Vanishing," 17; Brian Thomas, "Doubts Raised About the 'Goldilocks' Planet," *Acts&Facts* 39, no. 12 (2009): 17.

⁵⁷⁴ Brian Thomas and Frank Sherwin, "Eyewitnesses to Extinction: Testimonies to the Life and Death of Dinosaurs," *Acts&Facts* 40, no. 6 (2011): 17.

faith often involves a sort of atheistic religious zealotry, and requires ‘willful ignorance,’ ‘willfully ignoring the data,’ and a ‘willful commitment to naturalism.’⁵⁷⁵

FIGURE 4.19
Evolutionary Faith



J. Morris insists that because the ‘evidence for creation is so strong, it is illogical to believe anything else,’ and therefore, ‘Only a religious commitment to atheism, or a desire for the approval of those atheists who call themselves scholars, could lead one down this path.’⁵⁷⁶ Accordingly, readers are told that the paucity of substantive evidence drives evolutionists to use chicanery and bullying in order to counterargue creationists and maintain a ‘monopoly on science, education, and theology.’⁵⁷⁷ Thus, H. Morris explains, ‘The evolutionist, knowing the weakness of the scientific case for evolution, almost always directs his own argument not against creation per se, but against recent creation and its corollary, flood geology.’⁵⁷⁸ It is also said that evolutionists ‘willfully suppress’ conclusions that imply design and purpose in nature,

⁵⁷⁵ Henry Morris IV, “Willful Ignorance,” *Acts&Facts* 38, no. 2 (2009): 39; Morris, “The Biggest,” 15; ———, “Reading the,” 17; ———, “Defending the,” 13.

⁵⁷⁶ Morris, “The Biggest,” 15.

⁵⁷⁷ ———, “The Creation,” 9.

⁵⁷⁸ Henry M. Morris, “Recent Creation Is a Vital Doctrine,” *Acts&Facts* 39, no. 5 (2010 [1984]): 14.

while also employing propaganda, in the most negative sense of the term.⁵⁷⁹ As Johnson tells readers, ‘Evolutionary propaganda is more than just science fiction—it is hyped and sold with slick sophistry.’⁵⁸⁰ These efforts are combined with political scheming, because while evolutionists ‘may not have scientific explanations on their side,’ argues Dao, ‘evolutionists have political and other tactics.’⁵⁸¹

Cumulatively then, the ostensibly honourable, God-fearing, and science-respecting qualities of YEC are contrasted with the Institute for Creation Research’s adversaries, serving to heighten the organization’s image while simultaneously denigrating evolutionary theory and its proponents. Added to such claims are recurring appeals to Social Consensus, which help to legitimate ICR’s stance through the use of Multiple Sources, Social Proof, and Underdog Effects.

4.5 ICR and Social Consensus

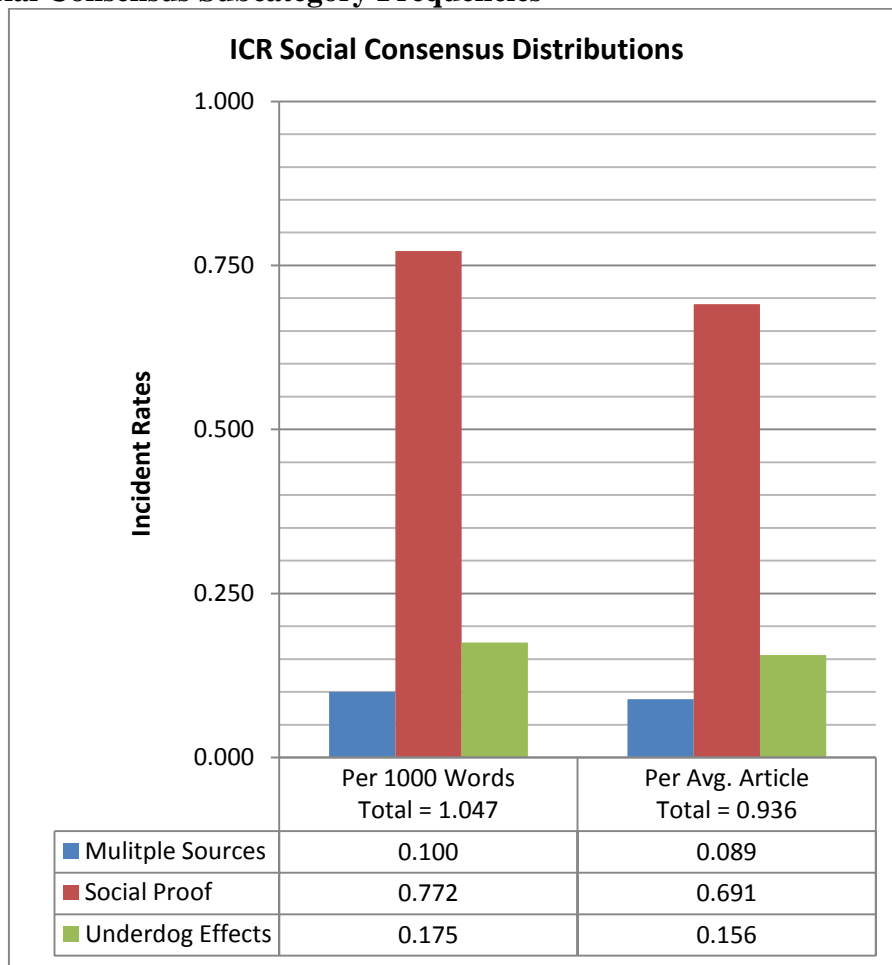
Though the Contrast Principle and Negativity Effect operate by identifying dissimilarities, Social Consensus usually focuses on people’s agreement, subsequently connecting this accord with a propagandist’s message. In the case of *Acts&Facts*, this involves demonstrating that numerous individuals share ICR’s creationist views. Social Consensus exhibits a frequency value of 1.047 incidents per 1000 words, indicating that ICR actually possesses the highest occurrence rate of this particular variable in comparison with both AiG and CSC. The average *Acts&Facts* article maintains 0.936 occurrences of this persuasive cue, which is here subdivided into the three categories described as multiple sources, Social Proof, and underdog effects. The most ubiquitous of these is clearly Social Proof, which comprises 301 of ICR’s 408 Social Consensus occurrences.

⁵⁷⁹ Guliuzza, "Similar Features," 10.

⁵⁸⁰ James J. S. Johnson, "Buyer Beware! Don't Swallow Evolutionist Sophistry," *Acts&Facts* 40, no. 1 (2011): 8.

⁵⁸¹ Christine Dao, "Texas Schools Seek Science Supplements," *Acts&Facts* 40, no. 2 (2011): 19.

FIGURE 4.20
ICR Social Consensus Subcategory Frequencies



Representing 73.8% of the Institute for Creation Research's Social Consensus incidents, Social Proof plays an important role throughout *Acts&Facts* magazines. In many cases this persuasive element appears in the form of audience testimonials, which are concentrated in each magazine's *Letters to the Editor* section. These comments from readers are unanimously positive, and usually thank ICR for its influential work, encourage its members, reiterate YEC precepts, describe how readers are using ICR materials, and explain how they have chosen to give money to the organization. Whenever such contributors are from another country the letter's origin is provided. For instance, feedback is included from ICR's admirers residing in Australia, Bahrain, Bermuda, Canada, Colombia, Ecuador, Indonesia, Japan, Kenya, Kuwait, Malawi,

Nepal, the Philippines, Scotland, South Korea, Sri Lanka, and Zambia. As one Canadian audience member writes:⁵⁸²

I am writing to you to say thank you for all that you do and for everyone involved—please don't stop or give up because what you are doing is so vital to every believer and even more so to those who continue to be blinded by the god of this age. It is so important to have your magazines here to help with revealing God's truth to my family. We love the work everyone has put in to this ministry and we will be helping financially too! God bless you now and, more importantly, in the future as the devil continues to try to shut your voice up—may our Lord keep you shining like a light on the hill as a beacon of hope and truth!!⁵⁸³

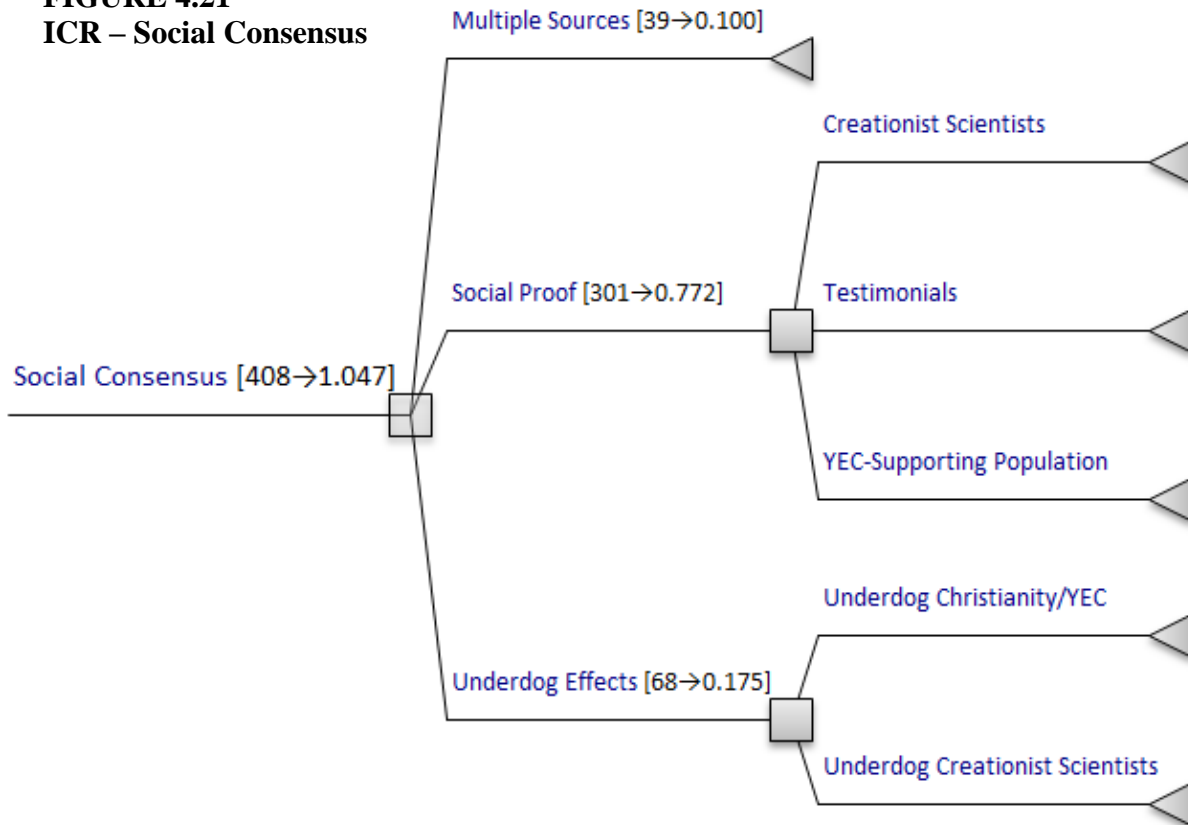
These audience comments demonstrate the global reach of ICR's materials and act as Social Proof for the institute's efforts, especially within ICR's regular appeals for donations. This is evident in an article by Morris IV, in which he laments that 'Sadly, much of the information being disseminated [online] might better be called "disinformation," just as much of what is called science is really "science falsely so called" (1 Timothy 6:20).' He then encourages potential donors to financially support ICR's online initiatives, and notes, 'Judging by the thousands of personal testimonies and emails we have received, it is clear God has abundantly blessed this vital aspect of ICR's ministry.'⁵⁸⁴

⁵⁸² R.D.S., "Letters to the Editor," *Acts&Facts* 40, no. 9 (2011): 20; R.F., "Letters to the Editor," *Acts&Facts* 39, no. 11 (2010): 20; J.F., "Letters to the Editor," *Acts&Facts* 39, no. 5 (2010): 20; J.C., "Letters to the Editor," *Acts&Facts* 39, no. 11 (2010): 20; S.F.S., "Letters to the Editor," *Acts&Facts* 38, no. 10 (2009): 20; D.S., "Letters to the Editor," *Acts&Facts* 38, no. 8 (2009): 20; L.T., "Letters to the Editor," *Acts&Facts* 38, no. 11 (2009): 20; J. and N.H., "Letters to the Editor," *Acts&Facts* 39, no. 7 (2010): 20; H.M.C., "Letters to the Editor," *Acts&Facts* 39, no. 7 (2010): 20; P.L., "Letters to the Editor," *Acts&Facts* 39, no. 4 (2010): 20; D.T., "Letters to the Editor," *Acts&Facts* 39, no. 3 (2010): 20; M.K.S., "Letters to the Editor," *Acts&Facts* 39, no. 6 (2010): 20; S.F., "Letters to the Editor," *Acts&Facts* 40, no. 11 (2011): 20; G.S.K., "Letters to the Editor," *Acts&Facts* 40, no. 6 (2011): 20; M.F., "Letters to the Editor," *Acts&Facts* 40, no. 4 (2011): 20; R.S., "Letters to the Editor," *Acts&Facts* 40, no. 3 (2011): 20.

⁵⁸³ S.M., "Letters to the Editor," *Acts&Facts* 40, no. 10 (2011): 20.

⁵⁸⁴ IV, "Gift Legacy," 21.

FIGURE 4.21
ICR – Social Consensus



These testimonials reflect other claims that thousands of people are being impacted by the Institute for Creation Research's materials. In a 2009 article Ford tells readers that 'ICR's premier monthly magazine, *Acts & Facts*, continues to grow, with new subscriptions now reaching 3,000 per month,'⁵⁸⁵ and almost two years later Morris IV communicated the following:

Over the last 40 years, God has enabled ICR to reach millions with the scientific truth of His creation through a myriad of presentations, publications, and other media. ICR distributes *Acts & Facts* and *Days of Praise* to hundreds of thousands free of charge, while countless multitudes have benefited from formal presentations like our Demand the Evidence lecture series, Genesis presentations, and Back to Genesis seminars. Creation science radio programs are broadcast on nearly 1,600 outlets each week, while hundreds of books, audio CDs, and DVDs have been produced through the years. These comprise the public "face" of ICR, and based on the many testimonies

⁵⁸⁵ Ford, "2008," 5.

received, they have brought many to a saving knowledge of our Creator and have been a great blessing to many more.⁵⁸⁶

These declarations correspond with assertions that there are millions of creationists worldwide, and thousands of scientists who actively support Young Earth Creationism. ‘Hundreds of students, pastors, and Bible teachers trained by ICR have taught creation in many venues,’ notes J. Morris, and ‘there are many thousands of creation scientists, hundreds of creation organizations, and millions of creation believers, a movement all catalyzed by the publication of *The Genesis Flood*.’⁵⁸⁷

ICR’s focus on the number of creationist scientists intersects with ICR’s use of Source Cues, assuring readers that ‘there are now thousands of scientists who believe in recent six-day creation,’ ‘many fully credentialed professional biologists who are Christian creationists,’ and that ‘[m]any scientists do accept the biblical record at face value, and there are now thousands of scientists who have become young-earth creationists, not to mention multitudes of non-scientists.’⁵⁸⁸ Similar statements are used to counter the apparently conceited proevolutionist allegations that the both the evidence and the majority of scientists support evolution. ‘In the absence of either a divine “evolution revelation” or real scientific *proof* of macroevolution,’ stated H. Morris, ‘it is hard to understand this pervasive attitude of intellectual superiority (even over thousands of fully credentialed creationist scientists) as anything but evolutionary arrogance.’⁵⁸⁹

Furthermore, ICR writers stress that even if a minority of scientists accept YEC, the majority of citizens, especially in the United States, support some form of creationism and would like there to be nonevolutionist alternatives taught in public

⁵⁸⁶ Henry Morris IV, "The Breadth and Depth of ICR Ministries," *Acts&Facts* 39, no. 12 (2010): 21.

⁵⁸⁷ Morris, "The Creation," 9.

⁵⁸⁸ ———, "Old-Earth Creationism," 10; ———, "Biology and," 4; ———, "Defending the," 14.

⁵⁸⁹ Henry M. Morris, "Evolutionary Arrogance," *Acts&Facts* 38, no. 7 (2009 [2003]): 9. (his italics)

schools.⁵⁹⁰ Polls are used to underscore such observations, demonstrating that only a small group of educated elite are true evolutionists. One article tells audiences, ‘In spite of evolution’s dominance among these educated leaders, over half of respondents in a 2007 USA Today/Gallup poll agreed that it was either “definitely” or “probably” true that “God created human beings pretty much in their present form at one time within the last 10,000 years,”’ and, ‘An earlier CNN/USA Today Gallup poll found that “fifty-three percent say God created humans in their present form the way the Bible describes it, essentially endorsing a strict creationist explanation.”’⁵⁹¹ With such information in hand, readers are told, ‘Interest in creation still flourishes today, spawning thousands of creation scientists, hundreds of creationist organizations, and millions of creation believers.’⁵⁹²

At the same time that Social Proof is being communicated, *Acts&Facts* articles also exhibit 68 cases of Underdog Effects. It may at first seem that these two message variables are incongruous, but it is quite possible for both to coexist in persuasive combinations. For instance, despite the fact that the bulk of America’s citizenry are apparently creationists, audiences are told that Christian scientists who accept YEC are still outnumbered within a fiercely hostile academic world. These include the stalwart underdogs that first resisted the scientific authority after reading *The Genesis Flood*, and who ‘like God’s loyal “seven thousand” in the days of Elijah, had not yet bowed their knee to the Baal of evolutionary compromise.’⁵⁹³

Acts&Facts writers also paint Christians, and specifically Christian creationists, as a severely persecuted underdog community within an increasingly antagonistic secular society that is ‘pervasively dominated by humanistic unbelief and worldly

⁵⁹⁰ Ford, "New Voices," 5.

⁵⁹¹ Morris, "An Inconvenient," 21.

⁵⁹² John D. Morris, "The Creation Worldview and the Scopes Trial," *Acts&Facts* 40, no. 1 (2011): 15.

⁵⁹³ Henry Morris, III., "A Flood of Influence: The Impact of Henry Morris and the Genesis Flood in Modern History," *Acts&Facts* 40, no. 2 (2011): 5.

intimidation.⁵⁹⁴ Morris III insists that ‘we are now immersed in a secular culture, bombarded with an ever-increasing vitriol and hatred toward Christ and His followers,’ further elucidating, ‘Among politicians and pundits, media and entertainment moguls, and academicians pontificating from their tenured naturalism, Christians are blatantly branded as the enemy, a scourge to be banned.’⁵⁹⁵ In the context of this discrimination, Christians are told to hold-fast to their beliefs and test scientific theories for themselves, rather than simply ‘relying on “a majority of authorities” who write their own world history apart from that given by the highest ranking authority.’⁵⁹⁶ Additionally, despite being underdogs, *Acts&Facts* writers explain that the Institute for Creation Research’s members remain fearless. In fact, they are assured of an eventual victory through divine assistance, because ‘while the adversaries of God and His Word are powerful, we are not intimidated--because the Lord is on our side.’⁵⁹⁷ Plus, ICR is joined by numerous influential Evangelical leaders in their courageous fight:

Along with ICR, leaders like Dr. Mohler, Dr. Mac Brunson, Dr. John MacArthur, and others are standing, unafraid of the masses, shepherding the Church through the unwavering communication of biblical truth. Throughout our 40 years of ministry, ICR has counted on the friendship of men like these who resist compromise and seek to honor the Creator and His Word.⁵⁹⁸

Finally, 39 incidents of ICR Social Consensus are associated with the Multiple Sources subcategory. Because these occurrences simply involve three or more separate sources expressing analogous messages, this persuasive variable complements numerous topics. For example, in H. Morris’ article “The Vanishing Case for Evolution” a flurry of sources are used to successively echo the claim that no scientific

⁵⁹⁴ Morris, "Creation &," 13.

⁵⁹⁵ Henry Morris, III., "Issues among Evangelicals," *Acts&Facts* 38, no. 9 (2009): 22.

⁵⁹⁶ Brian Thomas, "The Stones Cry Out: What Rocks and Fossils Say About the Age of the Earth," *Acts&Facts* 40, no. 1 (2011): 17.

⁵⁹⁷ IV, "Christian Heritage," 21.

⁵⁹⁸ Ford, "Stand Up," 3.

evidence exists in support of evolution.⁵⁹⁹ In most cases, however, this persuasive cue overlaps with Social Proof and the testimonials found in each magazine's Letters to the Editor articles. Such testimonials represent separate voices that often provide matching statements concerning the efficacy of ICR's materials, while also expressing complimentary thankfulness for the organization's work.⁶⁰⁰ In this way, Multiple Sources work in concert with ICR's other Social Consensus incidents to reveal a veritable choir of support for the organization's efforts. It is also apparent that in certain cases statistics are used to verify this consensus, which is in part the concern of the next ELM cue.

4.6 ICR's Use of Statistics and Technical Jargon

308 occurrences of Statistics and Technical Jargon can be identified throughout *Acts&Facts* articles. This denotes a frequency rate of 0.790 incidents per 1000 words, corresponding to an average of 0.707 cases for every ICR piece. Of these 308 incidents, 278 are associated with the use of jargon, while only 30 include the utilization of statistics. The Institute for Creation Research's employment of jargon includes technical language associated with one of four broad areas of study, grouped here as: i. Biological Sciences; ii. Earth and Atmospheric Sciences; iii. Mathematics, Physics, and Astronomy; and, iv. Theology.

References to biology often include the Latin binomial nomenclature for species, as well as complex descriptions of physiology. Such jargon is frequently included within explanations of the apparent biological intricacy, and therefore design, found in all living organisms. For instance, in the article "The Wax That Taxes Darwin," Frank Sherwin explains that any would-be pathogens trying to infect human ears are 'subject

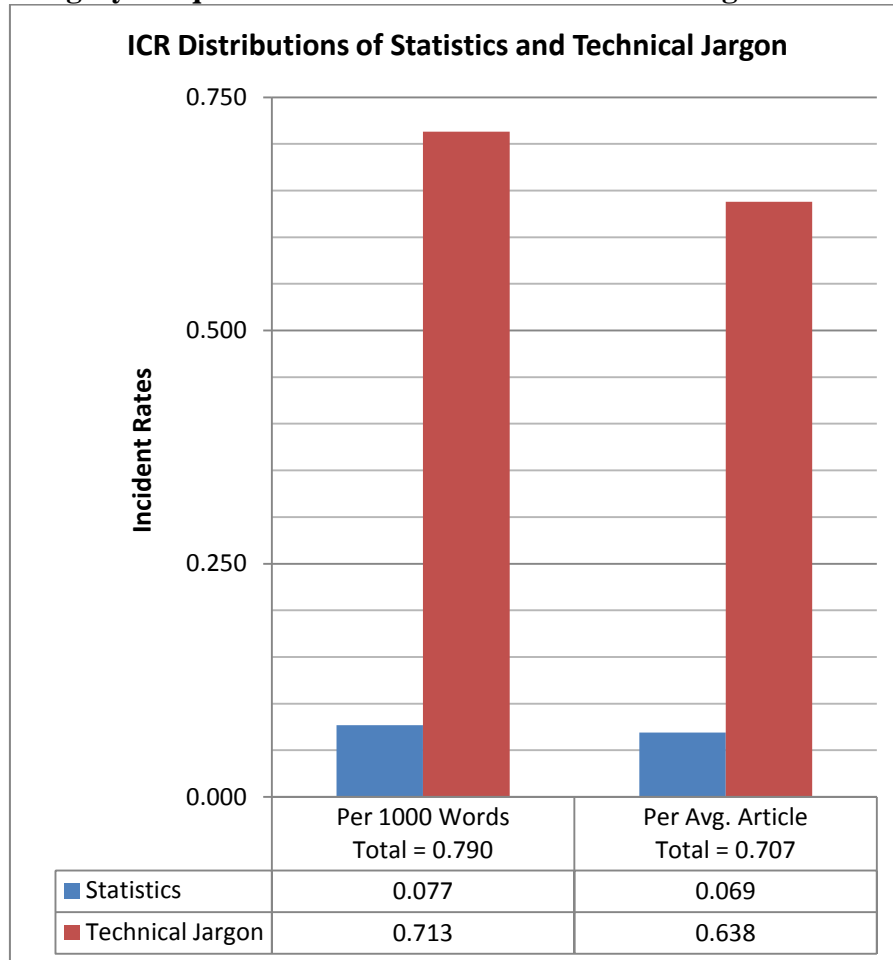
⁵⁹⁹ Morris, "The Vanishing."

⁶⁰⁰ See: "Letters to the Editor," *Acts&Facts* 38, no. 3 (2009); "Letters to the Editor," *Acts&Facts* 40, no. 12 (2011).

to a veritable smorgasbord of defensive compounds such as lactoferrin, beta-defensin-1, cathelicidin, beta-defensin-2, lysozyme, MUC1 and secretory component of IgA (a major class of antibody) found in the cerumen.⁶⁰¹

FIGURE 4.22

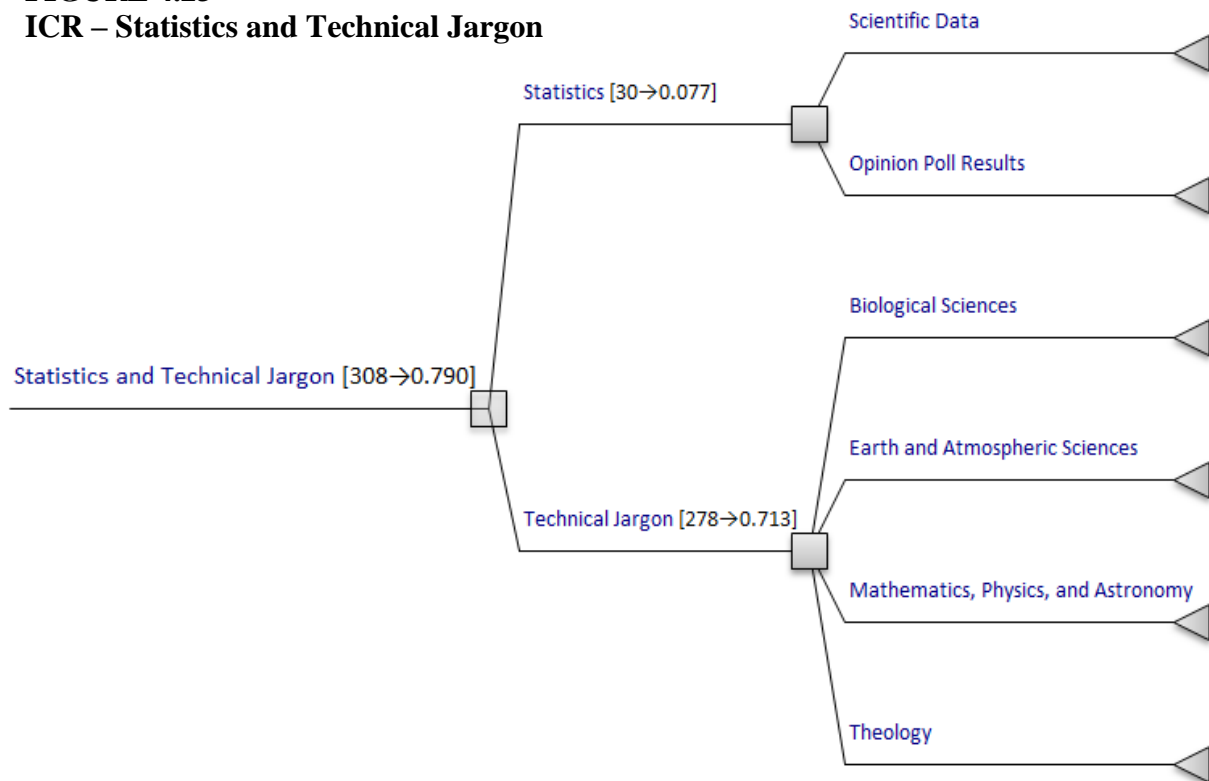
ICR Subcategory Frequencies of Statistics and Technical Jargon



No additional information regarding these substances is provided, and it is doubtful that readers lacking undergraduate training in human physiology as well as biochemistry would be able to recognize these compounds or quickly understand their operations. Without such knowledge audience members are forced to defer to the communicator's perceived expertise.

⁶⁰¹ Frank Sherwin, "The Wax That Taxes Darwin," *Acts&Facts* 38, no. 1 (2009): 12.

FIGURE 4.23
ICR – Statistics and Technical Jargon



Likewise, discussions of Earth and Atmospheric Sciences often include specialized terms requiring a proficiency in geology for proper comprehension. For instance, within an article concerning the *Kingston Peak Formation in California*, *J. Morris states*, 'Enormous deposits of boulder breccias, mega-breccias, diamictites, pudding-stones, and associated slide blocks and gravity flows of Upper Proterozoic strata have been correlated worldwide.'⁶⁰² Also, when ICR's Larry Vardiman examines weather pattern computer modelling, ice ages, and the scientific likelihood of a global flood, he includes detailed charts with seemingly complex field-specific observations. Examples of Vardiman's Atmospheric Science jargon are provided in figures 4.24-26.

⁶⁰² John D. Morris, "A Tectonic Origin for the Kingston Peak Formation," *Acts&Facts* 38, no. 3 (2009): 6.

FIGURE 4.24
Trends in Solar Activity and Temperature⁶⁰³

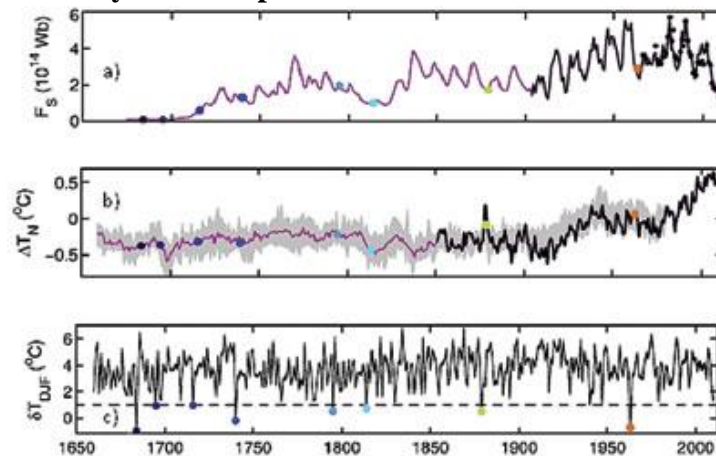


Figure 1. Trends in solar activity and temperature since the mid-17th century.¹ (a) Annual mean open solar flux, F_S . The mauve line is a model based on observed sunspot numbers.⁴ The black line after 1905 A.D. is derived from ground-based geomagnetic data. The dots are annual means of interplanetary satellite data. (b) Estimated mean northern hemispheric temperature anomaly, ΔT_N . The black line shows the Had-CRUT3v compilation of observations.⁶ The mauve line shows the median of an ensemble of 11 reconstructions (individually intercalibrated with the HadCRUT3v northern hemispheric data over the interval 1850-1950 A.D.) based on tree ring and other proxy data. The decile range is given by the gray shaded area. (c) Detrended winter CET anomaly, δT_{DJF} . D, J, F are abbreviations for the winter months December, January, and February. The curve is obtained by subtracting the best-fit variation of ΔT_N from the mean monthly CET. The dots are for years with $\delta T_{DJF} < 1^\circ\text{C}$ (the dashed horizontal line). Data for the winter of 2009/2010 A.D. are provisional.⁷

FIGURE 4.25
Accumulated WRF Model⁶⁰⁴

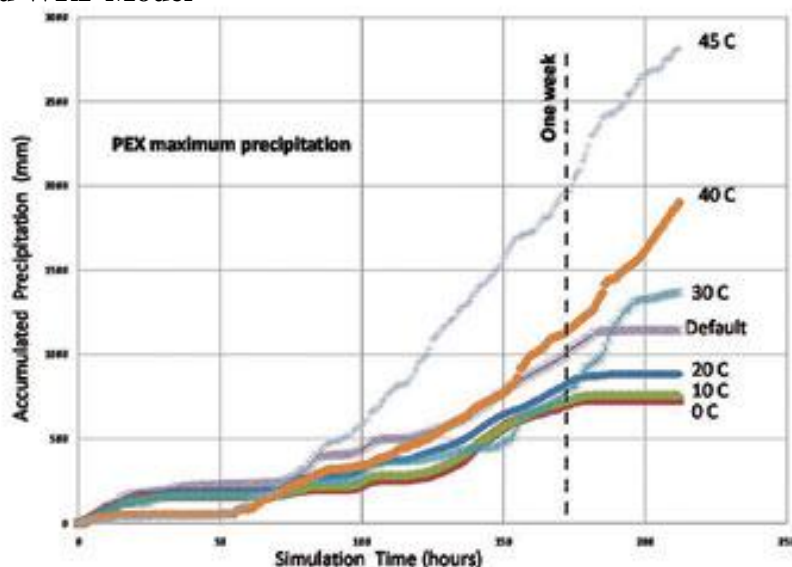


Figure 2. Accumulated WRF model precipitation in Yosemite National Park as a function of simulation time and SST.

⁶⁰³ Larry Vardiman, "New Evidence for Global Cooling," *Acts&Facts* 39, no. 7 (2010): 13.

⁶⁰⁴ ———, "An Ice Age in Yosemite National Park," *Acts&Facts* 39, no. 3 (2010): 13.

FIGURE 4.26
Zonal Flow Storm Precipitation⁶⁰⁵

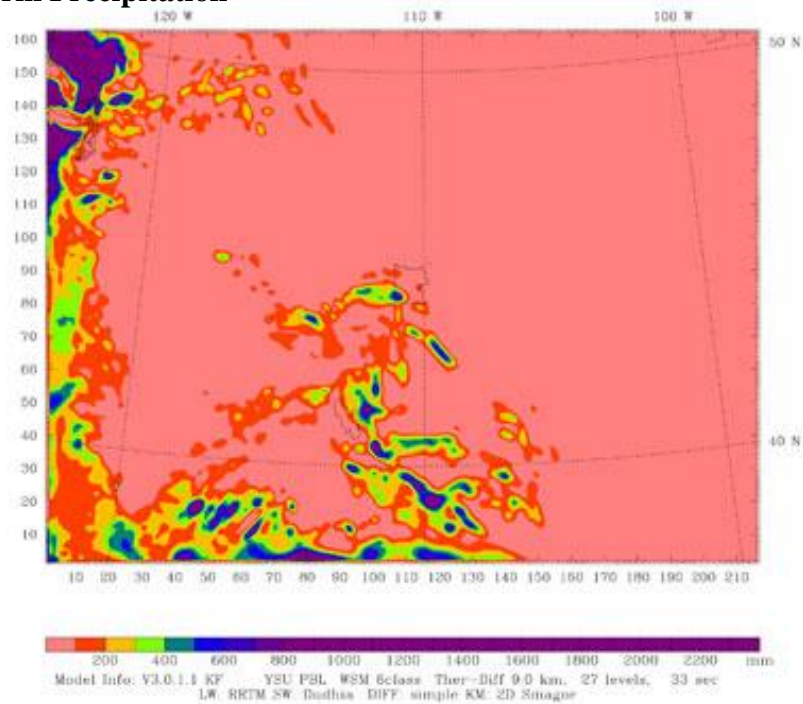


Figure 1. Total continuous zonal flow storm precipitation for SST = 40°C (104°F). East/west and north/south distances are in number of grids 9 km (5.6 mi) each for a total of 1,174 mi east/west and 895 mi north/south. Run time: 10 days.

Technical jargon also permeates articles addressing physics, the speed of light, theories of time-dilation, and YEC.⁶⁰⁶ Moreover, *Acts&Facts* articles include a handful of cases associated with theological jargon, which can involve the use of ancient Hebrew and Koine Greek terms that require some proficiency in each language to fully comprehend.⁶⁰⁷

Furthermore, statistics appear throughout discussions of scientific data. This is particularly evident in Jeffery Tomkins' repeated attempts to refute the statistical similarities between human and chimpanzee genomes. Tomkins argues against

⁶⁰⁵ ———, "An Ice Age in Yellowstone National Park," *Acts&Facts* 39, no. 12 (2010): 13.

⁶⁰⁶ Larry Vardiman and D. Russell Humphreys, "A New Creationist Cosmology: In No Time at All Part 1," *Acts&Facts* 39, no. 11 (2010); ———, "A New Creationist Cosmology: In No Time at All Part 2," *Acts&Facts* 40, no. 1 (2011); ———, "A New Creationist Cosmology: In No Time at All Part 3," *Acts&Facts* 40, no. 2 (2011).

⁶⁰⁷ See: Randy J. Guliuzza, "The Completed 'Rest' of the Lord," *Acts&Facts* 38, no. 3 (2009); James J. S. Johnson, "The Graffiti of Judgment," *Acts&Facts* 38, no. 4 (2009).

scientific claims that chimps share a 97% or greater genetic likeness with humans, which has been used by evolutionists to demonstrate proof of common ancestry.⁶⁰⁸ In the process he reports numerous statistical figures to make his point:

For example, a report in 2007 showed that 23 percent of the human genome shares no immediate genetic ancestry with chimpanzees, mankind's supposed closest living relative. A more recent study showed extreme dissimilarity (> 30 percent) between human and chimp Y chromosome DNA sequence. Furthermore, when data are provided in research papers that allow the determination of DNA sequence gaps in alignments, actual overall identities are 70 to 87 percent.⁶⁰⁹

As was noted previously, statistics also appear in the form of survey results that are used to support various claims of Social Consensus. For instance, in an article entitled "The Iron Grip of Darwinism on Education" the author explains, "In a Gallup survey, 66 percent of Americans considered the statement "creationism, that is, the idea that God created human beings pretty much in their present form at one time within the last 10,000 years" as either probably (27 percent) or definitely (39 percent) true."⁶¹⁰ Similar opinion poll findings coincide with both Social Proof and Underdog Effects; either demonstrating creationism's sizeable following, or reporting on the academy's proevolutionist sentiments, against which YEC's underdogs must bravely contend.⁶¹¹

4.7 From ICR to Answers in Genesis

The five message variables described above reveal how ICR materials include an assortment of persuasive elements. This study will further examine the Institute for Creation Research's use of these specific ELM cues in the context of communication

⁶⁰⁸ Jeffrey Tomkins, "Human-Chimp Similarities: Common Ancestry or Flawed Research?," *Acts&Facts* 38, no. 6 (2009); ———, "Ongoing Telomere Research at Odds with Human-Chimp Chromosome 2 Model," *Acts&Facts* 40, no. 11 (2011); ———, "First Phase Complete in Human and Chimp Genome-Wide DNA Comparison," *Acts&Facts* 40, no. 12 (2011).

⁶⁰⁹ Jeffrey Tomkins, "Evaluating the Human-Chimp DNA Myth--New Research Data," *Acts&Facts* 40, no. 10 (2011): 6.

⁶¹⁰ Patricia L. Nason, "The Iron Grip of Darwinism on Education," *Acts&Facts* 38, no. 2 (2009).

⁶¹¹ Randy J. Guliuzza, "Consensus Science: The Rise of a Scientific Elite," *Acts&Facts* 38, no. 5 (2009): 5; Ford, "Science Education," 3; Morris, "Evolutionary Arrogance," 9; ———, "Creation By," 4; ———, "Biology and," 4.

studies and the sociology of knowledge, with the intent of appraising ICR's Evolution Wars branding efforts. In advance of this, however, both AiG and CSC materials must first be considered. Interestingly, the next chapter will demonstrate that AiG propaganda features many of the same ELM cues as those exhibited throughout ICR materials, though there are several notable differences in how these variables are actually expressed.

CHAPTER FIVE

Answers in Genesis Propaganda

Since the Bible is clear about the earth's age of thousands of years, the popular assumptions are wrong.

God's word unmistakably teaches a young earth and universe ('the heavens'). God has ensured the accurate recording and preservation of His eyewitness account of the earth's history, which Jesus Christ endorsed repeatedly during His earthly ministry.

God took great care to include the necessary chronological details of the universe's creation in six literal days, as well as the unbroken genealogies of mankind from Adam to Jesus. So we have absolutely no doubt that the earth is only around six thousand years old.

Andrew A. Snelling⁶¹²

Dinosaurs are used more than any other animal to persuade people to believe in millions of years and evolution. Yet God clearly claims that He created the land animals on Day Six along with man. In light of who God is and His eyewitness testimony, we should not be ashamed to build our understanding of dinosaurs upon His Word, even if some people disagree. Dinosaurs make perfect sense in light of the biblical history of creation and the Flood.

Buddy Davis⁶¹³

5.1 AiG Message Variable Frequencies

AiG and ICR exhibit similar message variables throughout their propaganda materials. In fact, both organizations' three most frequently-occurring cues are not simply equivalent, as they are for each group in this study, but they occur in an identical order when listed according to their rates of recurrence. This, perhaps, should not be overly surprising because ICR and AiG have a shared history, similar Young Earth

⁶¹² Andrew A. Snelling, "Radiometric Dating," *Answers* 6, no. 3 (2011): 151.

⁶¹³ Buddy Davis, "Dinosaurs on the Ark," *Answers* 5, no. 2 (2010): 57.

Creationist convictions, and occasionally even utilize the same writers. However, it is important to note that variances in how these same elements are manifested reveal crucial differences regarding the way that AiG approaches mass communications. For example, *Answers* articles demonstrate the highest quantity of visually-based persuasive elements, and AiG distinctively uses cartoons throughout its materials. Additionally, AiG expresses the greatest number of overall incidents, the largest cumulative frequency value, and it is the sole organization to express a total of six message variables with an occurrence rate of ≥ 0.400 incidents per 1000 words. As table 5.2 further indicates, *Answers in Genesis* is also the only group to demonstrate a significant appearance rate of the ELM cue Message Repetition, while *Answers* magazine displays the greatest frequency values for Source Cues, Asking Questions, as well as Statistics and Technical Jargon. It is through such similarities and differences that AiG articulates its own distinctive EW mass media voice.

TABLE 5.1
Frequency of Message Variables in AiG Materials

Number of Articles: 522 Total Word Count: 366063 Mean Article Word Count: 701				
Message Variable		Total Incidents	Incidents per 1000 Words	Incidents per Article (Avg.)
1. Data Delivery Options	Asking Questions	1049	2.866	2.009
	Disrupt-then-Reframe	3	0.008	0.006
	Message Repetition	149	0.407	0.285
	Number of Message Arguments	34	0.093	0.065
	The Scarcity Principle	19	0.052	0.036
2. Offence-Defence	Arousal of Emotions (Fear)	61	0.167	0.117
	Source Cues	1304	3.562	2.497
	Statistics and Technical Jargon	435	1.188	0.833
	The Contrast Principle and Negativity Effect	524	1.431	1.003
	Two-Sided Persuasion	57	0.156	0.109
3. Social Levers	Self-Referencing	43	0.117	0.082
	Social Consensus	176	0.481	0.337
	The Rule of Reciprocity	13	0.036	0.025
TOTAL		3867	10.564	7.405

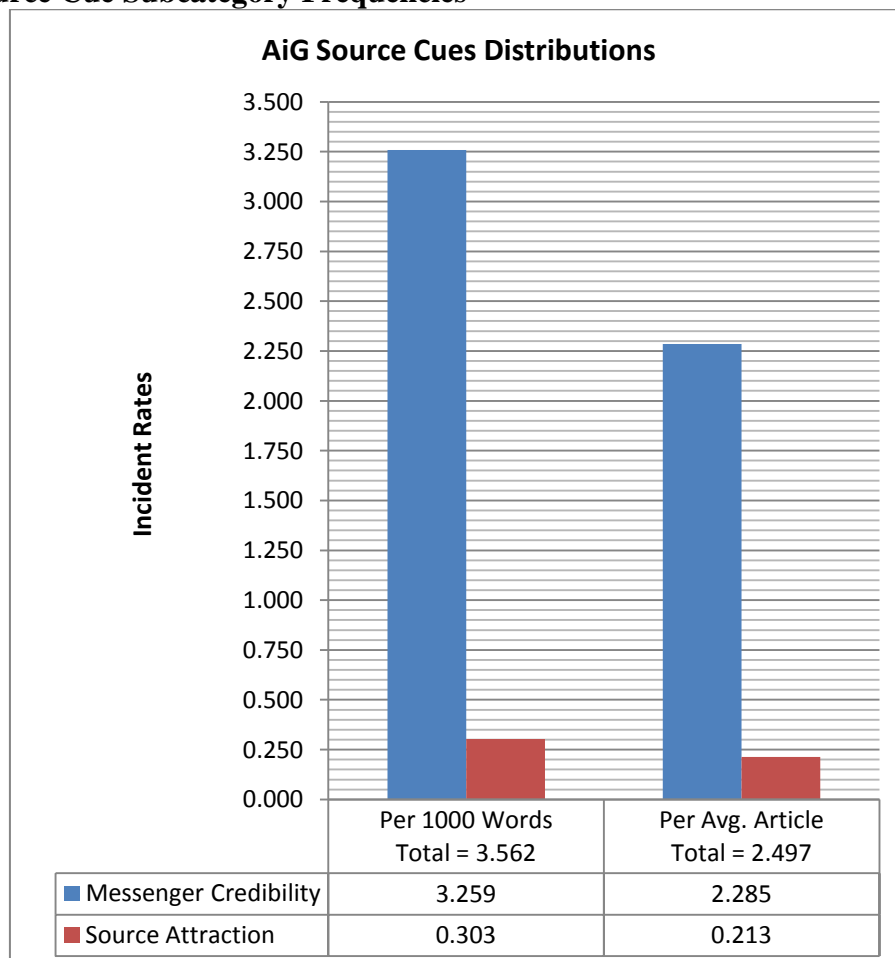
TABLE 5.2
AiG Message Variables Exhibiting ≥ 0.400 Incident Rates per 1000 Words

6. Sources Cues	3.562
7. Asking Questions	2.866
8. The Contrast Principle and Negativity Effect	1.431
9. Statistics and Technical Jargon	1.188
10. Social Consensus	0.481
11. Message Repetition	0.407

5.2 AiG and Source Cues

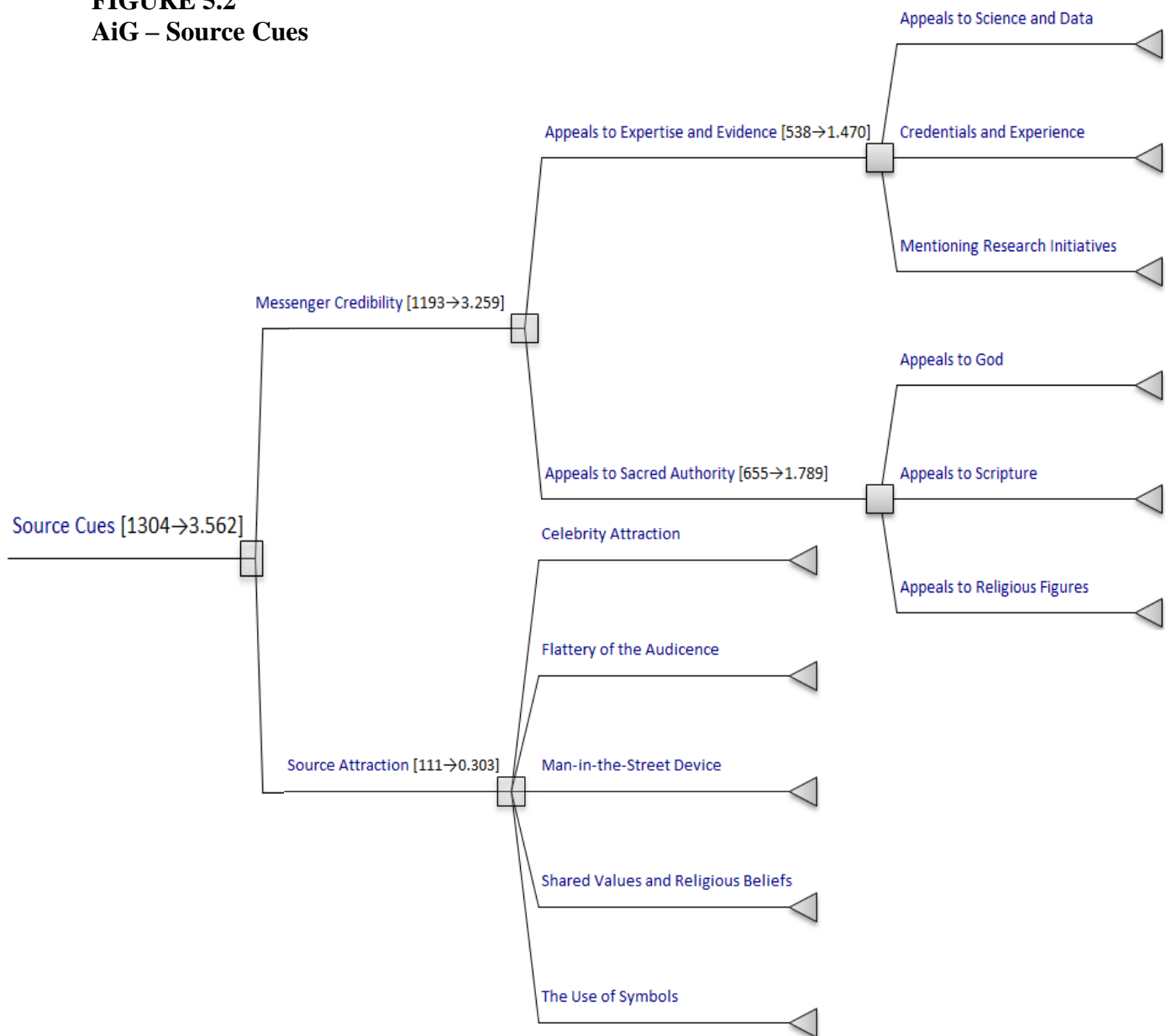
AiG propaganda demonstrates a Source Cue frequency rate of 3.562 occurrences per 1000 words, which means that the average *Answers* article notably possesses 2.497 incidents of this message variable. Like both ICR and CSC, the greatest proportion of these incidents is engaged in developing Messenger Credibility.

FIGURE 5.1
AiG Source Cue Subcategory Frequencies



Unlike these other groups, however, AiG materials express a greater focus on invoking credibility associated with God, the bible, or revered persons of faith. In fact, 655, or 54.9%, of Answers in Genesis' total 1193 Messenger Credibility occurrences are categorized as appeals to sacred authority, equating to 1.789 incidents per 1000 words of *Answers* text. Consequently, AiG materials employ these specific sources of credibility to a greater degree than any other analyzed group.

FIGURE 5.2
AiG – Source Cues



5.2.1 AiG Messenger Credibility I: Appeals to Sacred Authority

Appeals to sacred authority permeate *Answers* articles, and in comparison to ICR materials, AiG writers also exert noticeably more effort to articulate Christian ideas as well as the religious impetus catalyzing YEC. As a result, the numerous persuasive cues expressed throughout *Answers* demonstrate greater religious inclinations, and there is a relatively greater tendency to focus on scriptural support rather than scientific evidence or secular credibility. For instance, while *Answers* articles do stress the organization's scientific foundations, AiG materials are less concerned with communicating the organization's reliance on science than they are with articulating an unwavering dependence on holy writ. In this vein, AiG writers demonstrate an increased likelihood of appealing directly to God and his 'eyewitness account of the earth's history' as sources of credibility.⁶¹⁴

Answers writers unapologetically cater to Christian audiences, though unlike ICR's *Acts&Facts* authors, there are very few cases in which these contributors declare that God is directly championing AiG's cause.⁶¹⁵ Nevertheless, *Answers* articles do often explain that creationism is based primarily upon the authority and reliability of the Bible's teachings. These teachings are described as being superior to any scientific conclusions because Christian scriptures represent God's personal testimony of the creation event. In discourse that also infuses *Answers* in Genesis' use of the Contrast Principle and Negativity Effect, articles pit the credibility derived from God's wisdom against the unreliability of human minds and their imperfect scientific predictions. 'That sums up what the creation/evolution battle is all about,' explains Ham, 'it's all

⁶¹⁴ Andrew A. Snelling, "Transcontinental Rock Layers: Flood Evidence Number Three," *Answers* 6, no. 3 (2011): 103.

⁶¹⁵ Mason, "The First," 8.

about authority—God’s infallible Word or autonomous man’s fallible word.’⁶¹⁶

Another AiG contributor tells readers,

God’s revealed wisdom is vastly superior to the so-called wisdom of this fallen world in several key ways.

First, the wisdom that is from above teaches things the fallen human mind could never discover through reason or experimentation alone—answers to some of the most important and most basic questions of all: How did we get here? Where do I go when I die? What is the meaning of life? What is the reason for my existence, and how can I do what I was made to do?

Second, God’s wisdom is sure and unchanging, in contrast to the theories and speculations of even the smartest scientists or philosophers.

Third, God’s wisdom is pure and perfect. Human reasoning is always tainted with sin and foolishness. Moral judgments that rely on human wisdom are downright dangerous.

Clearly, the human race in its fallen state is drawn to folly, not wisdom.⁶¹⁷

This unadulterated divine wisdom is said to buttress AiG’s specific views concerning the universe and science. Furthermore, YEC is described as the *only* option that aligns most congruently with God’s version of the facts, and therefore, going against creationism means intentionally denying God’s trustworthiness. ‘While the Bible is not a scientific text,’ argues an *Answers* contributor, ‘it was inspired by the Creator, who is an eyewitness of earth history.’ Consequently, ‘Any correct interpretation of history must be consistent with God’s infallible record of events.’⁶¹⁸ This correct interpretation is described as being thoroughly obvious, and *Answers* writers often state that ‘The

⁶¹⁶ Ken Ham, "Maturing the Message: Creationism and Biblical Authority in the Church," *Answers* 5, no. 1 (2010): 63.

⁶¹⁷ John MacArthur, "The Source of All Wisdom," *Answers* 4, no. 2 (2009): 87.

⁶¹⁸ "Biologos—Obscuring the Truth," *Answers* 6, no. 4 (2011): 85.

Bible clearly shows ...’ or ‘Scripture clearly teaches...’ creationist premises, demonstrating how such ideas are championed by God himself.⁶¹⁹

God’s Word is clear. God made everything in the heavens and the earth in six 24-hour days and it was “very good.” Sadly, Christians in recent times have tried to find ways to justify the insertion of millions of years into the Bible’s plain account, but in every case the insertion of extra time violates the clear teaching of God’s Word.⁶²⁰

As Mike Matthews further delineates, ‘God’s Word, beginning with Genesis, is still our supreme authority. Its central themes are so clearly stated that even a child can understand them.’⁶²¹

Additionally, *Answers* writers draw upon the credibility of both Jesus and the biblical authors to reinforce AiG’s literal readings of scripture. These assertions are akin to similar claims made by ICR writers, and as one AiG contributor asserts, ‘Moses confirms that Genesis is a literal account of creation in six days (Exodus 20:11), and Jesus Christ affirmed that God made Adam and Eve at the beginning of creation (Mark 10:6), not millions of years later. This excludes any possibility of an “old earth.”’⁶²²

Correspondingly, Jud Davis states:

Every New Testament writer refers to the early chapters of Genesis and treats them as historically true. Jesus Himself referred to every chapter of Genesis 1–7, including the creation of Adam and Eve and the murder of Abel.

Over 50 New Testament passages and at least 68 individual verses directly reference Genesis 1–11. (Some passages, such as Hebrews 11:3–7, refer to several events in Genesis 1–11.)

And this number does not include all the indirect references.⁶²³

⁶¹⁹ Ken Ham, "The Most Horrific Graveyard in the World," *Answers* 4, no. 3 (2009): 60; "Concise Answers on Video," *Answers* 4, no. 4 (2009): 18.

⁶²⁰ "No Room for Compromise," *Answers* 5, no. 4 (2010): 85.

⁶²¹ Mike Matthews, "Simple Answers," *Answers* 5, no. 4 (2010): 82.

⁶²² "Biologos."

⁶²³ Jud Davis, "'Let There Be Light'," *Answers* 6, no. 3 (2011): 43.

Through such declarations AiG writers underscore the superiority and divine sanction of its literal hermeneutic; causing the boundaries between the credibility of God's eyewitness testimony, the religious authority of Jesus Christ, the biblical authors, literal interpretations of the bible, and Darwin-scepticism to become indistinguishable. As a result, any rejection of YEC is likened to the denunciation of scripture itself, its writers, and the messiah. 'Either we believe Christ and embrace the entire Bible as our own absolute authority, or we reject both Christ and the Bible as imposters,' Don Landis tells readers. 'The authority of one is inextricably bound up with the other.'⁶²⁴

Using such rationale, *Answers* contributors tell audiences that for Christians there really can be no other choice but to accept AiG's literalistic approach to scripture. In a sense, readers are given an ultimatum, declaring that if they do not fully trust AiG's sacred credibility, established through God's word and properly expressed in YEC, then they will be forced to rely upon the defective, untrustworthy conclusions developed by sin-infused human beings. 'Although there is tremendous physical evidence of a global flood, ultimately, it is a matter of trust in a perfect God who created everything (Genesis 1:1), knows everything (Colossians 2:3), has always been there (Revelation 22:13), and cannot lie (Titus 1:2),' explains Bodie Hodge. 'The only alternative is to trust imperfect, fallible human beings who can only speculate on the past (see Romans 3:4).'⁶²⁵ Again, readers should not simply have faith in AiG, but in the righteous God of the universe who has ultimately provided the organization's creationist message.

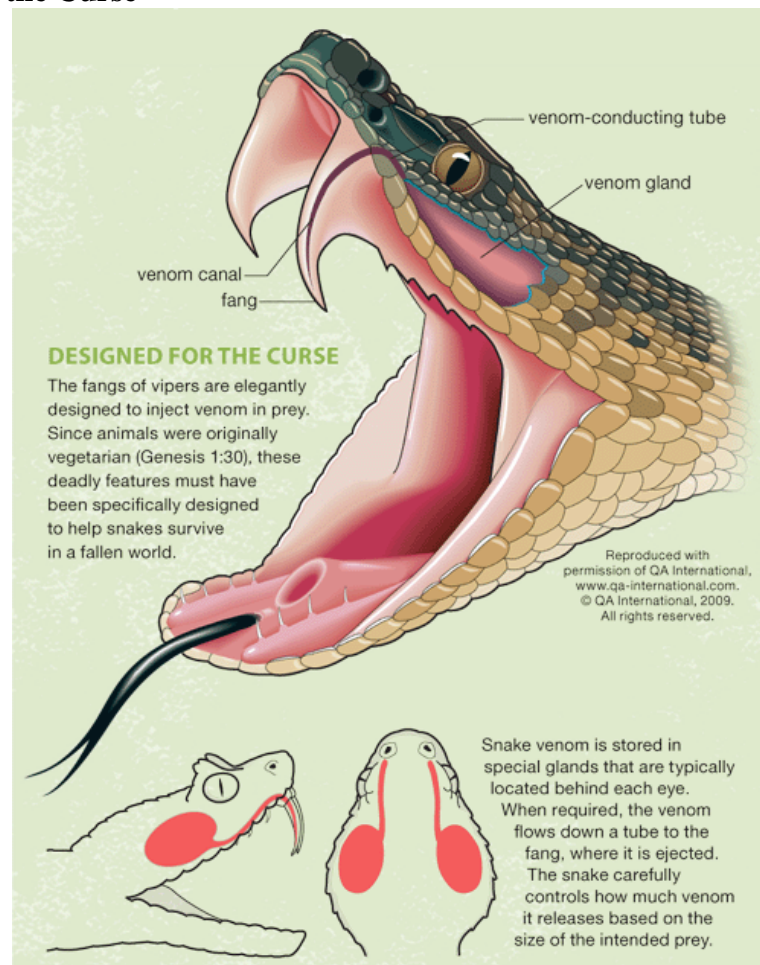
Tied to this ultimatum are yet more claims that rejecting the sacred authority upon which *Answers in Genesis*' credibility is founded will lead to the unravelling of countless Christian tenets. 'If the history in the Bible concerning our origins were not true, then we would have no reason to trust the gospel message, which is based in that

⁶²⁴ Don Landis, "2. Claims of Divine Authorship," *Answers* 6, no. 2 (2011): 57.

⁶²⁵ Bodie Hodge, "Global Flood," *Answers* 6, no. 3 (2011): 156.

history,” contends Ham. ‘And the gospel is the heart of what Christians, such as those at Answers in Genesis, do—bring the saving message of the gospel to a fallen world so that people may be convicted of their sin and repent and be saved for eternity.’⁶²⁶ In this way, AiG’s Messenger Credibility is reinforced by its professed capital allegiance to God’s words, while being linked with a myriad of indispensable Christian doctrines.

FIGURE 5.3
Designed for the Curse⁶²⁷



Furthermore, *Answers* articles also appeal to God’s creative handiwork as a religiously-credible alternative to evolutionary hypotheses. Such statements parallel analogous ICR messages that invoke God’s supernatural craftsmanship in the universe,

⁶²⁶ Ken Ham, "Not Ashamed of a Biblical Starting Point," *Answers* 5, no. 2 (2010): 47.

⁶²⁷ Rick Oliver, "Designed to Kill in a Fallen World: The Incredible Design of Snake Venom," *Answers* 4, no. 3 (2009): 39.

and which cite the bible as the Christian's decisive source for understanding scientific observations. 'The Bible provides a simple solution to the question of [perceived] design,' contends Rick Oliver in opposition to evolutionary theories regarding snake venom, 'God made and sustains all things.'⁶²⁸ While also appealing to his own academic credentials in the field of herpetology, Oliver's article includes such statements as those exhibited in figure 5.3; fortifying appeals to God's divine biological engineering as the ultimate basis for comprehending natural phenomena. Through such messages, these articles communicate that challenging the idea of a God-designed natural world is actually a contestation of AiG's primary source of credibility: the bible. To go against the former is to defy the latter.

Rather similarly, Perry and Stephanie McDorman tell readers, 'Chameleons draw from a full chest of amazing designs that help them survive in a fallen world. Only the handiwork of an all-wise, loving Creator could explain how so many wonderful tools could work together so seamlessly.'⁶²⁹ Throughout *Answers*, allied claims are repeated so often that they constitute a significant portion of AiG's cases of Message Repetition, which are examined in section 5.7. In this echoing discourse writers often note that such conclusions are acquired not only from scripture, but from dependable scientific observations. Nevertheless, even the science behind AiG's conclusions is still established upon the bible's credibility. Audiences are told that the most accurate science must begin with scriptural illumination, for as John Upchurch maintains, 'Excellent Science Starts with the Bible.'⁶³⁰ Consequently, even *Answers in Genesis'* appeals to expertise and evidence firmly rely upon the bible's sacred authority.

⁶²⁸ Ibid.

⁶²⁹ Perry McDorman and Stephanie McDorman, "Chameleons: A Bug's Worst Nightmare," *Answers* 6, no. 2 (2011): 40.

⁶³⁰ John Upchurch, "Mapping out the Truth: A Creationist-Run Dinosaur Dig," *Answers* 5, no. 1 (2010): 59.

Answers writers explain that with this scriptural foundation, it is possible to gain superior scientific conclusions:

Humbly accepting the Bible as their starting point, modern creationists are striving to develop a set of models that help us better understand God's world. These models, even in their infancy, explain an enormous number of observations from diverse fields. They have proven so successful because they are built on the right foundation.⁶³¹

AiG's contributors also profess that the bible's teachings actually underlie the authoritative voice of all scientific practice itself, to the point that 'evolutionists must borrow the principles of biblical creation in order to do science (even though they would deny this).' This is because, 'The Bible Provides the Foundation for an Orderly Universe' and 'The Bible Is the Foundation for Logic.'⁶³² Furthermore, the credibility of scripture is intertwined with the trustworthiness of science, so that each is described as supporting the other while cumulatively endorsing AiG's message. Scripture allows creationists to more accurately interpret scientific evidence, while science upholds scripture and confirms its divine status. Snelling notes, 'The Bible is clearly unlike any other document in history. Every claim it makes about science is not only true but crucial for filling in the blanks of our understanding about the origin of the universe, the earth, fossils, life, and human beings.' In fact, 'The Bible explains when God intervened supernaturally at key points in history in ways that affect what astronomers, geologists, biologists, and anthropologists study. Without this record, we would be in the dark about these events, but with it we can understand the world we see today.' He then tells readers that the bible does not merely inform science, but science reciprocates by corroborating the scripture's veracity. 'Over the centuries the Bible has been rigorously tested for scientific accuracy, and it has never failed,' he explains. 'Not only

⁶³¹ Michael Matthews, "Stumbling Stones or Stepping Stones: Fossils and Biblical Authority," *Answers* 5, no. 1 (2010): 37.

⁶³² Jason Lisle, "Darwin—Unwittingly a "Creationist?," *Answers* 4, no. 1 (2009): 86-87.

is God's Word always true; it has proven to be the key to understanding God's world today!'⁶³³ Snelling's conclusions to this article accurately demonstrate AiG's blend of sacred and scientific appeals to credibility:

The Bible offers many specific examples of amazingly accurate science, and science has uncovered many amazing evidences that the universe and earth are young, as the Bible describes.

Astronomy

- Stars are innumerable (Genesis 22:17; Jeremiah 33:22)
- Stars differ in glory (1 Corinthians 15:41)
- Stars follow a predictable pattern (Jeremiah 31:35)
- Earth is round, not flat (Isaiah 40:22; Psalm 103:12)
- Earth hangs on nothing (not built on pillars) (Job 26:7)
- Scientific evidence of a young universe:
 - 1) Spiral galaxies
 - 2) "Missing" supernova remnants
 - 3) Short-lived comets
 - 4) Moon moving away from Earth

Geology

- Water cycle (Ecclesiastes 1:7; Isaiah 55:10)
- Sea currents (Psalm 8:8)
- "Fountains of the deep broken up" (Genesis 7:11)
- Scientific evidence of a young earth:
 - 1) Continents erode too fast
 - 2) Too much mud on the sea floor
 - 3) Too much sodium in the ocean
 - 4) Too rapid decay of earth's magnetic field

Biology

- Blood circulation (Leviticus 17:11)
- Scientific evidence of a recent creation:
 - 1) DNA programming for irreducibly complex protein sequences
 - 2) Lack of missing links in the fossil record
 - 3) Dinosaur blood vessels in fossils⁶³⁴

It is to the science-focussed elements of such Messenger Credibility-building appeals that this study will now turn.

⁶³³ Andrew A. Snelling, "5. Scientific Accuracy," *Answers* 6, no. 2 (2011): 61.

⁶³⁴ *Ibid.*: 62.

5.2.2 AiG Messenger Credibility II: Appeals to Expertise and Evidence

AiG's remaining 538 Messenger Credibility occurrences can be categorized as appeals to expertise and evidence. While these incidents are somewhat less common than appeals to sacred authority, they still demonstrate 1.470 incidents per 1000 words. This indicates that AiG exhibits a lower frequency rate of this Messenger Credibility subdivision when compared with the Institute for Creation Research. Like ICR propaganda, however, AiG's appeals to expertise and evidence are manifested in three major ways, including references to credentials and experience, broad appeals to "science" or "data," and claims that the organization is conducting exceptional research. Within *Answers* the most prominent of these three are descriptions of credentials and experience. These specific appeals constitute 353 of *Answers* in Genesis' cases of Messenger Credibility, and alone result in a frequency rate of 0.954 occurrences per 1000 words. Though such references to credentials and experience actually appear less frequently in *Answers* than ICR's *Acts&Facts*, they still constitute an important element of AiG's persuasive cues.

A significant quantity of AiG's references to credentials and experience include descriptions of creationists' scientific education and expertise. As in ICR materials, such reports are often part of author profiles accompanying *Answers* articles. For instance, in every piece written by David Menton, described as a "Creation Anatomist," the following noteworthy academic details are listed: 'Dr. David Menton holds his PhD in cell biology from Brown University and is a well-respected author and teacher. He is Professor Emeritus at the Washington University School of Medicine in St. Louis. Dr. Menton is now one of the most popular speakers for *Answers* in Genesis—USA.'⁶³⁵ In fact, such lists of credentials are almost always repeated for the same author, even if that

⁶³⁵ See: David A. Menton, "Skin: Our Living Armor," *Answers* 4, no. 4 (2009): 48; ———, "Rubber Chicken Leg," *Answers* 5, no. 4 (2010): 42; ———, "Melanin—Umbrellas of Our Skin," *Answers* 5, no. 4 (2010): 70.

individual has made numerous contributions within a single magazine, and regardless of whether those contributions appear directly one after the other.⁶³⁶ *Answers* issues also contain articles devoted almost exclusively to underscoring AiG members' scientific competencies. An example of this includes a piece which further addresses Menton's expertise within a magazine that simultaneously details his credentials in two other articles.

Consider David Menton, a cell biologist and former professor of the year at the prestigious Washington University School of Medicine.... A respected researcher on human tissue, he contributed to Stedman's medical dictionary, the standard reference in the field.

Now at the Creation Museum, Dr. Menton, an Ivy League graduate, teaches and entertains audiences of all ages. With healthy doses of humor, he explains scientific facts, exposes the flaws behind evolutionary thinking, and opens eyes to God's marvelous designs.⁶³⁷

Unlike ICR propaganda, AiG materials seldom declare that scientific pioneers were creationists, and infrequently assert that leading contemporary scientists are Darwin sceptics. On the few occasions where this does happen, however, *Answers* writers make a point of reminding audiences that creationists can truly be first-rate scientists. As one article states about Andrew McIntosh, a University of Leeds professor, 'McIntosh is not only a renowned scientist but also a young-earth creationist,' which is a 'nice reminder that scientists can be both Bible believers and excellent researchers—in fact, their work is inspired by the Creator Himself.'⁶³⁸ While such cases are relatively uncommon, *Answers* contributors do concentrate upon the religiously-affiliated credentials of modern procreationist evangelical leaders, as well as the theological training of AiG members. For instance, *Answers* articles include

⁶³⁶ See: Danny Faulkner, "Galaxies—Unexplained Spirals," *Answers* 6, no. 1 (2011); Marcus Ross, "T. Rex—Fashioned to Be Fearless: A Closer Look at T-Rex," *Answers* 6, no. 4 (2011); ———, "Least but Not Last: A Closer Look at Hypsilophodon," *Answers* 6, no. 4 (2011); Danny Faulkner, "Blue Stars—Unexpected Brilliance," *Answers* 6, no. 1 (2011).

⁶³⁷ "Making Science Fun," *Answers* 4, no. 4 (2009): 74.

⁶³⁸ "Beetle Mania," *Answers* 6, no. 3 (2011): 13.

contributor profiles focussing upon theological education as much as any scientific competencies. Seminary degrees and ministry experience are detailed in order to demonstrate a writer's mastery of scripture and Christian theology.⁶³⁹ One of the most notable evangelical leaders mentioned within *Answers*, who also serves as a regular contributor, is the ninth president of the Southern Baptist Theological Seminary, which trains future pastors for the world's largest Baptist denomination:

Dr. R. Albert Mohler Jr., president of the Southern Baptist Theological Seminary, has been recognized by *Time* and *Christianity Today* as a leader among American evangelicals. He hosts a daily radio program and writes a popular blog on moral, cultural, and theological issues. Dr. Mohler has authored numerous books, including *Culture Shift*.⁶⁴⁰

Such descriptions of religious accreditations and expertise are evocative of AiG's appeals to sacred authority, and occur much more often throughout *Answers* than in ICR materials.

Answers articles also include Messenger Credibility-generating allusions to science or scientific data. These consist of relatively vague statements which assert that in 'virtually all areas of science, we find evidence that strongly confirms the Genesis account of creation,' or that science 'confirms the message of the Bible.'⁶⁴¹ Such comments occur 102 times throughout *Answers* magazine, exhibiting 0.279 incidents per 1000 words, and unequivocally tell audiences that every field of empirical science substantiates the bible's YEC message. 'If the Bible is really what it claims to be, a revelation from an omnipotent Creator,' posits Ham, 'then the history that is revealed to us will make sense of the evidence of the present, and observational (empirical) science

⁶³⁹ See: W. Gary Phillips, "Lessons from the Fall: An Overview of Genesis 3," *Answers* 4, no. 3 (2009): 28; Ed Stetzer and Jason Hayes, "Reaching Twenty-Somethings," *Answers* 4, no. 4 (2009): 35.

⁶⁴⁰ Albert Mohler, "More Than a Revolution: Homosexuality in Biblical Perspective," *Answers* 5, no. 1 (2010): 54.

⁶⁴¹ Jason Lisle, "Distant Starlight," *Answers* 5, no. 2 (2010): 53; ———, "The Big Bang: God's Chosen Method of Creation?," *Answers* 6, no. 3 (2011): 86.

should confirm this history—and it does!’⁶⁴² As another contributor notes, ‘Nothing that we actually observe in science has ever contradicted the Bible, and it never will.’⁶⁴³ Moreover, readers are told that a preponderance of scientific data is best explained by, and most harmoniously links with, Darwin-sceptic perspectives.⁶⁴⁴ In fact, even the conclusions of anticreationist scientists inevitably verify YEC, because while ‘their goal may be to discredit His Word,’ they still ‘may unwittingly be uncovering truths about their Maker.’⁶⁴⁵

FIGURE 5.4
Science and History Confirmed⁶⁴⁶



Statements claiming that scientific observations unfailingly corroborate AiG’s creationism are epitomized in an article entitled “God’s Word is True in Everything it Says,” which explains that scripture is both ‘science confirmed’ and ‘history confirmed.’ An excerpt from this piece acts as an example of how, over time, science invariably comes to affirm biblical creationism: ‘The Bible implies that most animals were buried quickly as a result of the worldwide Flood. Nineteenth-century

⁶⁴² Ham, "Not Ashamed."

⁶⁴³ "Watery Beginning," *Answers* 6, no. 2 (2011): 9.

⁶⁴⁴ Snelling, "Transcontinental Rock," 103; Andrew A. Snelling, "Rock Layers Folded, Not Fractured: Flood Evidence Number Six," *Answers* 4, no. 2 (2009): 83.

⁶⁴⁵ Mike Matthews, "Run to the Science," *Answers* 6, no. 1 (2011): 82.

⁶⁴⁶ "God’s Word is True in Everything It Says," *Answers* 4, no. 2 (2009): 92.

paleontologists argued that animals were buried slowly. Today, paleontology confirms that animals were buried rapidly.⁶⁴⁷

FIGURE 5.5
Building a Community for Discovery⁶⁴⁸



As was mentioned in the previous chapter, the use of scientific imagery is almost solely an ICR Messenger Credibility attribute, though occasional incidences can be found in *Answers*. While only a scattering of images like the one featured in figure 5.5 appear throughout AiG materials, *Answers* contributors do insist that creationists are conducting important science. In fact, scientific research is described as being a divine mandate, because ‘God has given us dominion over the earth and expects His people to study His creation to find answers.’ Additionally, God ‘is at work today, building a community of faithful scientists who desire to discover how God filled the earth with such a cornucopia of species within His created “kinds.”’⁶⁴⁹

Answers in Genesis’ statements regarding creationist scientific endeavours draw Messenger Credibility from the suggestion that not only does science confirm YEC, but creationists are themselves occupied by paramount research projects. Within *Answers* such claims appear 83 times, and represent a frequency value of 0.227 occurrences per 1000 words. These reports describe how ‘creationists are pursuing major new research projects,’ and are actually making novel discoveries from pre-existing observations: ‘Creationists are striving to understand this data from a perspective nobody else is considering. They’re helping expose the true history of the world, which is far more

⁶⁴⁷ Ibid.

⁶⁴⁸ Pam Sheppard, "Building a Community for Discovery," *Answers* 4, no. 1 (2009): 76.

⁶⁴⁹ Ibid.: 77.

wonderful and inspiring than any work of fiction.’⁶⁵⁰ One notable instance of this explains that creationist ideas are actually leading some scientists to investigate how bacteria can be used to combat life-threatening diseases:

At least one creation researcher is already investigating such ideas and is proposing ways in which certain bacteria can be used to fight cancer. This kind of medical treatment represents a very promising and exciting new area of research. Best of all, it flows from our understanding of God’s beneficent creation, which He graciously allows to persist in a fallen world.⁶⁵¹

Information is supplied to audiences concerning the scientific enterprises of gifted ‘creation researchers,’ ‘creation scientists,’ ‘creation geologists,’ ‘creation biologists,’ and even a ‘creation botanist.’⁶⁵² Consequently, readers are informed that the credibility of Young Earth Creationism is as strong in its scientific application as it is in its empirical evidences.

5.2.3 AiG Source Attraction

AiG materials also demonstrate the greatest frequency rate of Source Attraction. 111 incidents of this Source Cue subcategory are spread throughout *Answers*, resulting in 0.303 occurrences per 1000 words of text. 56 of these cases involve communicating shared values and religious beliefs, 23 invoke celebrity status, and 18 employ significant cultural symbols. Only 12 incidents can be classified as either flattery of the audience or the man-in-the-street device, and for that reason they will not be examined here.

Unlike within ICR propaganda, more than 50% of AiG’s Source Attraction incidents comprise references to shared values. Specifically, such references indicate that AiG accepts and defends religious principles esteemed by Evangelical Christians.

⁶⁵⁰ "Why the Land of Milk and Honey Is Now a Desert," *Answers* 6, no. 4 (2011): 12; Mike Matthews, "Free Indeed," *Answers* 5, no. 3 (2010): 82.

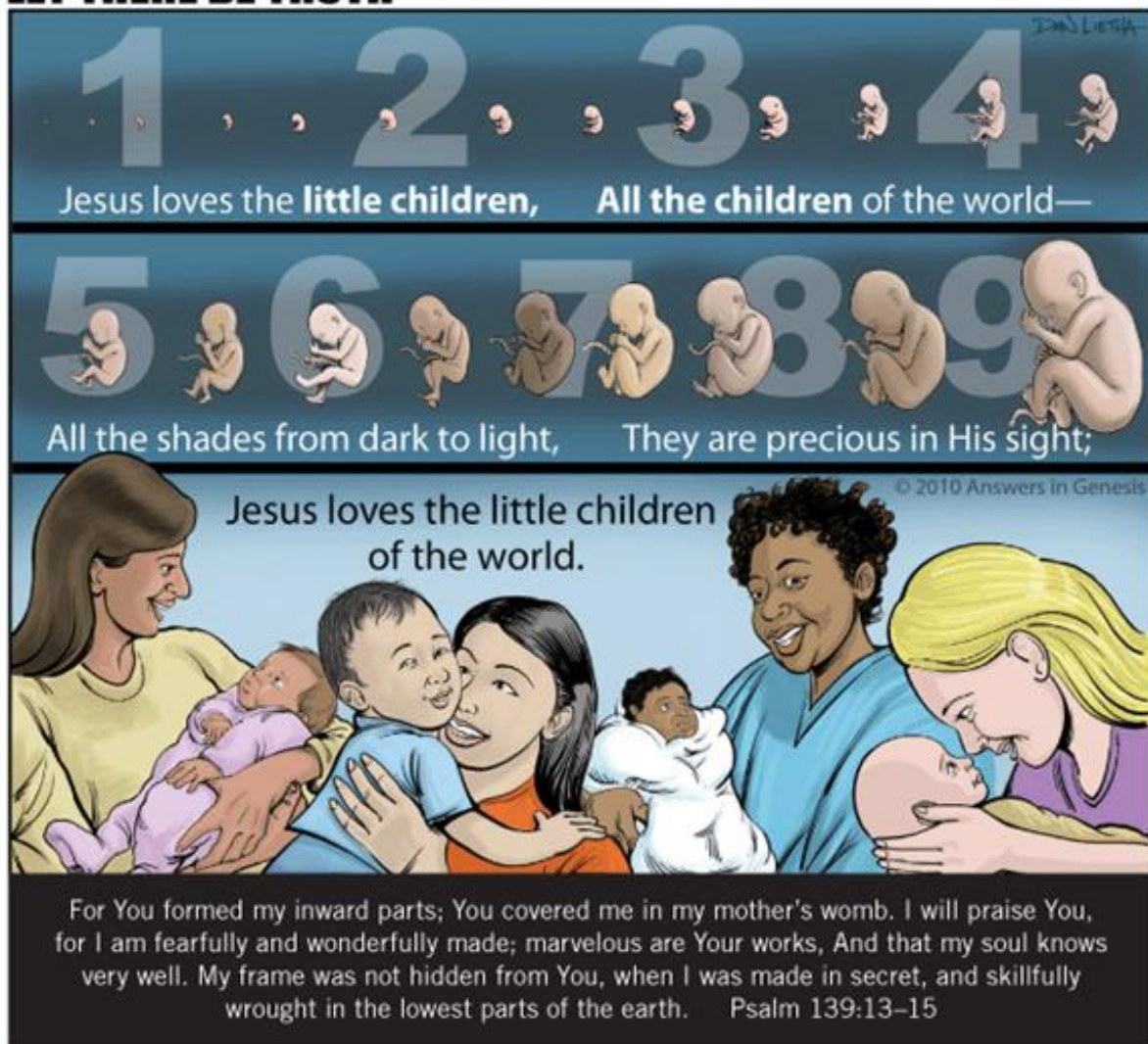
⁶⁵¹ Joe Francis, "Good Designs Gone Bad," *Answers* 4, no. 3 (2009): 35.

⁶⁵² See: "Why the."; Georgia Purdom, "Variety within Created Kinds," *Answers* 6, no. 3 (2011); Andrew A. Snelling, "Emeralds—Treasures from Catastrophe," *Answers* 6, no. 4 (2011); "Getting Closer to Down Under," *Answers* 5, no. 1 (2010); Sheppard, "Building a."; Roger W. Sanders, "Orchids—a Bouquet of Adaptations," *Answers* 4, no. 1 (2009).

For instance, numerous descriptions regarding the importance of Jesus Christ's atoning sacrifice indicate shared beliefs about sin and salvation.⁶⁵³ *Answers* also includes several condemnations of racism and abortion, which coincide with statements that affirm AiG's stance regarding humankind's *imago dei*.⁶⁵⁴ This view is plainly expressed in the cartoon depicted in figure 5.6, which represents one of many drawings produced by AiG's artist Dan Lietha.

FIGURE 5.6
Jesus Loves the Little Children⁶⁵⁵

LET THERE BE TRUTH



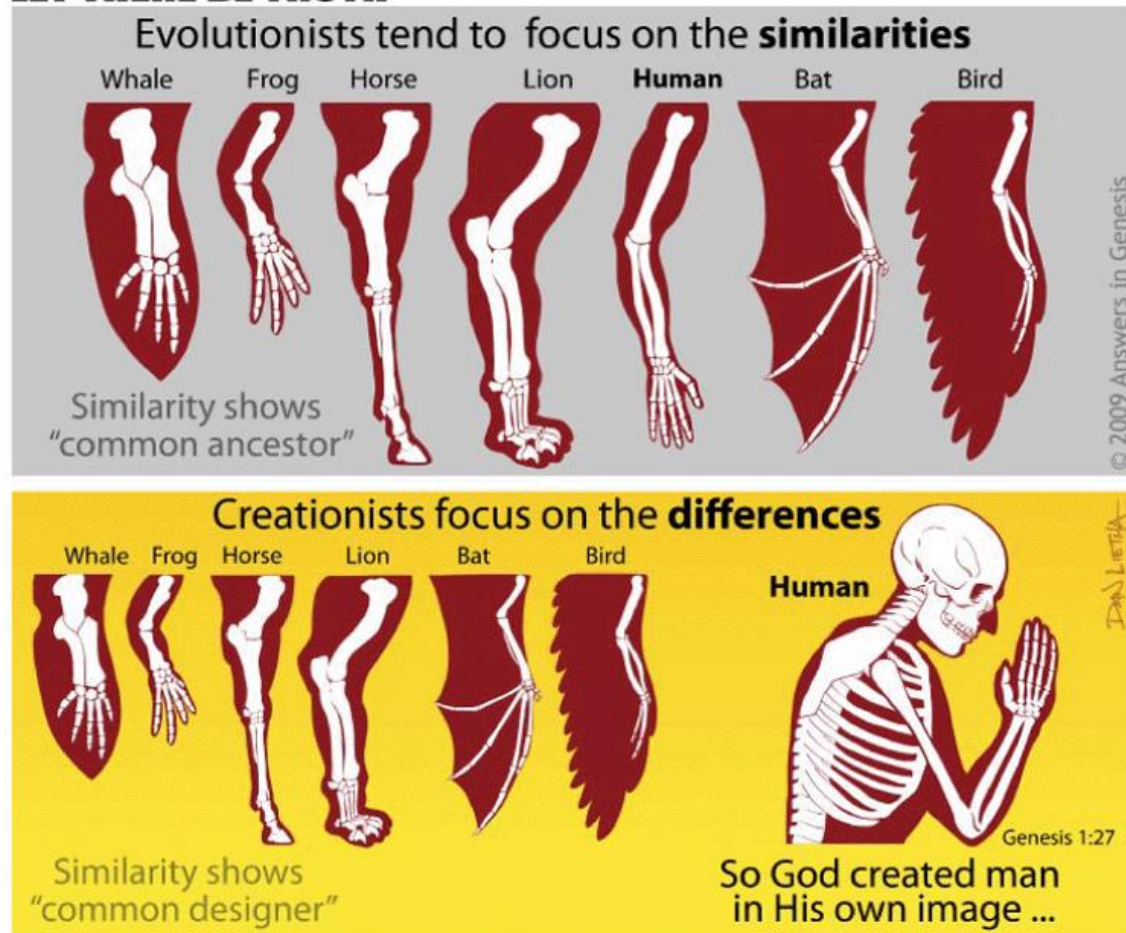
⁶⁵³ Tommy Mitchell, "Suffering & Death," *Answers* 5, no. 2 (2010).

⁶⁵⁴ Tony Perkins, "Fighting Abortion—the Measure of a Just Society," *Answers* 5, no. 4 (2010); "Mutant Humans," *Answers* 4, no. 2 (2009).

⁶⁵⁵ Dan Lietha, "Jesus Loves the Little Children of the World," *Answers* 5, no. 4 (2010).

FIGURE 5.7
Creationism Focuses on the Differences⁶⁵⁶

LET THERE BE TRUTH



AiG's focus on the uniqueness of humankind not only supports scripture, but also counters any notions of common evolutionary ancestry as well as pure randomness in nature. As Menton argues:

Genesis 1 states that God specially created the first male and female in His own image. Jesus Christ restated that the first couple were created 'at the beginning,' not from apes. Despite some anatomical similarities among all mammals, it is easy to distinguish humans.

Perhaps the most offensive feature of evolutionism to Bible-believing Christians is the belief that humans have evolved by natural processes from apes. In the evolutionary view, moreover, man was not the goal of evolution but a mere happenstance. This stands in startling contrast to the biblical

⁶⁵⁶ ———, "Creationists Focus on the Differences," *Answers* 4, no. 4 (2009).

declaration that humans were specially created in the image of God.⁶⁵⁷

This concentration on the uniqueness of humanity occurs so often that it is part of AiG's Message Repetition. It also regularly includes attacks upon evolutionary science, which coincides with the Contrast Principle and Negativity Effect. Such defences of the human uniqueness frequently indicate that evolutionists falsely look for human-animal homologies, and fail to grasp the divine fingerprint which clearly sets *homo sapiens* apart from apes. This concern is expressed in yet another AiG cartoon, portrayed in figure 5.7.

In addition to the articulation of shared values, AiG materials also advertise the potential celebrity status of procreationist individuals. For instance, if contributors are former actors or athletes, such as Kirk Cameron who 'is best known for his roles in the TV series hit *Growing Pains* and in the *Left Behind* movie series,' then their popular acclaim is mentioned.⁶⁵⁸ These reports often overlap with Social Proof and they can include individuals such as pastor John MacArthur, who are famed primarily within evangelical Christian circles.⁶⁵⁹ References to well-known evangelicals coincide with AiG's expressly religious tone, which is also characterized in the organization's use of symbols. That is, *Answers* contains specific religious images that would resonate with a Christian audience. In most cases these include imagery affiliated with the crucifixion and the bible, such as those depicted in figures 5.8 and 5.9. It is apparent that these images do not contain the patriotic American emblems found in Institute for Creation Research materials. However, *Answers* articles *do* share some similarities with ICR's use of as erotema, hypophora and anacoenosis, which embody AiG's numerous cases of Asking Questions.

⁶⁵⁷ David Menton, "Uniqueness of Man," *Answers* 5, no. 2 (2010): 54.

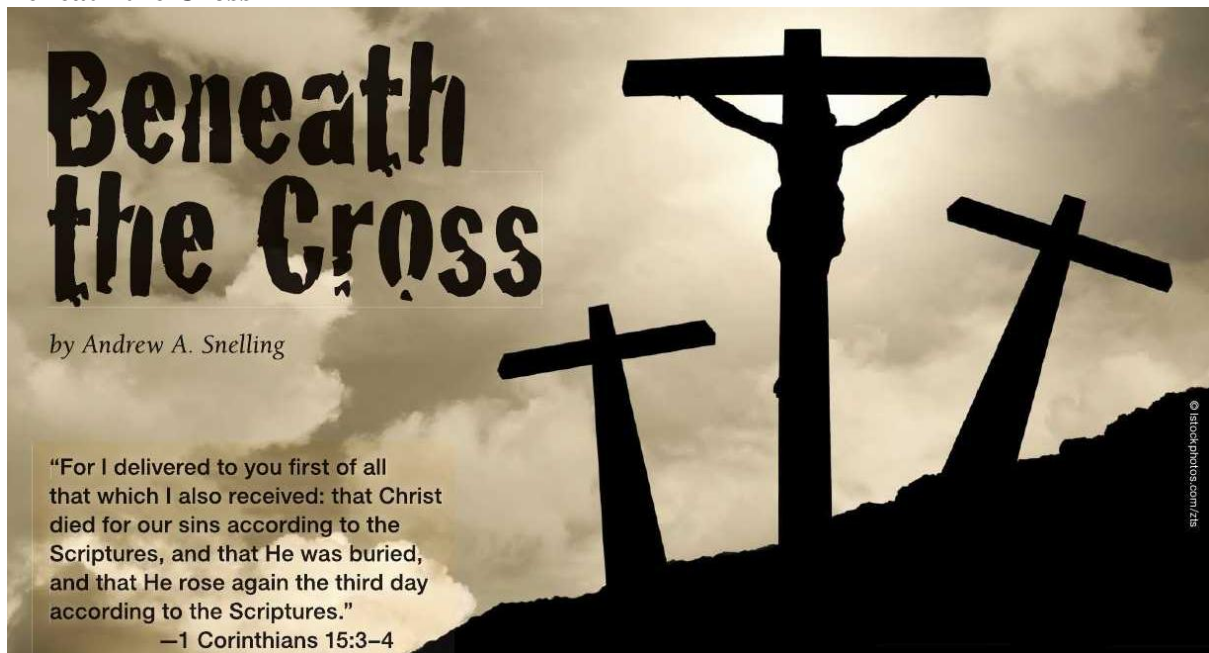
⁶⁵⁸ Kirk Cameron, "The Incredible, Evangelistic Egg," *Answers* 6, no. 3 (2011): 104.

⁶⁵⁹ MacArthur, "The Source," 87.

FIGURE 5.8
Our Suffering Saviour⁶⁶⁰



FIGURE 5.9
Beneath the Cross⁶⁶¹



5.3 AiG and Asking Questions

The persuasive element Asking Questions demonstrates a frequency rate of 2.866 occurrences per 1000 words throughout AiG materials. This means that the

⁶⁶⁰ Tommy Mitchell, "Our Suffering Savior: A Physician's Perspective," *Answers* 6, no. 3 (2011): 115.

⁶⁶¹ Andrew A. Snelling, "Beneath the Cross," *Answers* 4, no. 2 (2009): 78.

average *Answers* article contains 2.009 incidents, of which 1048 of 1049 are categorized as rhetorical queries. As with ICR propaganda, each case of this message variable can be subdivided into negative, neutral, and positive rhetorical questions. However, *Answers* exhibits a much more even ratio of positive to negative questions than is found in either ICR or CSC materials. This is due, in part, to the fact that AiG also possesses the lowest frequency value of the Contrast Principle and Negativity Effect, with which negative questions are often linked. Additionally, it is important to note that there is considerable overlap across negative and positive questions, as they often appear concurrently within AiG articles. Neutral questions are also much more common throughout *Answers* than in other EW propaganda, which further adds to AiG's significant frequency measure of this persuasive variable.

FIGURE 5.10
AiG Asking Questions Subcategory Frequencies

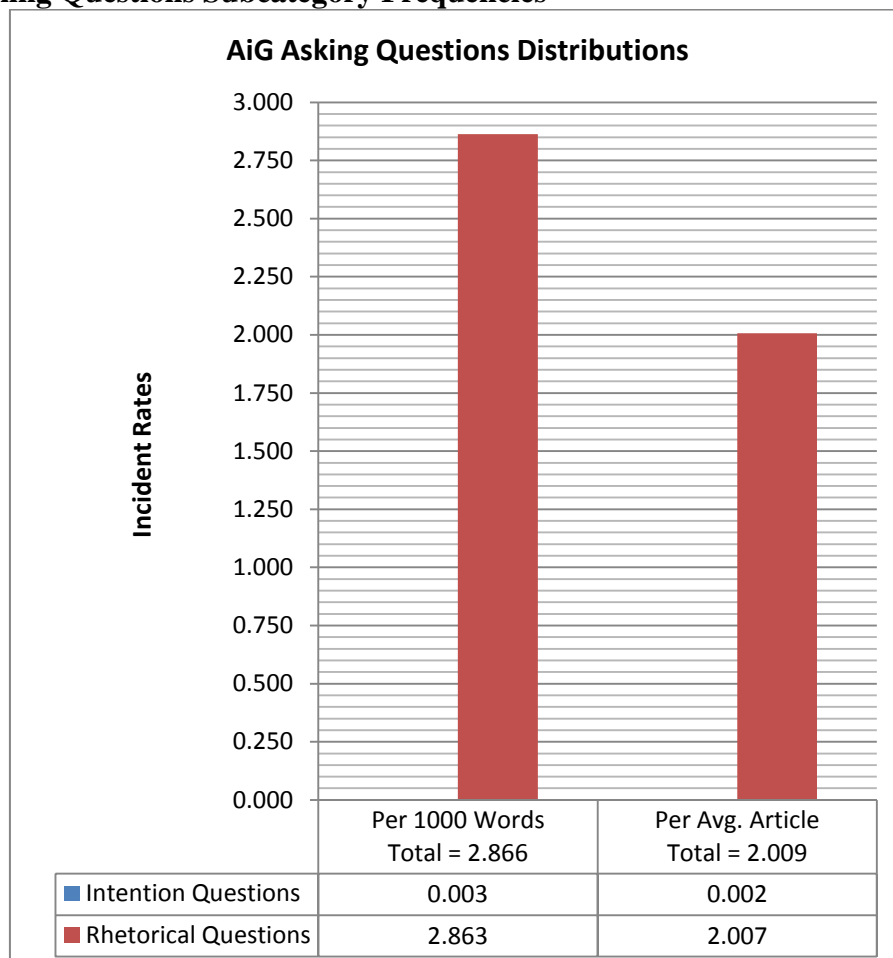
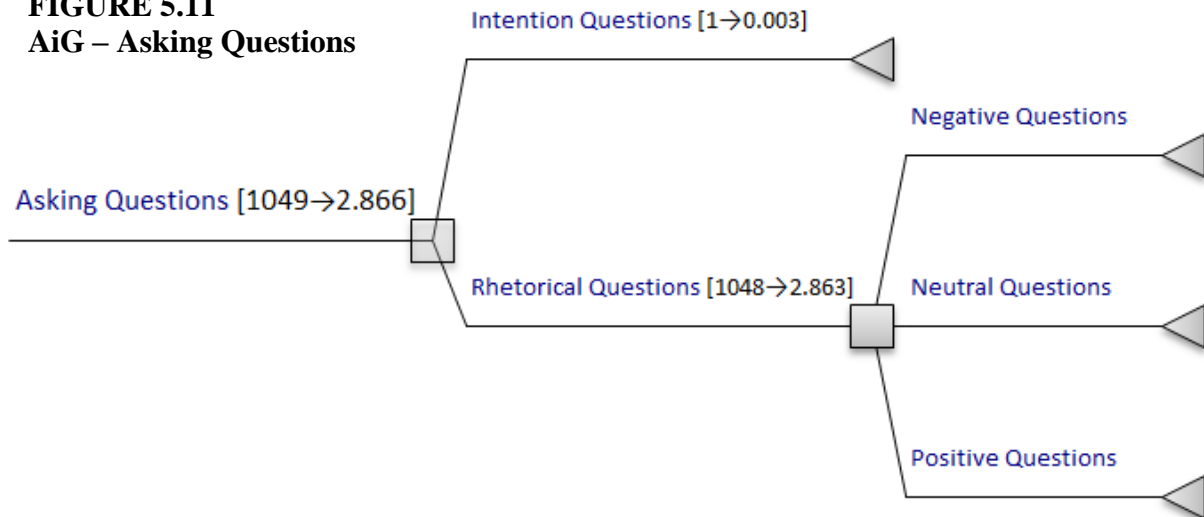


FIGURE 5.11
AiG – Asking Questions



Answers writers employ neutral rhetorical questions to simply introduce ideas or to move from one topic to another. Such queries do not lead directly to criticisms of an opponent or to validations of the communicator's message. For instance, in an article that discusses the properties of salt, the author begins by asking readers, 'What's one of the most sought-after commodities in human history—the only rock we eat because it's so essential to life?'⁶⁶² Such neutral questions are regularly located in articles designed provide facts about animal species or natural phenomena, and they direct audiences to areas of interest highlighted by the writer. This is exhibited in an article that examines the biological attributes of flying fish:

When you think of the marvels of flight, what creatures come to mind? Perhaps majestic birds like the eagle or falcon, whose sleek design has inspired centuries of dreamers like Leonardo DaVinci and the Wright brothers. Or perhaps—with a little prompting—you might think of bats or bumblebees. Or if you've watched a dinosaur movie lately, perhaps a flying reptile, such as the pterosaur. But a *fish*?⁶⁶³

Another repeated use of neutral questions involves simply asking 'Why?' to steer an article's contents from one piece of information to the next, while simultaneously drawing in the audience's attention.

⁶⁶² Bill Jack, "'Pass the Salt, Please'," *Answers* 6, no. 4 (2011): 79.

⁶⁶³ Don DeYoung, "Flying Fish—Aquatic Flight Instructors," *Answers* 6, no. 4 (2011): 36. (his italics)

Negative rhetorical questions are also designed to intrigue audience members, and within *Answers* these queries are frequently used within critiques of theistic evolutionism. For instance, *Answers in Genesis* contributors rhetorically ask readers what might happen to the church, or to the authority of the bible, if evolutionary theory were integrated with Christianity. An article by Upchurch, entitled ‘The Danger of BioLogos: Blurring the Line Between Creation and Evolution,’ provides numerous examples of how such negative rhetorical inquires operate. Upchurch begins by telling readers, ‘Charles Darwin knew his “dangerous idea” contradicted biblical creation. Rather than exposing the contradictions, however, some church leaders want to blend the two. The newest effort by BioLogos has taken the evangelical world by storm.’ He then asks forebodingly: ‘But at what cost?’ Within the disparaging commentary that follows, Upchurch dispatches a series of additional questions, which suffuse his use of the Contrast Principle and Negativity Effect:

- ‘If some scientists’ claims contradict Scripture, what, then, is the final authority?’
- ‘But if we rely on human interpreters who reject the possibility of God, what of the balance then?’
- ‘If God did not create a perfect, sinless world, why does the Apostle Paul call Jesus Christ the Last Adam, whose work on the Cross redressed the sin and death that Adam brought into this world (Romans 5:11–19)?’
- Do we really believe that the gospel is more effective if we hide, discount, or contradict other portions of Scripture?⁶⁶⁴

⁶⁶⁴ John Upchurch, “The Danger of Biologos: Blurring the Line between Creation and Evolution,” *Answers* 6, no. 4 (2011): 38-41.

At the root of such negative questions is the conspicuous fear that the bible's fundamental message is being effectively dismantled through the introduction, and the ascendancy, of secular premises within both popular and academic Christian thought:

Sadly, many people are inclined to ignore what God has said. Instead, they rely on secular philosophy to explain what happened in the past, and it contradicts recorded history and eyewitness testimony.

Can you imagine people applying such thinking to other fields of study? What if historians rejected recorded history and claimed that World War I never happened because their philosophy does not allow for the possibility of a world war? Would this be reasonable?⁶⁶⁵

A cluster of similar questions mark the article 'Unity...At What Cost?' which asks whether creationists should be allied in any way with noncreationist Christians:

- If His Word is not authoritative, in all its parts, how can anyone be sure that its message of salvation is reliable?
- If a Christian claims to be committed to Christ's centrality, how can he or she possibly tolerate such a shift, which degrades Christ's supremacy?
- How do you think Paul would feel to see so many modern Christian leaders embracing a new version of Epicurean philosophy (Darwinian evolution), even though it undermines the true history of Genesis, which Christ revealed in His Word so that sinners could understand their need for Him?⁶⁶⁶

These types of queries are ubiquitous in AiG's defence of biblical literalism and YEC, while also appearing throughout its criticisms of noncreationist Christians. As one contributor asks in the concluding sentences of a piece censuring various Pentecostal denominations: 'When the church rejects the Bible's authority in one area, should Christians be surprised that society does not take the Bible's other teachings seriously?'

⁶⁶⁵ Lisle, "The Big," 82-84.

⁶⁶⁶ Steve Ham, "Unity . . . At What Cost?," *Answers* 6, no. 3 (2011): 58-61.

Why should anyone live by God's Word if it is merely a flawed book that cannot be trusted?'⁶⁶⁷ In the same *Answers* magazine, Ken Ham poses the following confrontational question in an article's introduction, 'Can a person believe in an old earth and an old universe (millions or billions of years in age) and be a Christian?'⁶⁶⁸

Negative rhetorical questions also constitute an important element of AiG's anti-old-earth offensive. These queries foster doubt regarding the strength of theories that support and/or require an ancient universe, as well as the data utilized in their development. Hypophora proves to be the most common form of rhetorical question employed for this purpose. For instance, in an article that challenge's the scientific credibility of the Big Bang, Lisle first asks audiences, 'Is the big bang the same kind of science that put men on the moon or allows your computer to function?' He then provides an immediate answer, intended to downgrade the empirical support of the theory itself: 'Not at all. The big bang isn't testable, repeatable laboratory science. It doesn't make specific predictions that are confirmed by observation and experimentation. In fact, the big bang is at odds with a number of principles of real operational science.'⁶⁶⁹ Similar questions-and-answers are incorporated into AiG's various criticisms of contemporary biology, palaeontology, and geology:

- 'Could instincts be the result of millions of years of evolutionary trial and error? That possibility seems hard to believe in light of the consequences of failure in just one generation.'⁶⁷⁰
- 'How could these survive for millions of years? It's unthinkable!'⁶⁷¹
- 'But where is the evidence of millions of years between rock layers? There is none.'⁶⁷²

⁶⁶⁷ "Attacks from Within," *Answers* 6, no. 1 (2011): 13.

⁶⁶⁸ Ken Ham, "Does the Gospel Depend on a Young Earth?," *Answers* 6, no. 1 (2011): 39.

⁶⁶⁹ Lisle, "The Big," 85.

⁶⁷⁰ Rick Barry, "Ready-Made Instincts," *Answers* 6, no. 3 (2011): 33.

⁶⁷¹ "Amazing Adventures with Buddy Davis," *Answers* 6, no. 4 (2011): 19.

FIGURE 5.12

Man's Opinion⁶⁷³**LET THERE BE TRUTH**

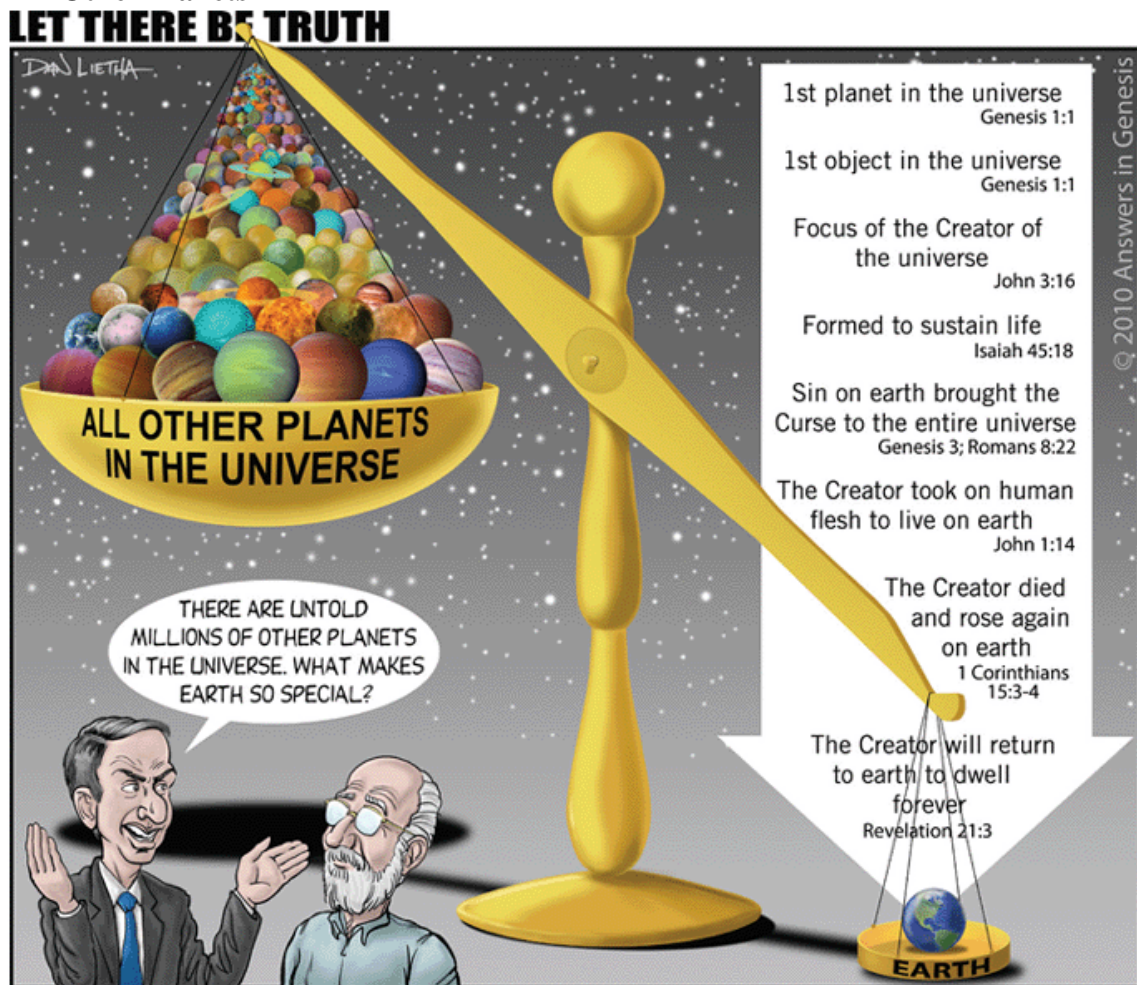
In addition to such negative questions that serve to deride adversarial positions, a significant proportion of AiG's rhetorical inquiries guide readers towards procreationist conclusions. Nonetheless, some of these questions are imbricate with negative queries, and are still coupled with cases of negative contrast. For example, a number of Dan Lietha's cartoons exhibit positive rhetorical questions within messages that express the Contrast Principle and Negativity Effect. Figure 5.12 demonstrates such a case, as it criticizes Christians who are swayed by unreliable, oscillating opinions. In this context Christian audiences are asked, 'Whose word do you trust?,' and scripture references alluding to the suitable answer are correspondingly listed. This

⁶⁷² Andrew A. Snelling, "No Slow and Gradual Erosion: Flood Evidence Number Five," *Answers* 4, no. 1 (2009): 97.

⁶⁷³ Dan Lietha, "Man's Opinion," *Answers* 6, no. 2 (2011).

overlap between negative contrast and positive rhetorical questions is also represented in figure 5.13. Here Lietha's drawing criticizes those who fail to acknowledge the earth's special status within God's creation, while also employing a rhetorical question that leads readers to the provided biblical support for the affiliated creationist ideas.

FIGURE 5.13
All Other Planets⁶⁷⁴



Other *Answers* writers also use positive rhetorical inquiries to lead audiences to implicit, YEC-supporting conclusions. This often involves asking readers to consider whether they, as good Christians, are devotedly trusting God in the face of anti-biblical scientific threats. For instance, Terry Mortenson ends an article defending the literal six-day creation account by asking readers, ‘Will you trust His Word over the arrogant

⁶⁷⁴ ———, "All Other Planets," *Answers* 6, no. 1 (2011).

claims of sinful men?'⁶⁷⁵ In the article 'Crib Notes for Every Believer,' Matthews alludes to Jesus Christ's sacred authority by declaring that 'Even the most challenging questions of our day, such as evolution over millions of years, boil down to the authority of Christ's words, beginning in Genesis.' Next, he speculates, 'Do we trust God or not?'⁶⁷⁶ These questions entreat an audience member's sense of personal faith, asking, 'Who are we to set up our opinions against the Almighty,' or 'What could we possibly be ashamed of' if we know that the bible is 'true and the ultimate authority in every area upon which it touches'?'⁶⁷⁷

Positive rhetorical questions also guide readers to creationist explanations of scientific data. This is particularly apparent in materials addressing the Noachic deluge, geology, and palaeontology. Such articles often detail various scientific findings, and then ask whether a global flood would best clarify these observations. For example, after discussing the apparent complications associated with trilobite tracks and fossils in various stratigraphic layers, the authors ask the following two questions: 'But what if the trilobites were scurrying for their lives, climbing through successive waves of mud that flooded over them, and then they finally expired from exhaustion? Do we have any record of a massive catastrophe that could form so many layers so quickly, then kill the trilobites?' The inferred answer to each of these questions is provided later in the article's final sentence, which tells reads, 'Follow the trilobite tracks, and they lead us to the worldwide Flood of the Bible!'⁶⁷⁸ Analogous questions prompt similar conclusions:

⁶⁷⁵ Terry Mortenson, "Six Literal Days," *Answers* 5, no. 2 (2010): 50.

⁶⁷⁶ Mike Matthews, "Crib Notes for Every Believer," *Answers* 5, no. 2 (2010): 82.

⁶⁷⁷ ———, "The Humility Factor: Understanding God's Truth," *Answers* 5, no. 1 (2010): 82; "10 Basics Every Creationist Must Know: To Boldly Proclaim a Biblical Worldview," *Answers* 5, no. 2 (2010): 48.

⁶⁷⁸ A.P. Galling, Marcus Ross, and Kurt Wise, "Five Fossil Mysteries... That Evolution Can't Explain," *Answers* 5, no. 1 (2010): 48.

- ‘What force could cut the sharp angles necessary to make such a deep drop?’⁶⁷⁹
- ‘What catastrophe ripped apart all these animals, and how did they end up in the center of the continent, 500 miles (800 km) from the nearest ocean?’⁶⁸⁰
- ‘What unique forces brought this gem to the earth’s surface for us to enjoy?’⁶⁸¹

As Snelling explains:

If the violent global Flood, described in the astonishing narrative of *Genesis* 7-8, really occurred, what evidence would we expect to find? Wouldn’t we expect to find rock layers all over the earth that are filled with billions of dead animals and plants that were rapidly buried and fossilized in sand, mud, and lime? Yes, and that’s exactly what we find.⁶⁸²

The intent of such queries is to turn readers from the seemingly deficit explanatory power of noncreationist theories, to the unmatched accounts of nature found in YEC. It is to this same end that Answers in Genesis materials use the Contrast Principle and Negativity Effect.

5.4 AiG’s Use of the Contrast Principle and Negativity Effect

The Contrast Principle and Negativity Effect exhibits a frequency value of 1.431 appearances per 1000 words, which equates to 1.003 incidents in the average *Answers* article. This means that AiG materials actually demonstrate the lowest rate of recurrence for this ELM cue. AiG’s incidents of the Contrast Principle and Negativity Effect can also be categorized as either negative or neutral/positive contrast, and of a total 524 incidents, 83 are associated with the latter. As a result, neutral/positive

⁶⁷⁹ Mike Matthews and Pam S. Sheppard, "10 Creation Vacations: Building Your Biblical Worldview... One Destination at a Time," *Answers* 4, no. 2 (2009): 40.

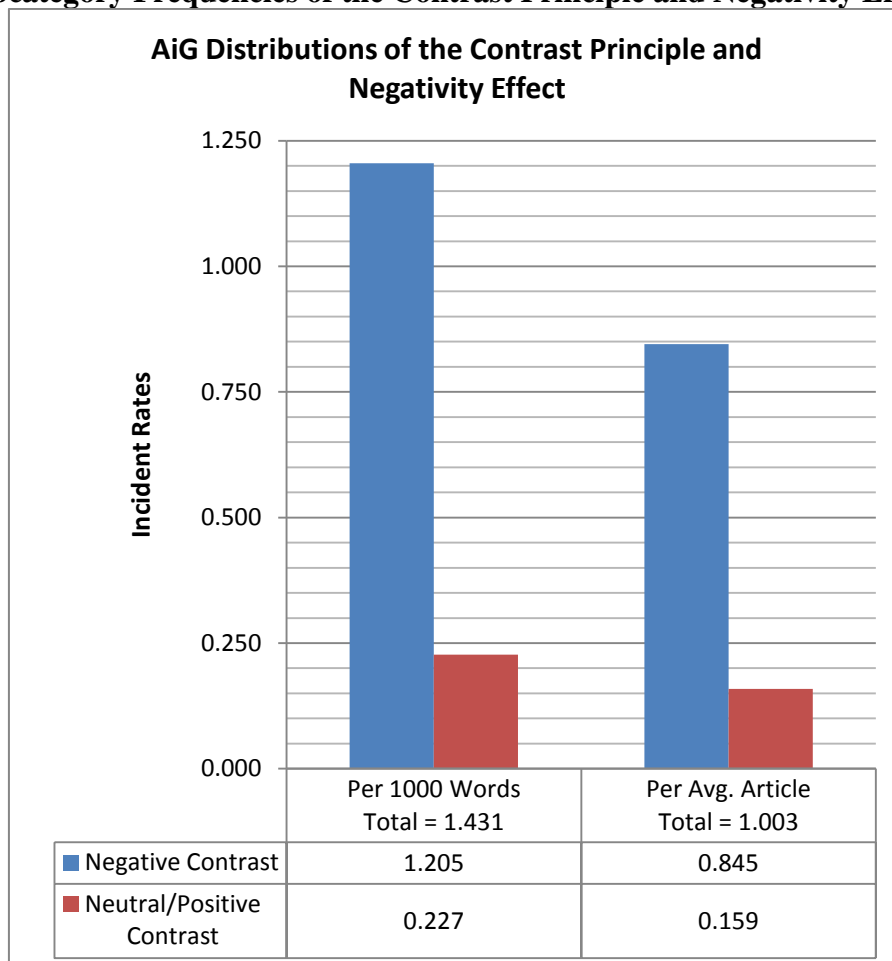
⁶⁸⁰ Andrew A. Snelling, "Cincinnati—Built on a Fossil Graveyard," *Answers* 6, no. 3 (2011): 51.

⁶⁸¹ Snelling, "Emeralds," 73.

⁶⁸² ———, "No Slow," 97.

contrast actually expresses 0.227 occurrences per 1000 words, which is higher than both ICR and CSC's rates combined.

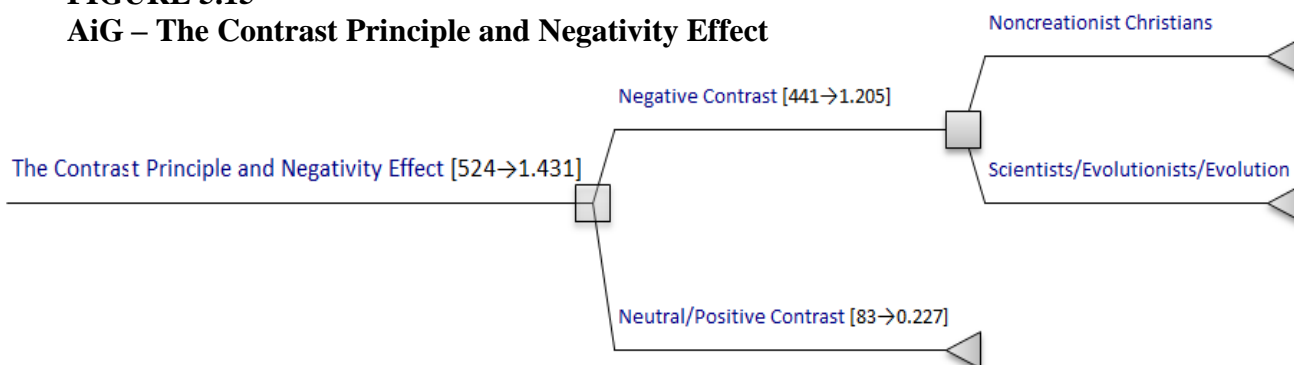
FIGURE 5.14
AiG Subcategory Frequencies of the Contrast Principle and Negativity Effect



These neutral/positive cases often appear in short commentaries on recent scientific findings, which bolster AiG's position by simply juxtaposing noncreationist and YEC interpretations of scientific data. For instance, a short article concerning the extinction of the dinosaurs first summarizes the asteroid-impact model before contrasting it with flood geology. Without directly condemning the opposing position, the author explains, 'Creationists argue that a different catastrophe is the best explanation for the death of most dinosaurs: Noah's Flood about 4,300 years ago. (Most creationists, though, do not discount asteroid impacts during the Flood.)' To reiterate that this is the comparatively

‘best’ theory, readers are told that ‘Dinosaurs definitely roamed the earth in the past few thousand years, and this may explain many of the drawings and stories we find among post-Flood people groups.’⁶⁸³

FIGURE 5.15
AiG – The Contrast Principle and Negativity Effect



Neutral/positive contrast is also used in comparisons of both creationist and evolutionist conclusions regarding other scientific findings. Again, evolutionary theories are not ostensibly criticized, but often noncreationist bewilderment is contrasted with assured YEC conclusions. In an article discussing an inexplicably well preserved ink sac found within a Jurassic-era squid, an AiG contributor first notes that noncreationist palaeontologists have been utterly perplexed by the discovery. This evolutionary puzzlement is then distinguished from Answers in Genesis’ confident interpretation of the same data: ‘The remarkable discovery is a testament to the validity of creationist palaeontology. It shows rapid burial and fossilization by catastrophic processes, which would be expected during Noah’s Flood.’⁶⁸⁴ Similar neutral/positive contrast emphasizes the differences between noncreationist scientific uncertainty and

⁶⁸³ "The Impact of Dinosaur Extinction," *Answers* 5, no. 4 (2010): 12.

⁶⁸⁴ "Monster’s Ink," *Answers* 5, no. 1 (2010): 10.

the assured explanatory might of YEC when applied to the fields of biology, geology, and physics.⁶⁸⁵

While AiG maintains the greatest neutral/positive incidence-rate, negative contrast is still the most prevalent variety of this ELM cue found throughout *Answers*. 84.2% of AiG's Contrast Principle and Negativity Effect occurrences are associated with this subcategory, which alone displays 1.205 appearances per 1000 words. These negative cases are quite similar to those found in ICR propaganda, as they primarily concentrate attacks upon proevolutionists, evolutionary theory, and noncreationist Christians. Additionally, AiG's writers are more likely to simply target 'science' or 'scientists' in their assaults, and tend to compare the superiority of biblically-based scientific explanations with seemingly inferior old-earth conjectures. These second-rate old-earth conclusions are said to result from a wholly defective view of the universe, which fails to consider God's personal eyewitness testimony.

Associated with this is the chief claim that no scientist was present to observe the creation event, and nobody can prove or empirically test astrophysical or geological theories relating to an ancient cosmos. Such ideas are merely flawed conjectures, which can be distinguished from proper scientific conclusions that are founded upon scripture's authoritative voice. Recurrently, AiG writers maintain that 'No geologist was present when the rocks were formed,' or 'people are imperfect and were not there to witness the early history of the world.'⁶⁸⁶ Such declarations are contrasted with the absolute certainty of biblically-based scientific conclusions, because 'God was there,

⁶⁸⁵ See: "Reef Belief is Challenged," *Answers* 4, no. 4 (2009); Heather M. Brinson, "Heart: Constantly Beating Death," *Answers* 4, no. 4 (2009); Dan Hayden, "Who's Number One in the Universe?," *Answers* 4, no. 4 (2009); Roger Sanders, "Finding God in Galapagos," *Answers* 4, no. 1 (2009).

⁶⁸⁶ Andrew A. Snelling, "Radiometric Dating: Problems with the Assumptions," *Answers* 4, no. 4 (2009): 71; Bodie Hodge and Buddy Davis, "Two Fighting Dinosaurs?: Buried in Sand!," *Answers* 6, no. 3 (2011): 68.

and His Word lets us know that the earth is young.⁶⁸⁷ This discourse interlocks with AiG's appeals to sacred authority, and it equates casting aside YEC with refusing God's own irrefutable report on the history and nature of the universe. In fact, one contributor actually associates rejecting the literal, documented Genesis account with holocaust denial:

The Holocaust, for example, is well documented by photographic evidence and firsthand testimonies. Creation is also well documented—in what has proven to be the most trustworthy eyewitness testimony on the planet, the Bible—whereas evolution is a belief system with no eyewitness documentation...

The key is whether you choose to trust God's Word or accept an undocumented and unprovable belief in molecules-to-man evolution.⁶⁸⁸

FIGURE 5.16
Fabricating Ardi⁶⁸⁹



⁶⁸⁷ "10 Basics Every Creationist Must Know," *Answers* 5, no. 2 (2010): 85.

⁶⁸⁸ "Lord of the Ringmasters," *Answers* 5, no. 1 (2010): 13.

⁶⁸⁹ Dan Lietha, "Fabricating Ardi," *Answers* 5, no. 1 (2010).

In relation to such allegations, AiG writers insist that scientists are plainly using unempirical conjectures to fabricate cosmologies and evolutionary theories. This is because they ‘can only guess about the past based on fragmentary evidence and biased assumptions, which they cannot scientifically prove or disprove because they were not present to observe what happened in the distant past.’⁶⁹⁰ The conviction that proevolutionist science is essentially the fictitious product of distorted anti-Christian assumptions, rather than actual evidence, occurs so often that it marks AiG’s use of Message Repetition, and pervades Lietha’s cartoons.

The cartoon in figure 5.16 displays a small, crossed-out bible on the artists’ canvas. This symbolizes the evolutionists’ intentional denial of God’s authoritative voice, resulting in misinterpretations of data. Readers are consistently told that this denial is systemic within the noncreationist scientific community, and that Darwin also participated in such a defiance of scripture. ‘By rejecting the Bible’s teaching, Darwin misinterpreted the world around him,’ explains Ham. ‘Now, 150 years later, we see the tragic results of such foolishness.’⁶⁹¹ Indeed, ‘Though God had pursued him enough for him to know where to find the answers, Darwin never took the questions back to the Bible to find God’s answers. He chose not to look.’⁶⁹² In order to bear out this dismissal of scripture, Darwin was forced to replace divine creation with natural selection:

Rejecting the biblical view, he reasoned that death and suffering were integral to operation of the present world and had always existed.

Darwin proposed a new natural law—natural selection—which assumed that death has operated from the beginning. With this naturalistic, impersonal force of natural selection, he found a substitute for the God of the Bible, who is the Creator of all life-forms, the eternal Judge of sin, and the

⁶⁹⁰ Snelling, "5. Scientific," 61.

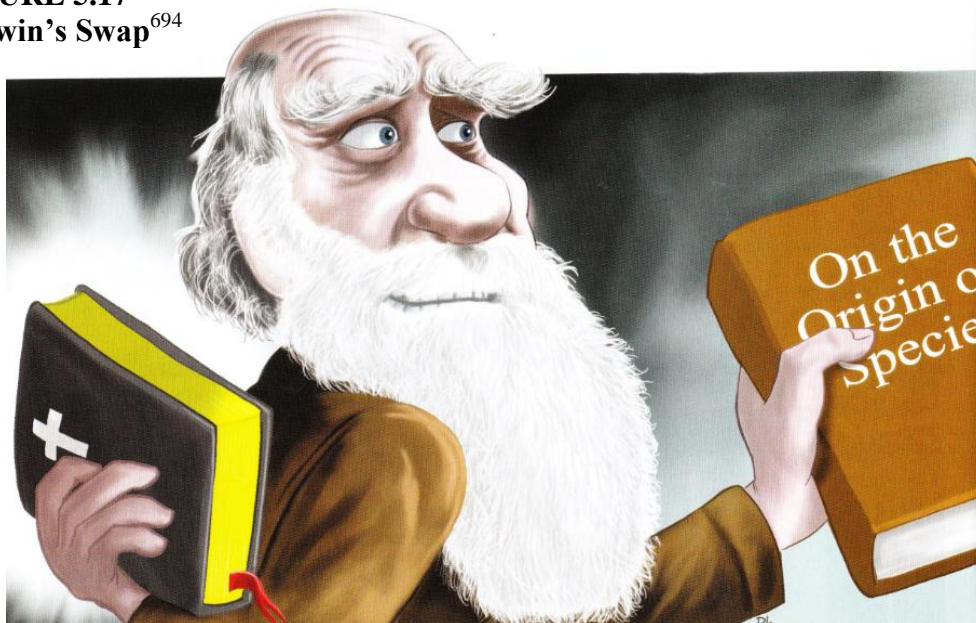
⁶⁹¹ Mason and Ham, "Year of," 6.

⁶⁹² Roger Sanders, "The Pursuit of Darwin," *Answers* 4, no. 1 (2009): 29.

only possible Redeemer of fallen mankind and of our corrupted world.⁶⁹³

This exchange is clearly represented in figure 5.17.

FIGURE 5.17
Darwin's Swap⁶⁹⁴



Readers are also told that, like Darwin, contemporary scientists are actually ‘wilfully ignorant’ of the tremendous empirical evidence that supports Young Earth Creationism.⁶⁹⁵ This unwavering ignorance, which causes people to ‘suppress truth about God that they can easily see all around them,’ is required to foolishly reject the bible and ‘embrace an absurd worldview.’⁶⁹⁶ It is contested that this irrational denial of scripture lays at the heart of not only evolution, but also today’s widespread, though deceptively false, global warming speculations. This is because, ‘Those who reject the Bible cannot truly understand how climate change fits into the real history of the earth, including the biblical timeline over six thousand years and God’s judgment during the

⁶⁹³ _____, "Darwin's Personal Struggle with Evil," *Answers* 4, no. 1 (2009): 33.

⁶⁹⁴ Lisle, "Darwin," 86.

⁶⁹⁵ Mike Matthews, "The Ultimate Proof That the Bible Is True," *Answers* 6, no. 2 (2011): 51.

⁶⁹⁶ MacArthur, "The Source," 86; Jason Lisle, "Foolproof Apologetics," *Answers* 4, no. 1 (2009): 68.

Flood.’⁶⁹⁷ Like evolution, global warming is not an empirically-substantiated scientific conclusion, but is actually a non-Christian, politically-entrenched theory.⁶⁹⁸

FIGURE 5.18

Are You Prepared for the Real Global Warming?⁶⁹⁹



Such contestations cast doubt upon the moral fibre of noncreationists, who are apparently trying to ‘promote evolutionary dogma’ and ‘indoctrinate young people and adults in evolution and millions of years of earth history.’⁷⁰⁰ *Answers* writers contrast the religious faithfulness and honesty of creationists with evolutionists’ use of name-calling, fabricated data, and censorship.⁷⁰¹ Darwinists are even accused of trying to

⁶⁹⁷ Ken Ham, "Global Warming—Normal in an Abnormal World," *Answers* 5, no. 3 (2010): 60.

⁶⁹⁸ Jason Lisle, "Global Warming's Solar Connection," *Answers* 5, no. 3 (2010); George H. Taylor, "Global Warming—When Politics and Science Collide," *Answers* 5, no. 3 (2010).

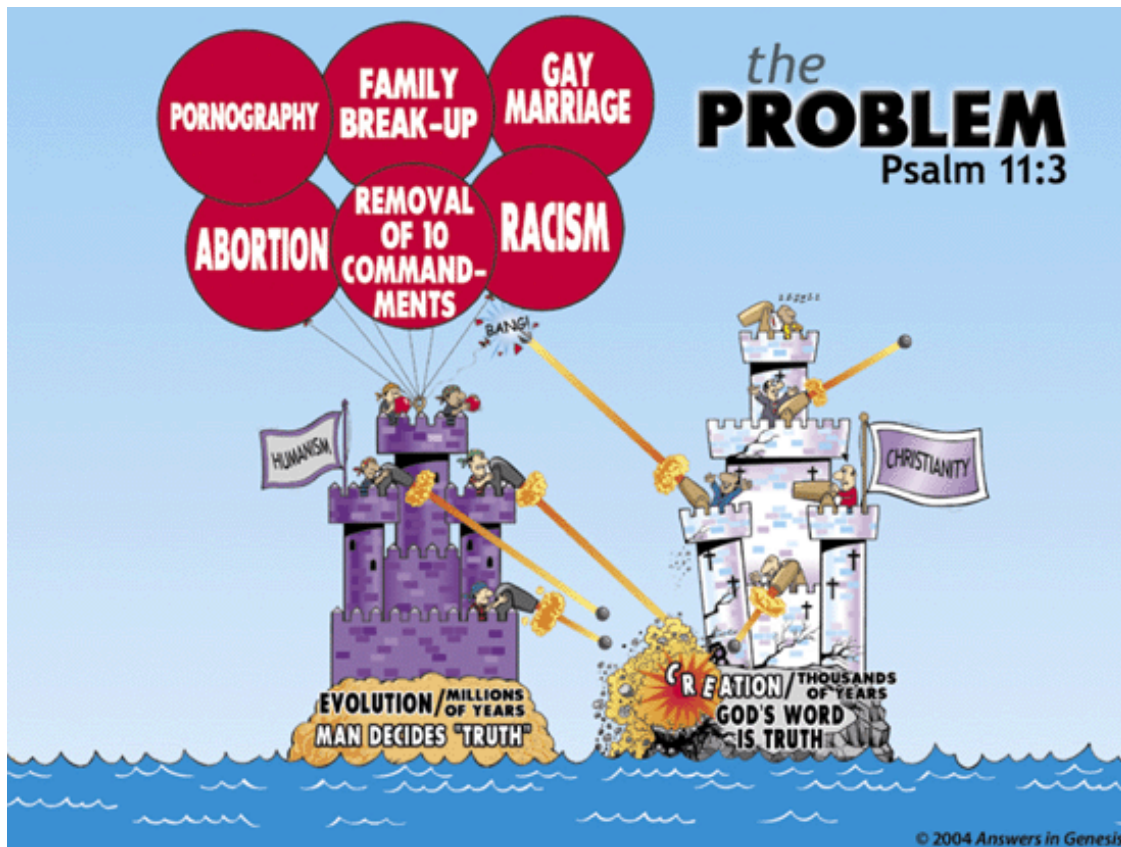
⁶⁹⁹ Dan Lietha, "Are You Prepared for the Real Global Warming?," *Answers* 5, no. 3 (2010).

⁷⁰⁰ "Dinosaur Doubts Down Under," *Answers* 6, no. 1 (2011): 12; "All Staged," *Answers* 4, no. 2 (2009): 12.

⁷⁰¹ Ken Ham, "Evolving Tactics," *Answers* 4, no. 1 (2009); "Fallible Research," *Answers* 4, no. 4 (2009); "Creationists and the Courts," *Answers* 5, no. 4 (2010); "A Royal Row," *Answers* 4, no. 1 (2009).

‘add credibility to their beliefs by use of reification with such statements as “science says,” and “natural selection guided.”’⁷⁰²

FIGURE 5.19
Castle Cartoon Ver.2⁷⁰³



Furthermore, the acceptance of evolution is correlated with Christian youth leaving the church, as well as the devastation of Christian moral values in modern societies. This is because evolution is said to necessitate a rejection of scripture, while reducing the intrinsic value of human life via theories of common ancestry as well as chance in nature. ‘A number of factors lead our young people to believe that values and morality are relative,’ explains Michael Farris. ‘The widespread belief in impersonal evolution has undoubtedly contributed to this erosion of biblical concepts about truth. If man is created by pure chance, then there is no place for transcendent values.’⁷⁰⁴ Unlike

⁷⁰² "Logic for Dummies," *Answers* 5, no. 4 (2010): 20.

⁷⁰³ Ham, "Maturing the," 62.

⁷⁰⁴ Michael Farris, "Showing Children the Way," *Answers* 6, no. 4 (2011): 78.

ICR's cases of negative contrast, these charges seldom describe evolution as a religious belief system, or blatantly associate the theory with Satan.⁷⁰⁵ However, Answers in Genesis materials still contain the patent message that evolutionary theory leads to countless evils. In an article addressing the ills of human trafficking, prostitution, and pornography, the author asserts:

Everything about the prostitution and pornography industries is offensive because they violate the sanctity of human beings, created in God's image. But mankind has despised this clear revelation of Scripture, leading to our current evil state. When society embraces the idea that humans are merely evolved animals with no Creator, the strong heedlessly prey upon the weak. But when they realize that everyone is uniquely created and loved by God, each life gains infinite value beyond mere self-gratification and survival of the fittest.⁷⁰⁶

Ham also notes, 'The entire western world is changing. Whereas the West was once permeated by Christian thinking, with a predominantly Christian worldview in regard to morality, there has been a dramatic shift.' At the root of this religious and moral digression lies the teaching of evolutionary theory: 'The major way this change has occurred is through the education system and media, which teach that evolution over millions of years is fact, causing many young people to doubt and ultimately disbelieve the Scriptures.'⁷⁰⁷ These incriminations are perhaps best captured in Ham's 'castle cartoons,' which include the illustration depicted in figure 5.19.

It is apparent that within Ham's castle cartoons Christians are reprimanded as much as secular evolutionists. This reflects AiG's concerted efforts to denounce noncreationist members of the faith, and to contrast YEC with their distorted views of scripture. In fact, antagonistic discourse relating to such Christians represents AiG's most prevalent form of the Contrast Principle and Negativity Effect. What is particularly interesting is that *Answers* writers spend a considerable amount of time

⁷⁰⁵ "Carlson with the Creator," *Answers* 6, no. 4 (2011).

⁷⁰⁶ Janice Shaw Crouse, "Human Trafficking: The West's New Slave Trade," *Answers* 5, no. 4 (2010): 53.

⁷⁰⁷ Ken Ham, "One Nation Under...?," *Answers* 5, no. 4 (2010): 39, 40.

identifying noncreationist religious leaders of the past in order to point out their theological deficiencies. For instance, in the article ‘Exposing a Fundamental Compromise,’ Mortenson tells readers that some ‘respected Christian leaders, famous for defending the fundamentals of the faith against compromise, were guilty of their own compromise.’⁷⁰⁸ He then pinpoints grave noncreationist shortcomings in the works of James Orr, Dyson Hague, and George Frederick Wright, who contributed to *The Fundamentals*. Readers are informed that such past failures have led to the protracted degradation of Christian thought, which has even marred the works of admired evangelical leaders:

The compromise started in the early nineteenth century, with men like Thomas Chalmers. It has continued increasingly into the present, through the influence of countless evangelical scholars and leaders, including Charles Spurgeon, Charles Hodge, B. B. Warfield, William Jennings Bryan, James Montgomery Boice, Gleason Archer, Bill Bright, Norman Geisler, William Lane Craig, J. P. Moreland, Billy Graham, Bruce Waltke, and Tim Keller, some of whom have even embraced theistic evolution.⁷⁰⁹

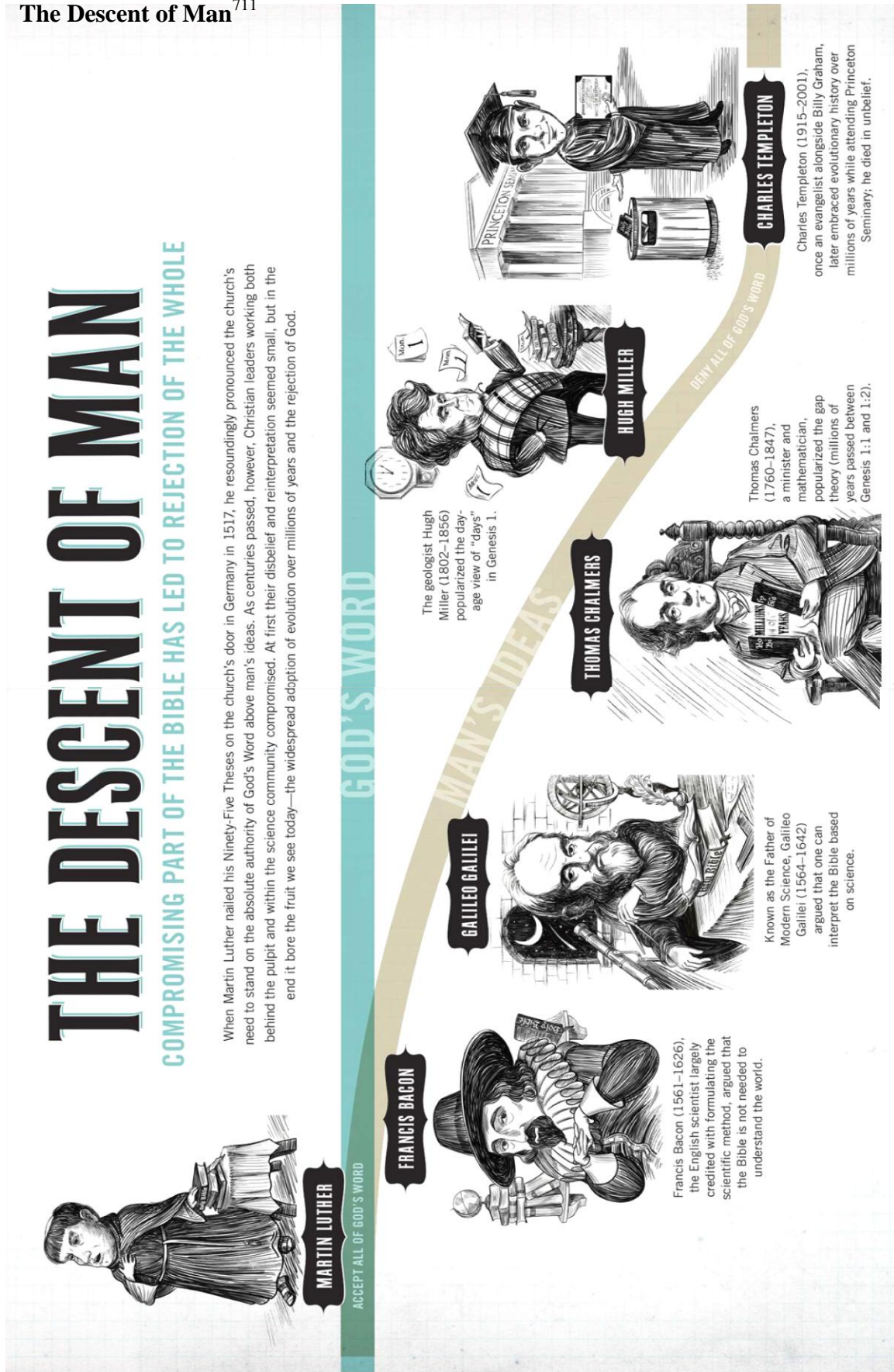
This deterioration is illustrated in the foldout poster entitled ‘The Descent of Man,’ located in figure 5.20. The poster depicts how leading Christian natural philosophers and theologians incrementally compromised scripture by incorporating ‘man’s ideas’ into the interpretation of Genesis’ creation account. ‘At first their disbelief and interpretation seemed small,’ states the author, ‘but in the end it bore the fruit we see today—the widespread adoption of evolution over millions of years and the rejection of God.’⁷¹⁰ Thus, while *Acts&Facts* writers enhance ICR’s Messenger Credibility by identifying procreationist scientific pioneers, *Answers* contributors point out the erroneous beliefs held by many of Christianity’s most renowned leaders.

⁷⁰⁸ Terry Mortenson, "Exposing a Fundamental Compromise," *Answers* 5, no. 3 (2010): 63.

⁷⁰⁹ *Ibid.*: 65.

⁷¹⁰ "The Descent of Man," *Answers* 5, no. 3 (2010): 85.

FIGURE 5.20
The Descent of Man⁷¹¹

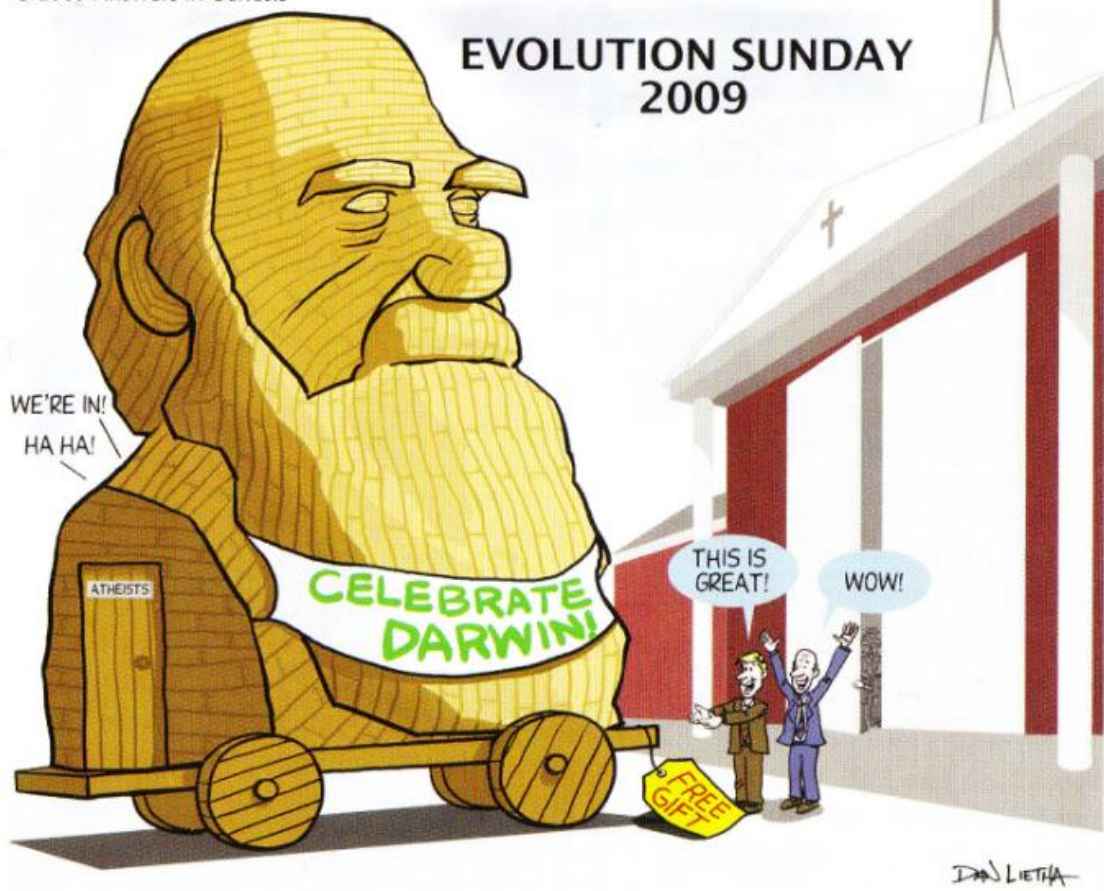


⁷¹¹ Ibid.

FIGURE 5.21
Evolution Sunday⁷¹²

LET THERE BE TRUTH

© 2009 Answers in Genesis



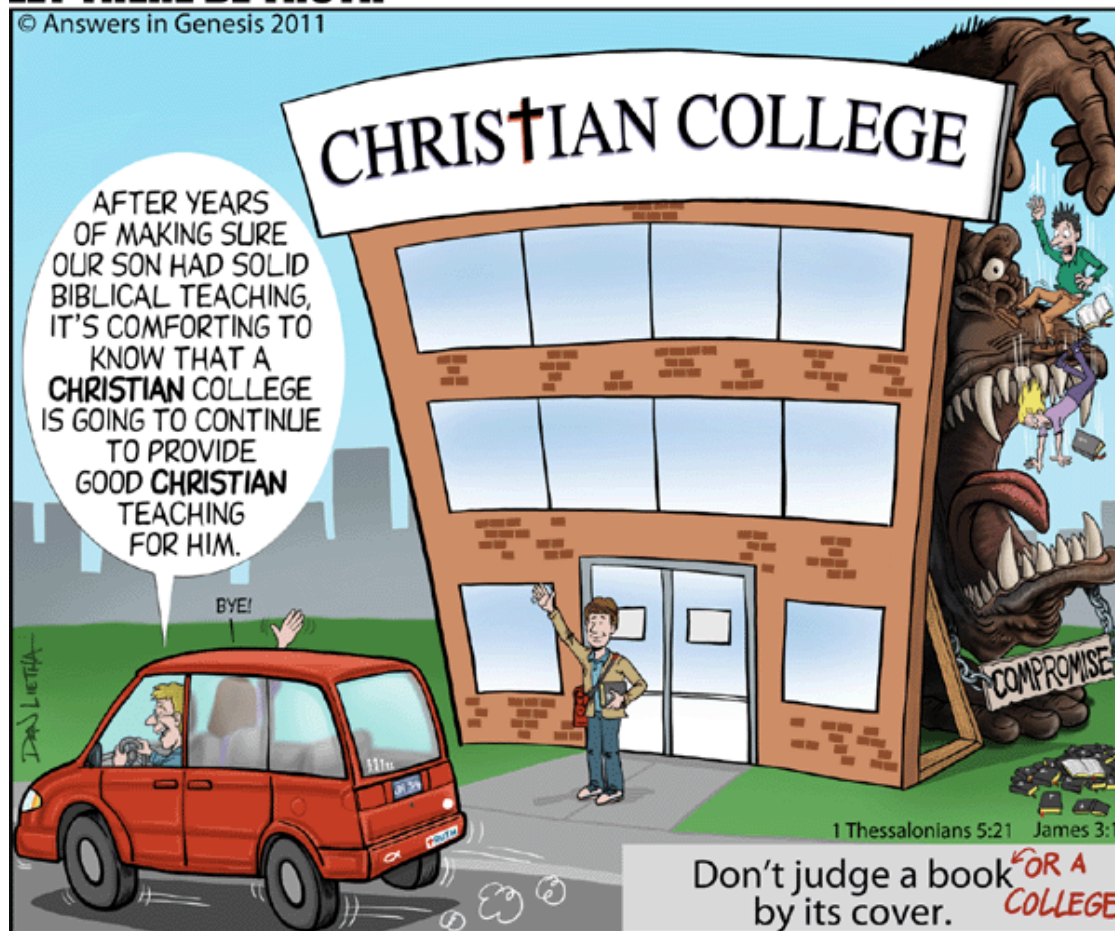
Readers are told that this theological decay has resulted in such flawed ideas as theistic evolution. This particular viewpoint is the most heavily criticized non-YEC position, and it is described as undermining the bible's authority, demeaning Jesus' gospel message, and questioning God's integrity.⁷¹³ These descriptions are contrasted with AiG's keen respect for the sacred authority of scripture, the messiah, and God's character. Also, while AiG is depicted as defending true Christianity, theistic evolutionists are accused of obtusely inviting atheism into the Church. This message is conspicuously articulated in figure 5.21, which portrays Christian leaders foolishly accepting a type of Darwinian Trojan horse. The compromise of theistic evolution is

⁷¹² Dan Lietha, "Evolution Sunday 2009," *Answers* 4, no. 1 (2009).

⁷¹³ Upchurch, "The Danger."; Mike Matthews, "Warring for Peace," *Answers* 6, no. 3 (2011).

further described as a ‘sell-out’ position, while Voddie Baucham contends that it is actually a form cognitive dissonance.⁷¹⁴ Theistic evolutionists ‘can happily worship the Creator God on Sundays and then bow at the altar of the god of chance the rest of the week,’ states Baucham, ‘All the while they justify their position by appealing to the supposed arbiter of all truth—science.’⁷¹⁵ With this in mind, Ham invokes the audience’s fear by warning readers not to send their children to a ‘Counterfeit Christian College,’ which may shipwreck a student’s faith by teaching noncreationist doctrines.⁷¹⁶ Figure 5.22 exemplifies this threat in its depiction of evolutionary compromise as an enormous, student-eating gorilla.

FIGURE 5.22
Christian College Compromise⁷¹⁷
LET THERE BE TRUTH



⁷¹⁴ Don Landis, "Science in the Balance," *Answers* 5, no. 3 (2010): 80.

⁷¹⁵ Voddie Baucham Jr., "Life's Toughest Questions," *Answers* 4, no. 2 (2009): 51.

⁷¹⁶ Ken Ham, "Counterfeit Christian College," *Answers* 6, no. 3 (2011).

⁷¹⁷ Dan Lietha, "Christian College Compromise," *Answers* 5, no. 3 (2011).

In addition to denouncing theistic evolution, *Answers* writers also contrast the biblical-legitimacy of YEC with other purportedly erroneous notions. Specifically, various Christian old-earth theories and the ID movement are proscribed as tarnishing the bible by capitulating with anti-Christian secular premises.⁷¹⁸ For instance, readers are told, ‘The gap theory is not biblical and is, in fact, a compromise of the truth of Genesis,’ while ID ‘fails to reference the God of the Bible and the Curse’s impact on a once-perfect world.’⁷¹⁹ Ken Ham summarizes *Answers in Genesis*’ criticism of noncreationist opinions in the following way:

In fact, every time a Christian defends compromise ideas about earth history and evolution, such as the gap theory, theistic evolution, and progressive creation, they are imposing their own ideas on Scripture. Then they claim that Scripture teaches their position. Such ‘eisegesis problematic apologetics’ ultimately undermines the authority of Scripture and causes unbelievers to stumble.⁷²⁰

On the other hand, AiG is characterized as not forcing human-based distortions upon scripture, and emphatically trusting God’s character, Jesus Christ, and the biblical authors. AiG’s collective negative contrast is stark, leaving audiences with a choice between the scriptural/scientific authority of YEC and numerous varieties of anti-biblical, god-denying compromises. Adding to the persuasiveness of such comparisons are manifestations of Statistics and Technical Jargon.

5.5 AiG’s Use of Statistics and Technical Jargon

Though AiG demonstrates the lowest frequency value of the Contrast Principle and Negativity Effect, *Answers* magazine exhibits the highest relative occurrence rate of Statistics and Technical Jargon. With 1.188 appearances per 1000 words, 0.833 expressions of this ELM cue occur in the average *Answers* article. Also, like both

⁷¹⁸ "The Grand Designer," *Answers* 6, no. 1 (2011); Ham, "Does the."

⁷¹⁹ Paul F. Taylor, "Closing the Gap," *Answers* 5, no. 4 (2010): 34; "Id'ed for a Imperfect Argument," *Answers* 5, no. 4 (2010): 11.

⁷²⁰ Ken Ham, "Problematic Apologetics," *Answers* 4, no. 2 (2009): 71.

ICR's and CSC's use of Statistics and Technical Jargon, the bulk of AiG's cases are categorized as technical jargon. In fact, technical jargon alone accounts for 375, or 86.2%, of a total 435 incidents, which indicates that this subcategory has a frequency rate of 1.024 cases every 1000 words. Each occurrence of jargon can be further subdivided into the four broad areas of study apparent in Institute for Creation Research materials, and the majority of cases are associated the biological sciences as well as earth and atmospheric sciences.

FIGURE 5.23
AiG Subcategory Frequencies of Statistics and Technical Jargon

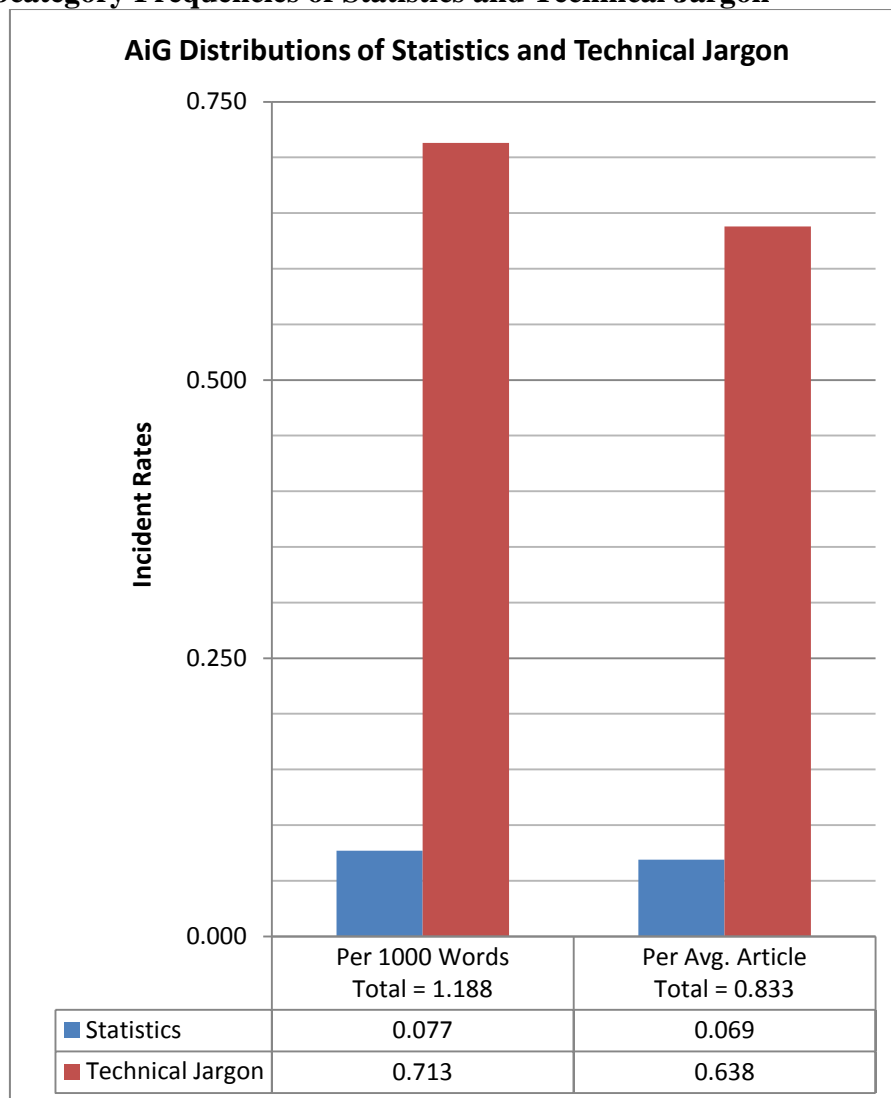
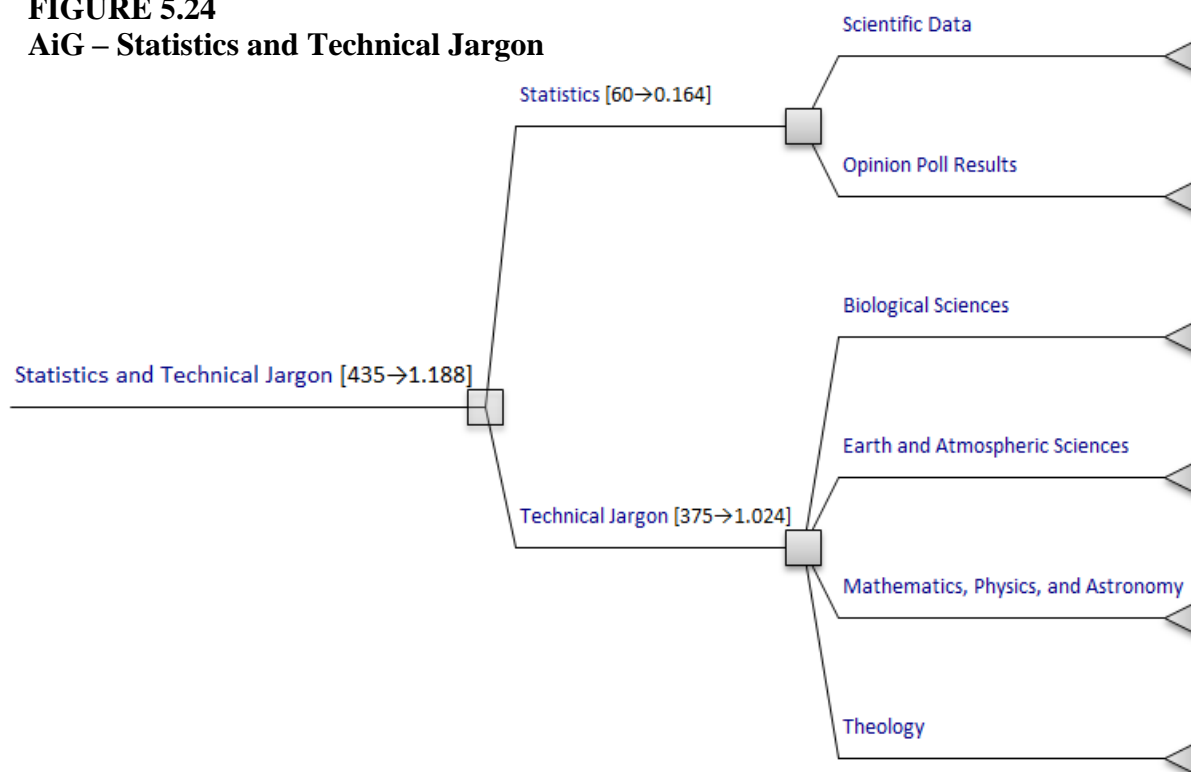


FIGURE 5.24
AiG – Statistics and Technical Jargon



Similar to what is observable in ICR propaganda, complex technical language related to the biology recurrently includes diagrams and descriptions of human or animal physiology. These concise overviews are meant to relay the intricacies of biological life, which appear to demonstrate divine craftsmanship. One article argues that ‘when we look more closely at something as outwardly simple as extending a finger to type the letter *u*, we discover an astoundingly sophisticated design that points unmistakably to the Creator.’⁷²¹ To reinforce that scientists ‘who dismiss finger motion as simply the end result of a series of accidents have failed to appreciate the complex physiology involved,’ a series of somewhat technical anatomical drawings are provided.⁷²² In order to wholly comprehend Jonathan W. Jones’ references to the human hand, and properly gauge their use within this antievolutionist lesson, some training in anatomy is required. The same could be said for Answers in Genesis’ ample

⁷²¹ Jonathan W. Jones, "Our Index Finger—Pointing to the Creator," *Answers* 5, no. 4 (2010): 71.

⁷²² *Ibid.*: 73.

use of binomial nomenclature, as well as references to such things as the ‘periaqueductal gray,’ the ‘ventromedial prefrontal cortex,’ or ‘cardiac rupture, asphyxiation, cardiac arrhythmia, and hypovolemic shock.’⁷²³

FIGURE 5.25
Multi-tasking Muscle Tendons⁷²⁴

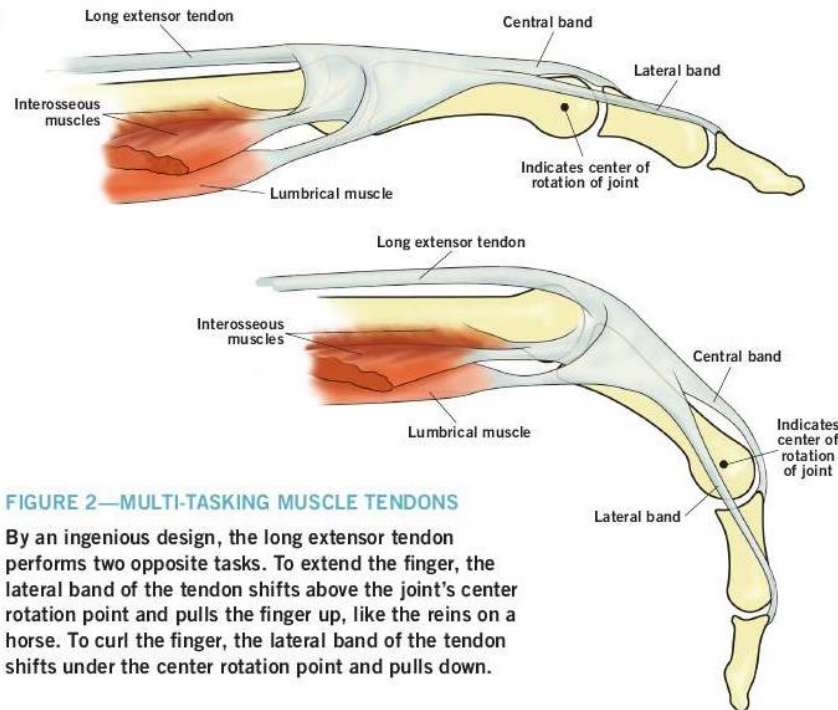
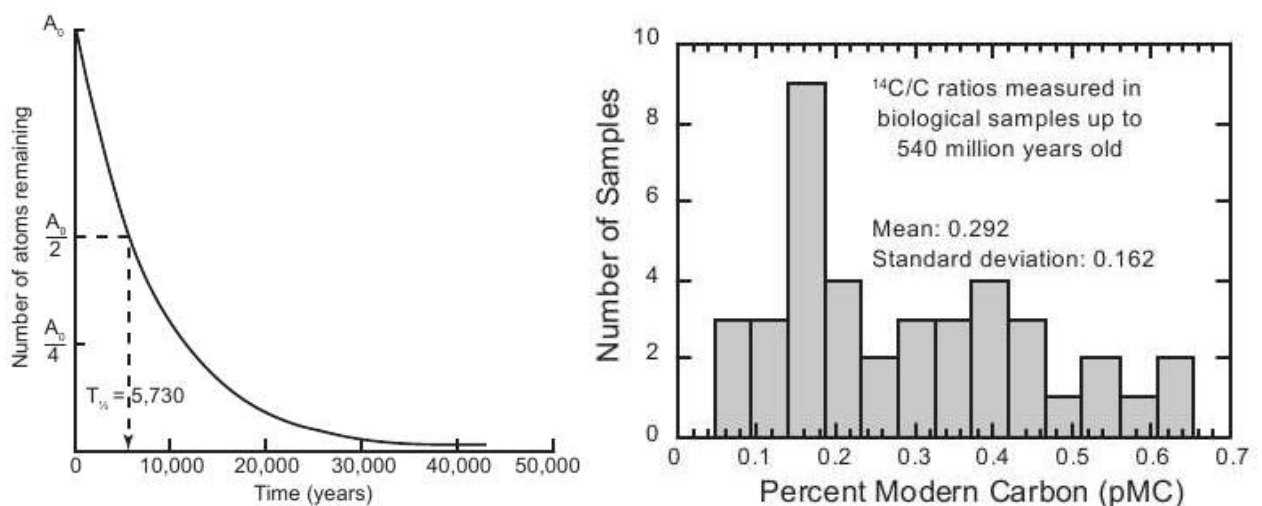


FIGURE 2—MULTI-TASKING MUSCLE TENDONS

By an ingenious design, the long extensor tendon performs two opposite tasks. To extend the finger, the lateral band of the tendon shifts above the joint's center rotation point and pulls the finger up, like the reins on a horse. To curl the finger, the lateral band of the tendon shifts under the center rotation point and pulls down.

FIGURE 5.26
Radiocarbon Found!⁷²⁵



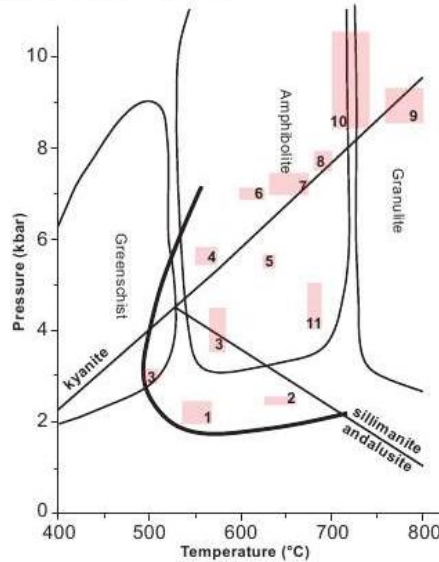
⁷²³ Heather M. Brinson, "The Human Body—Wired for Extremes," *Answers* 4, no. 4 (2009): 39, 40; Mitchell, "Our Suffering," 117.

⁷²⁴ Jones, "Our Index," 73.

⁷²⁵ Andrew A. Snelling, "Carbon-14 in Fossils and Diamonds: An Evolution Dilemma," *Answers* 6, no. 1 (2011): 74.

FIGURE 5.27
Hardened by Pressure and Heat⁷²⁶

Unlike many other rocks, rubies and sapphires can only form under a limited range of pressure and temperature. These rare conditions occurred during the Flood, as continental plates crashed together (see page 69).



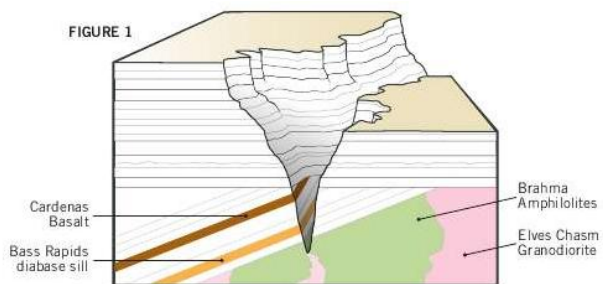
This chart shows the range of pressure (P) and temperature (T) under which rubies and sapphires can form. Each numbered brown block indicates the P-T range of a known deposit: (1) Mong Hsu (Myanmar) rubies; (2) Ural (Tajikistan) rubies; (3) Kashmir (India) sapphires; (4) Greenland rubies; (5) Sri Lanka sapphires; (6) Pakistan rubies; (7 & 10) southern Kenya rubies; (8) Tanzania gem corundum; (9) North Carolina rubies; and (11) ruby-bearing marbles. The brown blocks represent the apparent "gem corundum domain."

FIGURE 5.28
Radiometric Ages of Rocks Samples⁷²⁷

RADIOMETRIC AGES OF ROCK SAMPLES

Samples from the same rock unit can yield very different radiometric "ages," depending on the atoms being measured. The table below shows varying "ages" from rock units found in the Grand Canyon. Why is there so much variation? The measurements are not wrong, so there is only one reasonable answer: each radioactive element decayed at a different, faster rate in the past!

FIGURE 1



photos courtesy Andrew Snelling

TABLE 1—Radioactive ages yielded by four Grand Canyon rock units. (The error margins are shown in parentheses.)

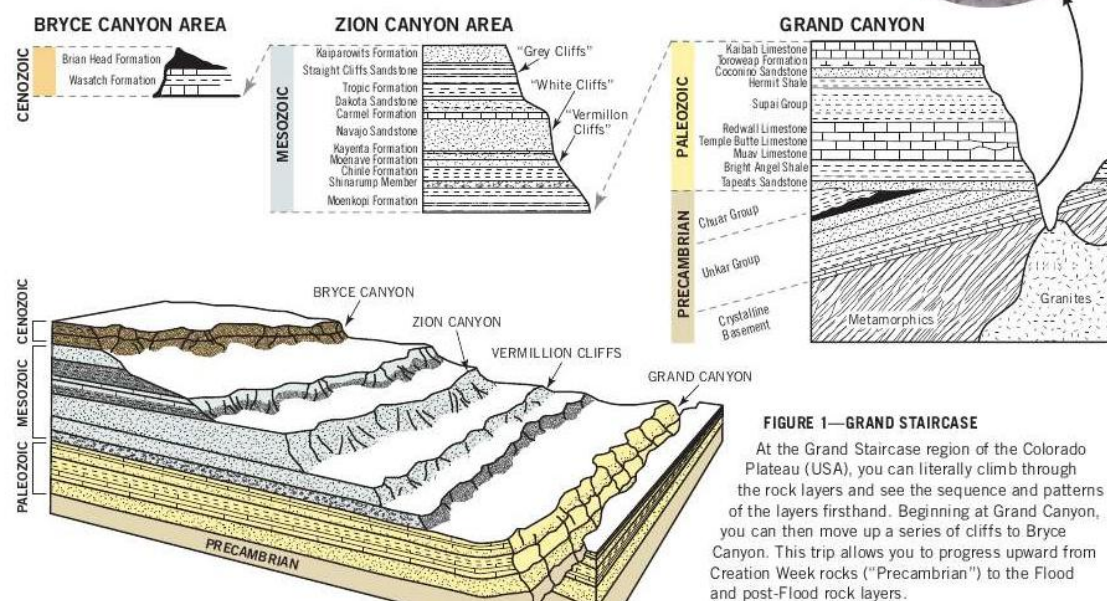
Rock Unit	Ages (million years)			
	Potassium-argon	Rubidium-strontium	Uranium-lead	Samarium-neodymium
Cardenas Basalt	516 (±30)	1111 (±81)	—	1588 (±170)
Bass Rapids diabase sill	842 (±164)	1060 (±24)	1250 (±130)	1379 (±140)
Brahma Amphibolites	—	1240 (±84)	1883 (±53)	1655 (±40)
Elves Chasm Granodiorite	—	1512 (±140)	1933 (±220)	1664 (±200)

⁷²⁶ ———, "Rubies & Sapphires: Sparkling Reminders of God's Judgment," *Answers* 5, no. 2 (2010): 67.

FIGURE 5.29 Order of the Rock Layers⁷²⁸

ORDER OF THE ROCK LAYERS IS REAL

The geologic column represents rock layers that are observable data and not some figment of evolutionary bias based on "the fossil content of their rocks." We can walk across various regions of the earth and observe that the rock layers and the fossils generally match what is depicted in the geologic column. One good regional example is the Grand Staircase (Figure 1) of the Colorado Plateau located in southwestern USA.



Answers articles contain only a small amount of jargon associated with mathematics, physics, and astronomy. For instance, a few AiG contributors mention such ideas as the 'anisotropic synchrony convention,' and the 'spiral density wave theory' in their defences of young-universe astrophysical models.⁷²⁹ However, the majority of technical language is affiliated with the earth and atmospheric sciences, usually involving explanations of scientific data from the perspective of flood geology. Sometimes this simply incorporates listing the chemical make-up of minerals, and can feature geological charts or diagrams.⁷³⁰ Examples are illustrated in figure 5.26, which provides readers with data on the complexities and apparent problems associated with

⁷²⁷ ———, "Radiometric Dating: Making Sense of the Patterns," *Answers* 5, no. 1 (2010): 74.

⁷²⁸ ———, "Order in the Fossil Record," *Answers* 5, no. 1 (2010): 66.

⁷²⁹ Jason Lisle, "Distant Starlight: The Anisotropic Synchrony Convention," *Answers* 6, no. 1 (2011): 71; Faulkner, "Galaxies," 56.

⁷³⁰ Snelling, "Emeralds," 73.

radiocarbon dating. Similar cases are especially prevalent in the works of Snelling, who also contributes to ICR's *Acts&Facts*. His refutations of radiometric dating, as well as explanations of geological phenomena, are replete with technical language requiring at least undergraduate training in earth sciences. 'Pre-Flood and early Flood sedimentary and igneous rocks were buckled, squeezed, and heated,' Snelling tells readers, 'transforming them into the metamorphic gneisses and granulites that host the ruby and sapphire deposits of eastern Africa, Madagascar, India, and Sri Lanka.'⁷³¹ Further examples can be found in figures 5.27-29.

Adding to cases of scientific technical jargon are incidents of complex theological language, which include the use of ancient Hebrew and Koine Greek vocabulary. Such occurrences are more common in *Answers* than in ICR propaganda, which reflects AiG's amplified religious focus.⁷³² Also, with a frequency rate of 0.164 occurrences per 1000 words AiG materials demonstrates the highest frequency rate of statistics, which is only slightly greater than what is found in CSC propaganda. These statistics appear as opinion poll results and scientifically-oriented data. The latter are far less common than the former, and are incorporated in discussions of human-chimp genetic similarities, greenhouse gas emissions, physiology, and astrophysics, which may also coincide with technical jargon. 'The earth's eccentricity is only 1.67%, measured by how far its orbit deviates from a perfect circle, explains Lisle, 'But Epsilon Eridani b's eccentricity—70%—is over forty times greater than our planet's. Some other exoplanets have even higher eccentricities!'⁷³³

Statistics from poll results are largely used by AiG writers to convey the atrocious state of Christianity, including the church's failure in upholding YEC, biblical authority, and Christian morality. For example, there is significant attention given to

⁷³¹ _____, "Rubies &," 68.

⁷³² See: Taylor, "Closing the."; Rand Hummel, "Is My Love for the Lord Real?," *Answers* 6, no. 3 (2011).

⁷³³ Jason Lisle, "Exoplanets—Unpredictable Patterns," *Answers* 6, no. 1 (2011): 46.

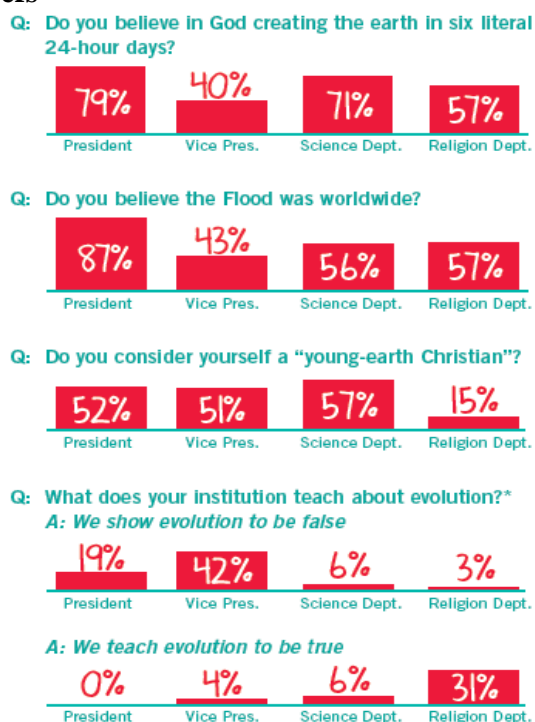
the apparent numbers of Christian youth that reject important religious doctrines, and are leaving the church. ‘Only 9% of “born again” Christian teenagers believe that there are unchangeable, absolute principles of right and wrong,’ laments Farris, ‘Only 7% of these same teens say that they make their moral decisions based on the Bible.’⁷³⁴

Another author states that ‘research has pointed to serious problems in Sunday school. Young people are not taking their lessons to heart and are leaving the church in droves.

In fact, nearly 70% leave before they turn twenty.’⁷³⁵ Similar reports can be found scattered throughout other articles:

A recent Barna survey shows that younger Americans are less likely to consider the Bible accurate. The results show that for Americans ages 18-25, only 30% believe the Bible is ‘totally accurate,’ and for ages 26-44, the percentage is less than 40%. This compares to almost 60% for those ages 64 and older. Overall, says a Barna researcher, the ‘central theme of young people’s approach to the Bible is skepticism. They question the Bible’s history as well as its relevance to their lives.’⁷³⁶

FIGURE 5.30
A Mixed Bag of Beliefs⁷³⁷



⁷³⁴ Farris, "Showing Children," 78.

⁷³⁵ Roger Patterson, "Intentional Teaching at Church," *Answers* 5, no. 2 (2010): 16.

⁷³⁶ "Generational Gaps," *Answers* 5, no. 2 (2010): 10.

⁷³⁷ "Many Christian Colleges Receive a Failing Grade," *Answers* 6, no. 3 (2011): 20.

FIGURE 5.31
Look at the Numbers...⁷³⁸



The articles “Many Christian Colleges Receive a Failing Grade” and “Going, Going...Gone: Why Are Young People Walking Away From Our Churches?”, whose contents are featured in figures 5.30 and 31, represent quintessential examples of how AiG writers incorporate statistics into such arguments. In the first of these articles the author explains that new research ‘paints a troubling picture of the Christian higher education system,’ in which Christian educators communicate varied beliefs about YEC and evolution. ‘The good news?’ asks the writer, ‘Most respondents (98–99%) believe that the Bible is “inspired by God” and that Jesus Christ was born of a virgin, died a substitutionary death on the Cross, and rose bodily from the grave.’ However, readers are told that things get much worse, as ‘only 74% of respondents believe that Scripture

⁷³⁸ Ken Ham, “Going, Going...Gone: Why Are Young People Walking Away from Our Churches?,” *Answers* 6, no. 3 (2011): 124.

is without error (“inerrant”). Even fewer (60%) accept the Genesis creation account of six literal 24-hour days. Ironically, the heads of the science departments were more likely to accept this than their colleagues in the religion departments (71% to 57%).⁷³⁹ Likewise, in the second article Ham explains that AiG has been trying to identify why so many young Christians have left the church. He tells readers, ‘we contracted with Britt Beemer, from America’s Research Group, to formulate questions and survey one thousand twenty-somethings (ages 20–29) who had gone to church regularly as children but no longer attend.’⁷⁴⁰ In the rest of the piece Ham provides a flurry of statistics, and in each of these articles such data are employed to support the view that Christianity desperately needs to readopt a God-honouring respect for scripture, which is exemplified in AiG’s literalistic approach and YEC.

FIGURE 5.32
65% of UK Teachers⁷⁴¹



What distinguishes AiG’s use of statistics from ICR’s opinion poll figures is that *Answers* writers are less likely than *Acts&Facts* contributors to provide data concerning the number of creationist allies. Nevertheless, existing cases reinforce *Answers* in Genesis’ contention that people all across the globe may support Young Earth Creationism. For instance, one writer informs readers, ‘An Australian national survey

⁷³⁹ "Many Christian," 20.

⁷⁴⁰ Ham, "Going, Going," 124.

⁷⁴¹ "Uk Schools Ok for Creation," *Answers* 4, no. 3 (2009): 12.

reveals that one in three Australians believes humans and dinosaurs coexisted and thus were not separated by millions of years,' while another article explains:⁷⁴²

According to a recent survey, almost one-third of teachers in the primary and secondary government-run schools of England and Wales believe creation should be taught as part of science lessons...

While most educators do not believe that the science classroom is the place for creation education, they are apparently open to creation being taught in social science or religion courses.

Such findings are encouraging, though polls like these will surely inspire opposition by activists who want to indoctrinate all children in only one view of origins—evolution.⁷⁴³

It is evident that such statistics are linked with the persuasive element Social Consensus, which includes appeals to the popular support of YEC.

5.6 AiG and Social Consensus

Answers demonstrates 176 cases of Social Consensus, which signifies a frequency rate of 0.481 occurrences every 1000 words. This denotes that the average article contains 0.337 appearances of this message variable, of which 140 incidents can be classified as Social Proof, 25 as Underdog Effects, and 11 as Multiple Sources. The few cases of Multiple Sources are located in each magazine's 'Readers Respond' section, which provide similar statements from different audience members. These response letters often supply analogous messages that praise AiG's efforts and communicate how much the organization's materials are appreciated. Such testimonials also serve as Social Proof, which alone constitutes 79.5% of AiG's Social Consensus cases, indicating a 0.382 frequency value.

⁷⁴² "Dinosaur Doubts," 12.

⁷⁴³ "Uk Schools," 12.

FIGURE 5.33
AiG Social Consensus Subcategory Frequencies

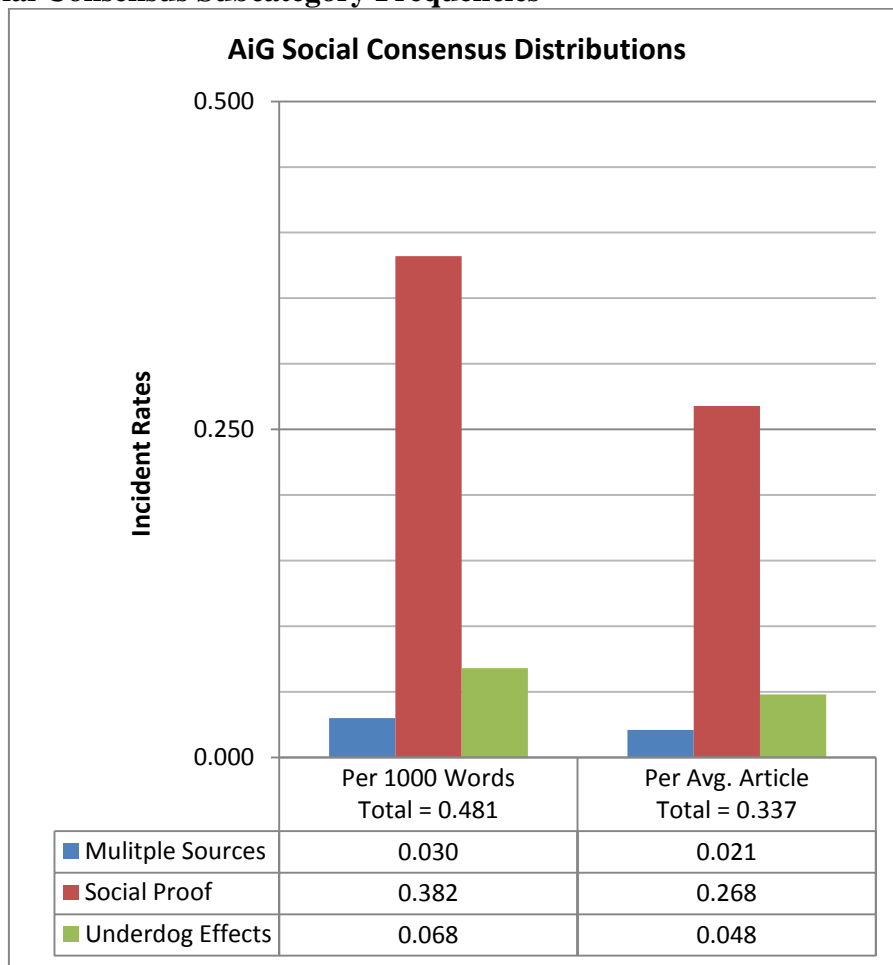
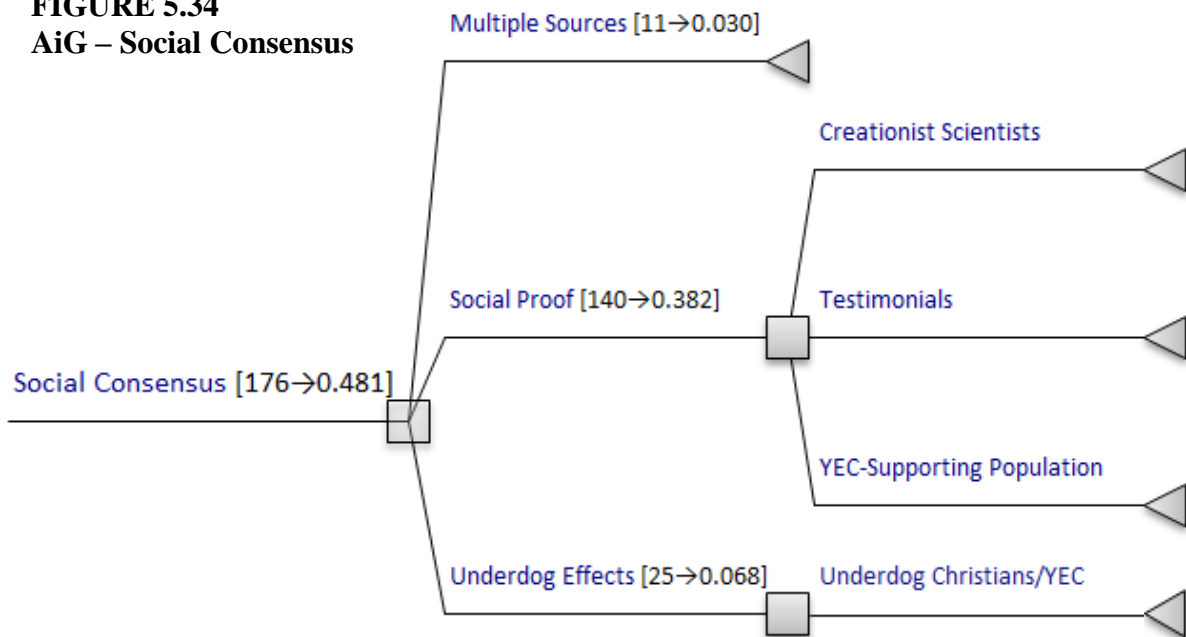


FIGURE 5.34
AiG – Social Consensus



The snippets of audience letters appearing in *Answers* include endorsements from people around the world who have been impacted the magazine, and who have also rejected evolution because of the communication's revealing information. A letter from Syed H. of Pakistan relates the following:

Your whole magazine sings the glory of God. It explains science in light of Scripture, rejects evolution, and shows the goodness of our Creator. I am now starting to believe that the Bible truly is the Word of God. I used to be convinced by evolution and the big bang theory, too. But after reading about the Word of God [in your magazine], I feel that I was wrong. The research you have done is marvelous, and it touches the heart. God bless you in your work so that you are able to help many other people open their hearts and minds to the Bible.⁷⁴⁴

In most cases, however, these letters simply express how much readers are enjoying *Answers*, and are pleased with their subscriptions:

- 'As a teenager in a world that loves to dish out lies, I enjoy reading a mag that is full of truth!'⁷⁴⁵
- 'I loved it enough that I bought extra copies for others.'⁷⁴⁶
- 'Super issue! Jam-packed with amazing, truthful articles! A must for every home!'⁷⁴⁷

Such testimonials socially confirm the potency of AiG's Darwin-sceptic message and its global impact. 'I once believed in an old earth,' explains an American soldier stationed in Afghanistan, 'Now that I've been reading *Answers* magazine it is more clear to me how the earth truly is young. I love when the Bible can be scientifically explained to me.'⁷⁴⁸ Unlike ICR testimonials, *Answers* also includes some negative feedback from audience members. For instance, one reader from Scotland comments on an article concerning homosexuality, stating unreservedly, 'I am

⁷⁴⁴ "Readers Respond - Oct-Dec.2011," *Answers* 6, no. 4 (2011): 7.

⁷⁴⁵ "Readers Respond - Jan-Mar.2010," *Answers* 5, no. 1 (2010): 7.

⁷⁴⁶ "Readers Respond," 7.

⁷⁴⁷ Ibid.

⁷⁴⁸ "Readers Respond - Jan-Mar.2011," *Answers* 6, no. 1 (2011): 7.

absolutely horrified at what has been published.’ He continues angrily, ‘I’d always thought AiG aimed to be scientifically accurate, but this article suggests that the author isn’t even remotely familiar with the current literature, leaving me no conclusion but that he’s writing what he wants to be true.’⁷⁴⁹ Such remarks add to *Answers in Genesis*’ 57 cases of Two-Sided Persuasion, as they demonstrate a conscious inclusion of potentially negative information.

In addition to these testimonials, *Answers* writers also explain that the world is teeming with creationists worldwide, and that YEC is increasingly being accepted wherever it is disseminated. In this vein an *Answers* contributor notes, ‘Creationists are seeing increasing success in convincing the public that dinosaurs did not die out 65 million years ago and were actually contemporaneous with humans.’⁷⁵⁰ Often readers are told that AiG’s ministry is flourishing, and that demand for the organization’s materials is increasing. ‘When we launched *Answers* magazine in 2006, we started with about 33,000 subscribers,’ explains Dale Mason, ‘There are now over 75,000, and growing! That’s amazing, because most magazines have fewer subscribers today than they did five years ago.’⁷⁵¹ Not only are *Answers* subscriptions on the rise, but so are attendances at AiG’s Creation Museum: ‘The dream of the Creation Museum has been realized—with over 1.3 million guests so far.’⁷⁵² Also, numerous articles report on successful creationist endeavours in Brazil, Cambodia, Egypt, Ecuador, Japan, Peru, Russia, South Korea, the Ukraine, and Uzbekistan.⁷⁵³ Most of these efforts involve the distribution of propaganda materials, such as Annie Wichman’s Girl Scout Gold Award

⁷⁴⁹ "Readers Respond - Apr-Jun.2010," *Answers* 5, no. 2 (2010): 7.

⁷⁵⁰ "Slaying the Dragon Myth," *Answers* 6, no. 1 (2011): 10.

⁷⁵¹ Mason, "The First," 8.

⁷⁵² "Foundations," *Answers* 6, no. 3 (2011): 24.

⁷⁵³ "Cultivating a Vision," *Answers* 6, no. 2 (2011); "Creation to Christ in Twenty Minutes," *Answers* 5, no. 3 (2010); "Biblical Truths across Continents: Just What the Doctors Ordered," *Answers* 4, no. 3 (2009); "A Canvas for Creation," *Answers* 5, no. 2 (2010); "Next Stop for Translations: Land of the Rising Sun," *Answers* 4, no. 2 (2009); "Proclaiming the Creator in the Land of Many Gods," *Answers* 4, no. 4 (2009); "Changing Lives in Latin America," *Answers* 4, no. 1 (2009); "Preparing Hard Ground for Planting," *Answers* 5, no. 3 (2010).

offence to any suggestion that creationists are not scientifically educated.⁷⁵⁶ For example Dawkins is criticized for insinuating that ‘creationists are “a baying pack of ignoramuses”’ when apparently ‘he knows full well that creationists are as educated as evolutionists, including several hundred PhD scientists.’⁷⁵⁷ In another article reprimands the *New York Times*’ executive editor, explaining, ‘His comments ignore the many scientists worldwide who are creationists and hold PhD degrees from respected schools.’⁷⁵⁸ Though such comments are less frequent in *Answers* than in ICR materials, they still make it known that there are numerous brave creationist scientists, which are also underdogs in academia:

A number of qualified scientists are not ashamed to stand before this world and boldly proclaim that their starting point is the Bible. Among them are scientists at the Answers in Genesis ministry and Creation Museum. As you read various articles by these godly people, you will see over and over again how observational science confirms that the Bible really is the right starting point and reveals the inconsistency of starting with secular ideas.⁷⁵⁹

AiG’s 25 cases of Underdog Effects emphasize the organization’s opposition, and the hostilities that creationists have to overcome to broadcast the truth. This opposition comes in numerous forms and in various contexts, such as on the internet. An *Answers* article that provides details concerning a creationist Facebook page explains, ‘Affirming the truth of Scripture in such a public [online] forum hasn’t come without its share of criticism, especially from militant atheists who have attacked the page’s Bible-affirming and young-earth creation posts.’⁷⁶⁰ This hostility flared when AiG opened the Creation Museum, and more recently when the organization began

⁷⁵⁶ "Koreans for Creation," *Answers* 4, no. 1 (2009); Sheppard, "Building a."

⁷⁵⁷ "Lord of," 13.

⁷⁵⁸ "Sign of the Times," *Answers* 5, no. 1 (2010): 9.

⁷⁵⁹ Ham, "Not Ashamed," 47.

⁷⁶⁰ "Sharing Jesus Daily...on Facebook," *Answers* 6, no. 4 (2011): 16.

planning its Ark Encounter theme park.⁷⁶¹ Readers are told, nevertheless, that through perseverance and faith creationists can prevail against the proevolutionist storm, because ‘the voice of even a few faithful Christians can make just as great an impact.’ Indeed, ‘It starts with each of us, and those we directly influence—our children, our church friends, and any other sincere seeker of truth that God brings across our path. By God’s grace, we can make a difference!’⁷⁶² Though all creationists are underdogs, YEC will still triumph with God’s help.

5.7 AiG Message Repetition

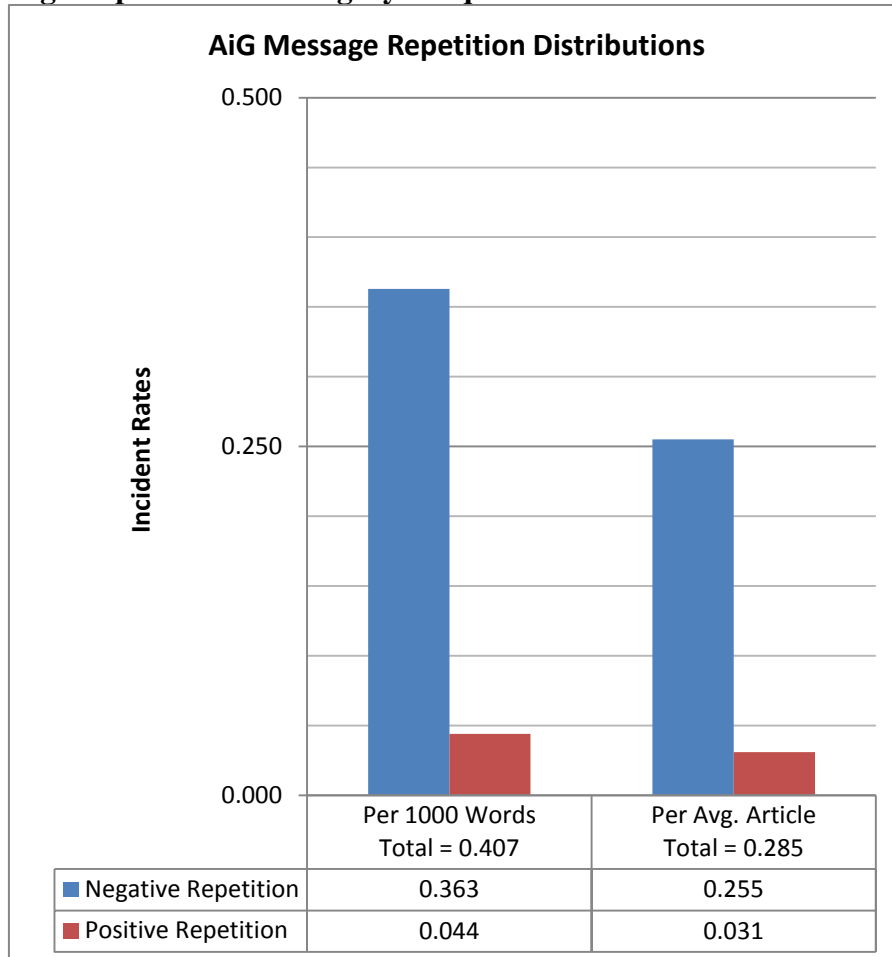
The consistent use of Message Repetition is a unique characteristic of AiG propaganda, and it exhibits 0.407 incidents every 1000 words. This is particularly interesting because *Answers* articles are, on average, 194 words shorter than ICR pieces, and 192 less than Center for Science and Culture articles. Consequently, not only do AiG writers utilize Message Repetition, but they actually do so while using less text per article. AiG’s occurrences of this message variable can be subdivided into two broad categories, described here as negative and positive repetition. The first involves the reiteration of messages that affirm YEC’s contentions and extol the virtues of creationism. For instance, *Answers in Genesis* writers assert the bible indicates that God created the universe within the last six thousand years, and therefore, they may repeat that the earth is clearly young numerous times within an article. On the other hand, the second form of repetition entails criticizing an opposing viewpoint over and over again. This includes repeating that scientists base evolution on dubious, unempirical assumptions. Though there is some intersection between these two

⁷⁶¹ "Outraged?," *Answers* 6, no. 3 (2011); "Encountering Opposition," *Answers* 6, no. 2 (2011).

⁷⁶² Mortenson, "Exposing a," 65.

Message Repetition subdivisions, 133 of AiG's 149 cases can be classified as the positive variety of this persuasive cue.

FIGURE 5.36
AiG Message Repetition Subcategory Frequencies

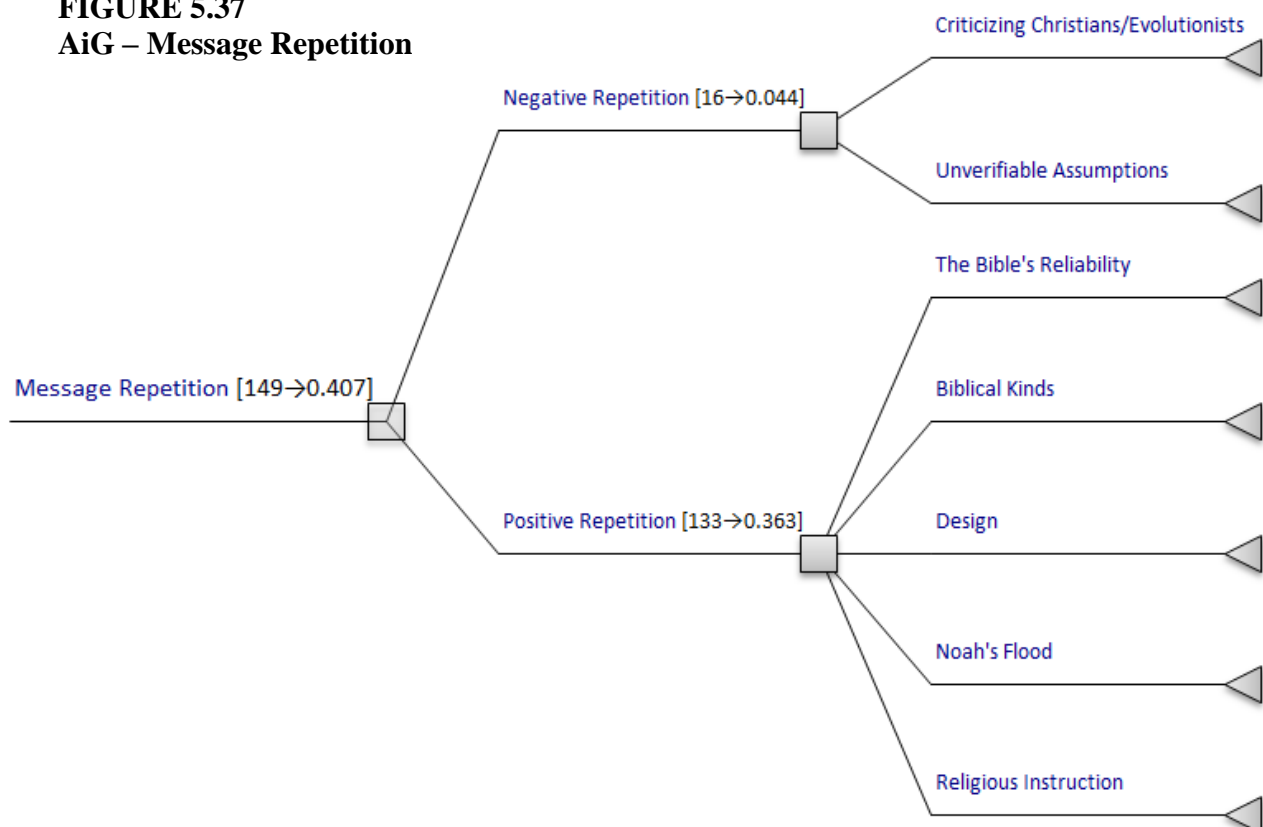


The majority of AiG's positive incidents occur within articles that reiterate how organisms demonstrate clear design from an omnipotent creator. In fact, 70 positive occurrences involve restating that particular animals 'reveal complex creative design,' or that a certain plant was 'specially designed' to survive in a harsh environment.⁷⁶³ Consequently, the articles in which such Message Repetition appears generally describe biological intricacies of flora or fauna, and then repetitively contend that such 'designs speak of a Creator,' and are clearly 'a marvelous testimony to the Creator's careful

⁷⁶³ Don DeYoung, "Water Striders—Walking on Water," *Answers* 6, no. 3 (2011): 167; ———, "Desert Rhubarb: Three-Foot Oasis," *Answers* 6, no. 3 (2011): 40.

design.⁷⁶⁴ Cosmetic variation is prevalent within this repetition, specifically in the form of reworded statements communicating identical messages. For instance, an article may state that certain animals have been unmistakably designed, engineered, or equipped by God for survival. The message is the same, though its transmission is slightly altered. While such incidents are generally categorized as positive repetition, they sometimes incorporate assaults against evolution within their attestations of supernatural design. For example, in an article describing the defence mechanisms of porcupines, Dan Breeding not only repeats that the animal's abilities are designed, but that these mechanisms could not have resulted from natural processes. 'God specially designed their defensive mechanisms,' he claims, 'They did not result from random mutations.'⁷⁶⁵

FIGURE 5.37
AiG – Message Repetition



⁷⁶⁴ Marcus Ross, "Sea Monsters: Mosasaurs Designed for Life at Sea," *Answers* 5, no. 1 (2010): 23; Nathaniel Abraham, "Programmed Cell Death: Death by Design," *Answers* 6, no. 2 (2011): 67.

⁷⁶⁵ Dan Breeding, "Thorny Pigs," *Answers* 4, no. 3 (2009): 22.

In addition to repeated messages associated with supernatural design, the next most commonly reiterated dispatches include assorted statements that can be described as religious instruction. These 34 incidents stem from AiG's religious focus, and they occur within articles that discuss pressing theological issues and/or matters of Christian ethics. For example, in one piece engaging the long-lasting question of why God would allow evil and suffering in the world, the author repeats a similar message that states 'sin explains the horrible things we see in our cursed world.'⁷⁶⁶ These types of repeated messages also include cosmetic variation, while emphasizing shared Christian values. With regard to this, AiG contributors use a variety of differing statements to reaffirm that humans were bestowed with a divine nature and intrinsic value at the time of creation. In this vein, Baucham notes again and again in altered forms that humankind is 'the crowning glory of the creation of God,' while Menton repeats such remarks as 'the mind and soul of man and his God-given ability to communicate with our Creator distance him from the beasts.'⁷⁶⁷

AiG's remaining 29 positive cases occur within articles that address three important Young Earth Creationist topics: the concept of *biblical kinds*, the bible's reliability as a source of information that truly refers to six literal 24-hour days of creation, and descriptions of the Noachic flood as the best interpretive tool for deciphering geological phenomena. The last two topics have already been briefly investigated in relation to AiG's use of Source Cues or the Contrast Principle and Negativity Effect. A number of articles dealing with these particular subjects reiterate such statements as, 'Only a literal understanding of Genesis makes sense of these facts,' 'Only an unprecedented, global flood can explain what we find at Grand Canyon,' 'the

⁷⁶⁶ Mitchell, "Suffering &," 59.

⁷⁶⁷ Voddie Bauchman, Jr., "Life's Toughest Questions," *Answers* 4, no. 2 (2009): 55; Menton, "Uniqueness of," 55.

word day in Genesis 1 refers to six 24-hour days,' and the bible is 'a real book of history that can be trusted.'⁷⁶⁸

With regards to the matter of biblical kinds, several articles contend that species do not share a single evolutionary ancestor, and instead, readers are told that organisms can be split into *baramins*, or created kinds.⁷⁶⁹ Though there are some inconsistencies regarding exactly what a kind actually is, the term usually refers to an indeterminate taxonomic level higher than a species but lower than a family. This category allows for limited genetic change or, microevolution, between species, and it is used to account for the earth's biological diversity in relation to the rather small number of animals brought aboard Noah's Ark. 'Genesis 1 claims that God created every "kind" of land animal on the same day as Adam,' explains Davis. 'Later Noah took representatives of every kind on the Ark. That required only about fifty dinosaur kinds on board. (Dinosaurs are divided into only about fifty families)'.⁷⁷⁰ Sheila Richardson outlines this term, and further illustrates how this concept is employed within AiG materials:

The "kind" is the basic biological unit within which every animal species belongs. In His infinite wisdom, God knew that the creatures would need to adapt to many different conditions in order to survive in a fallen world, so He enabled the original kinds to adapt to many different environments. Yet no matter how much animals vary within each kind, it is still easy to recognize how a cat differs from a dog or a rhinoceros.⁷⁷¹

Articles addressing this topic often repeat again and again how the idea of created kinds is a biblical and intellectually satisfying explanation for the earth's biological diversity, in light of a literal interpretation of Genesis.⁷⁷²

⁷⁶⁸ Ham, "Unity . . . At," 60; "Evidences for a Global Flood—Grand Canyon," *Answers* 6, no. 2 (2011): 85; Mortenson, "Six Literal," 50; Ham, "Going, Going," 123.

⁷⁶⁹ Paul Garner, "Do Species Change?," *Answers* 4, no. 1 (2009).

⁷⁷⁰ Davis, "Dinosaurs on," 157.

⁷⁷¹ Sheila Richardson, "Creature Teachers: At Your Local Zoo," *Answers* 5, no. 2 (2010): 40.

⁷⁷² Tom Hennigan, Georgia Purdom, and Todd Charles Wood, "Creation's Hidden Potential," *Answers* 4, no. 1 (2009); David Fouts, "The Meaning of Mîn," *Answers* 4, no. 1 (2009); "Dial-a-Tour," *Answers* 5, no. 4 (2010); Davis, "Dinosaurs on."; Purdom, "Variety Within."

Finally, the 16 incidents categorized as negative repetition can be found in articles claiming that geology's uniformitarian premises are based on unverifiable assumptions, and *Answers* pieces which either accuse noncreationist Christians of feeble capitulation or that criticize evolutionary theory and its proponents. For example, a number of times it is repeated that contemporary radiometric dating methods rely on 'unprovable assumptions,' and that old-earth theories 'are based on lots of assumptions, not observed facts.'⁷⁷³ Also, *Answers in Genesis* writers echo claims that noncreationist Christians are compromising the bible by assimilating secular dogma into their hermeneutics, and that evolution is simply a modern-day creation myth designed to expunge supernatural explanations.⁷⁷⁴ Naturally, these repeated messages coincide with AiG's use of the Contrast Principle and Negativity Effect, which occasionally involves critical assessments of the ID movement. It is to this important EW constituent that the present study will now turn.

5.8 From Repeated Claims of Design to the Intelligent Design Movement

Though 47.0% of *Answers in Genesis*' 149 Message Repetition cases involve definite statements about supernatural design in nature, it is important to remember that Young Earth Creationist proponents adamantly reject the ID movement for a number of key reasons. Moreover, Intelligent Design supporters correspondingly disdain all efforts to associate YEC with their own form of Darwin-scepticism, and actively try to distance themselves from the very term creationism. There are, in fact, crucial differences between the essential ID claims made by the Center for Science and Culture when compared with ICR and *Answers in Genesis*' young-earth premises. These distinctions result in a number of fundamental variances in how CSC actually conveys

⁷⁷³ Snelling, "Radiometric Dating," 71; Matthews and Sheppard, "10 Creation," 42.

⁷⁷⁴ Mortenson, "Exposing a."; Kurt Wise, "The Discontinuity of Life," *Answers* 4, no. 1 (2009).

its EW propaganda messages. The next chapter will identify these differences, while also acknowledging the noteworthy ways in which all three groups express the same persuasive elements.

CHAPTER SIX

Center for Science and Culture Propaganda

So let's start with what ID is and is not. Contrary to popular assumptions, ID is not Biblical creationism. It does not get into the recesses of Old Testament exegesis, nor is it meant to reveal the full nature of God.

ID is more modest, asking a simple question: When all of the scientific (not religious) evidence is put on the table, are certain features of nature better explained by an intelligent cause or by unintelligent causes like natural selection?

Logan Gage⁷⁷⁵

It's historically undeniable that Darwinian thinking forms a thread linking some of the most reprehensible social movements of the past 150 years... From Darwin's own musings on the logic of genocide, to his cousin Francis Galton's influential advocacy of eugenics, to the Darwin/monkey statuette on Lenin's desk, to Hitler's *Mein Kampf* with its evolutionary theme, to the biology textbook at the center of the Scopes trial that advocated racism and eugenics, to the modern eugenics movement right here in the U.S., to recent school shootings in which the student murderers invoked natural selection, to yesterday's tragedy at the Holocaust Memorial Museum, and much more along the way -- the thread is persistent, if widely ignored.

David Klinghoffer⁷⁷⁶

6.1 CSC Message Variable Frequencies

In many ways, CSC's *Evolution News and Views* is the most distinct variety of propaganda investigated within this project. Not only is it the sole representative of the Intelligent Design movement's communications efforts, but unlike *Acts&Facts* or *Answers* magazine, it is singularly produced for online distribution. Consequently,

⁷⁷⁵ Logan Gage, "Intelligent Design and the Artist's Soul (Part 1)," Center for Science and Culture, http://www.evolutionnews.org/2009/05/intelligent_design_and_the_art020881.html.

⁷⁷⁶ David Klinghoffer, "Whitewashing Darwinism's Ongoing Moral Legacy," Center for Science and Culture, http://www.evolutionnews.org/2009/06/is_it_somehow_petty_offensive021371.html.

CSC articles are often broadcast daily rather than being limited to month-to-month or quarterly publication restrictions. *Evolution News and Views*' online venue is also reflected in its content, style, and noticeable web-centeredness. For instance, some articles are actually blog entries simultaneously posted on other sites, readers are regularly provided with web links to further investigate certain topics, and content can be particularly internet-focussed, including numerous discussions relating to the online activity of ID's critics.⁷⁷⁷

TABLE 6.1
Frequency of Message Variables in CSC Materials

Number of Articles: 468 Total Word Count: 417286 Mean Article Word Count: 892				
Message Variable		Total Incidents	Incidents per 1000 Words	Incidents per Article (Avg.)
1. Data Delivery Options	Asking Questions	847	2.030	1.811
	Disrupt-then-Reframe	0	0.000	0.000
	Message Repetition	28	0.067	0.060
	Number of Message Arguments	32	0.077	0.068
	The Scarcity Principle	368	0.882	0.787
2. Offence-Defence	Arousal of Emotions (Fear)	12	0.029	0.026
	Source Cues	433	1.038	0.926
	Statistics and Technical Jargon	248	0.594	0.530
	The Contrast Principle and Negativity Effect	1156	2.770	2.471
	Two-Sided Persuasion	24	0.058	0.051
3. Social Levers	Self-Referencing	0	0.000	0.000
	Social Consensus	135	0.324	0.289
	The Rule of Reciprocity	0	0.000	0.000
TOTAL		3282	7.865	7.016

Beyond such medium-related distinctions, table 6.1 reveals that CSC propaganda also demonstrates the least number of total incidents, and the lowest cumulative frequency

⁷⁷⁷ See: Jonathan M., "The Recapitulation Myth," Center for Science and Culture, http://www.evolutionnews.org/2010/06/the_recapitulation_myth_still036011.html; Robert Crowther, "Aaup Responds on Academic Freedom," Center for Science and Culture, http://www.evolutionnews.org/2009/04/aaup_responds_on_academic_free019881.html; David Klinghoffer, "Wikipedia and the Myth of Falsifiability," Center for Science and Culture, http://www.evolutionnews.org/2010/01/wikipedia_and_the_myth_of_fals030561.html; Paul Nelson, "Seeing Ghosts in the Bushes (Part 2): How Is Common Descent Tested?," Center for Science and Culture, http://www.evolutionnews.org/2010/02/seeing_ghosts_in_the_bushes_pa031061.html.

value relative to the other groups. Specifically, *Evolution News and Views* exhibits the smallest occurrence rates of Source Cues as well as Statistics and Technical Jargon, though it boasts the highest frequency value for the Contrast Principle and Negativity Effect. CSC is also the lone organization to display an appreciable number of Scarcity Principle incidents, and it is the only group to possess a Social Consensus occurrence rate that is <0.400 . Furthermore, though Center for Science and Culture writers actively try to distance ID from YEC, the organization's Darwin-sceptic materials still manifest four message variables readily found in both ICR and AiG propaganda. The idiosyncratic ways these same persuasive cues are expressed, nonetheless, often reflect CSC's definitive ID perspective. This is made apparent when examining CSC's use of the Contrast Principle and Negativity Effect.

TABLE 6.2
CSC Message Variables Exhibiting ≥ 0.400 Incident Rates per 1000 Words

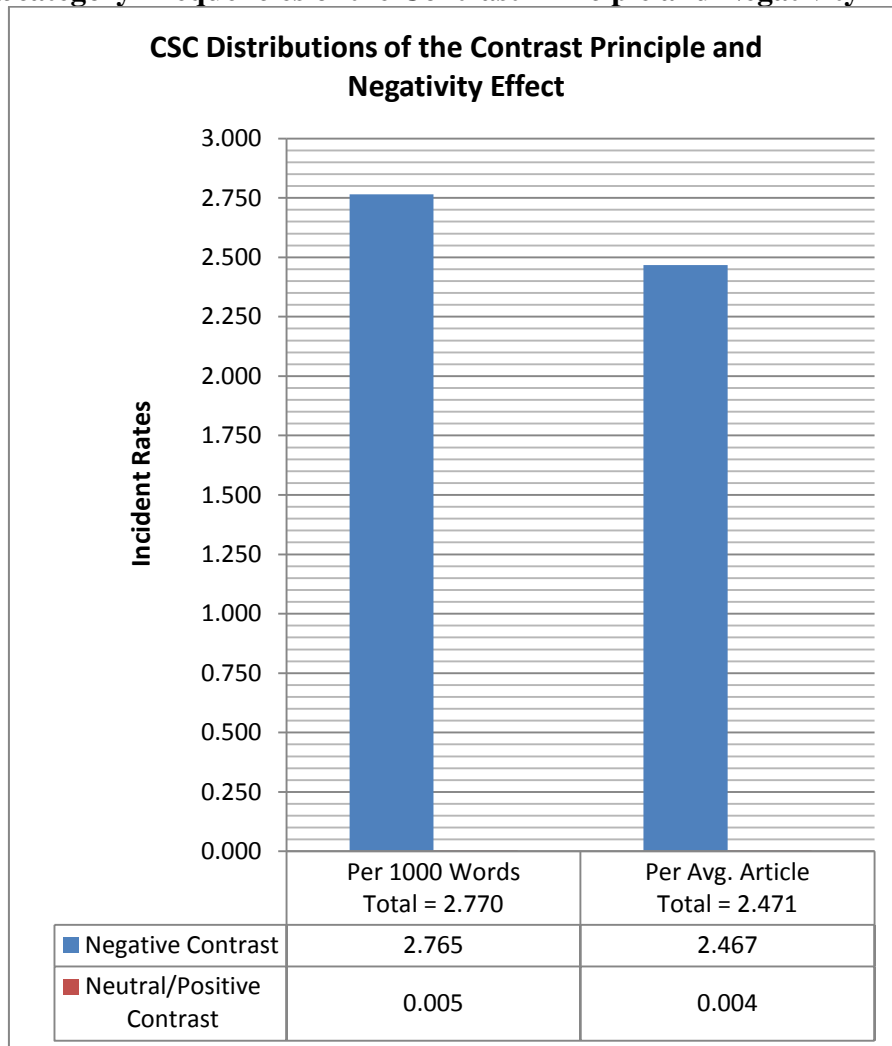
Message Variable	Incidents per 1000 Words
The Contrast Principle and Negativity Effect	2.770
Asking Questions	2.030
Source Cues	1.038
The Scarcity Principle	0.882
Statistics and Technical Jargon	0.592

6.2 CSC's Use of the Contrast Principle and Negativity Effect

It has been previously noted that the first three most recurrent message variables identified within AiG, ICR, and CSC propaganda are Source Cues, Asking Questions, as well as the Contrast Principle and Negativity Effect. Indeed, throughout Institute for Creation Research and AiG materials these elements actually maintain the exact same order when arranged from the greatest to least frequency. CSC materials, on the other hand, display somewhat different persuasive trends. *Evolution News and Views'* most ubiquitous variable proves to be the Contrast Principle and Negativity Effect, followed

closely by Asking Questions and then Source Cues. As a result, CSC articles are far less likely to include appeals to secular or sacred credibility than either ICR or AiG materials. Center for Science and Culture writers instead display a greater propensity to dispute the credibility and conclusions of ID's opponents. To be sure, such biting discourse embodies a significant quantity of CSC's Contrast Principle and Negativity Effect cases, which exhibit 2.770 occurrences per 1000 words. This means that CSC displays the highest frequency rate of this persuasive element and further indicates that there are 2.471 appearances within the average *News and Views* article.⁷⁷⁸

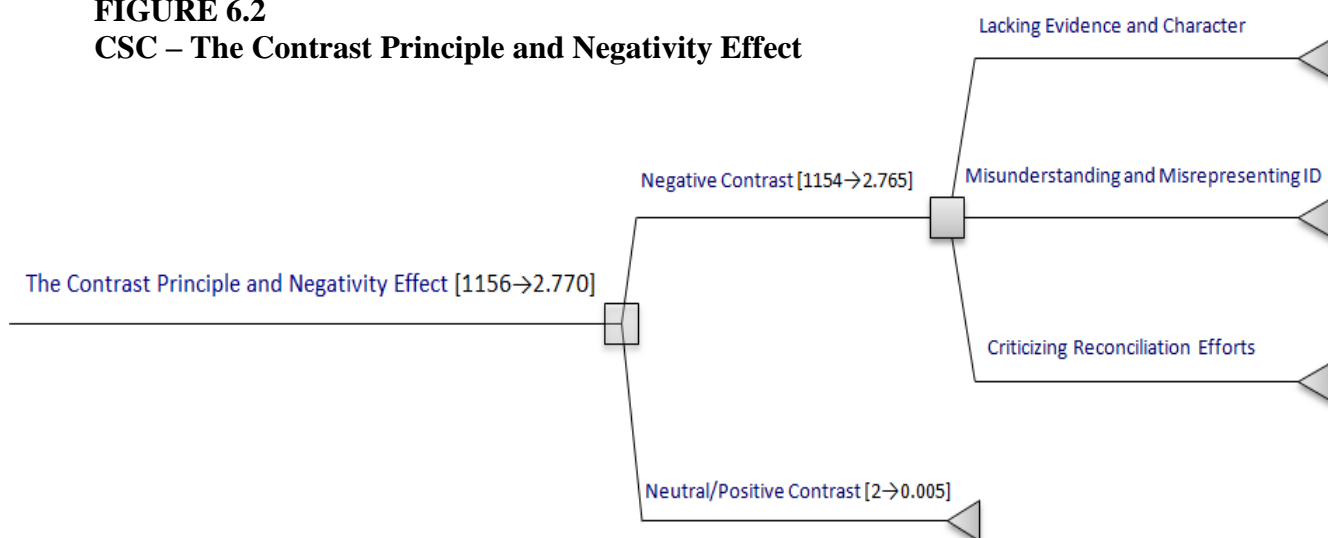
FIGURE 6.1
CSC Subcategory Frequencies of the Contrast Principle and Negativity Effect



⁷⁷⁸ *Evolution News and Views* is shortened to *News and Views*.

Though CSC’s 1156 cases of this persuasive element can be subdivided into neutral/positive and negative contrast, only 2 incidents are associated with the former category. For this reason, neutral/positive contrast will not be analyzed here, while CSC’s 1154 negative occurrences are assessed in detail throughout the following four sections.

FIGURE 6.2
CSC – The Contrast Principle and Negativity Effect



6.2.1 Negative Contrast I: Lacking Evidence and Character

A persistent assertion found throughout Center for Science and Culture propaganda is that Darwinists fraudulently present evolution as being substantiated by incontrovertible, empirical data. Such contentions are described by *News and Views* writers as being brazenly misleading, and are regularly contrasted with claims that the theory is truly deficient of evidential support. Additionally, the paucity of evolution’s hard evidence is compared with ID’s apparently overwhelming empirical support. This negative contrast pervades CSC materials, accentuating the movement’s scientific nature, while juxtaposing the honesty of ID proponents with the duplicity of evolutionists. ‘Although Darwinists claim that their doctrine is supported by “overwhelming evidence,” nothing could be further from the truth,’ explains Jonathan

Wells.⁷⁷⁹ Elsewhere he correspondingly asserts, ‘Despite the hype from Darwin's followers, the evidence for his theory is underwhelming, at best.’⁷⁸⁰ Michael Egnor clearly articulates such contrast in an article subtitled ‘Why Evolution is False.’⁷⁸¹ Within this piece he compares Darwinist’s faulty interpretations of cellular bimolecular intricacies with Intelligent Design’s superior perspectives on biocomplexity. ‘Darwinists claim that all of this originated from random mutations and unguided natural selection, without design,’ Egnor notes, ‘Yet there isn't a single detailed, evidence-based explanation for the evolution of any biomolecule from primordial precursors. All Darwinists have to offer are “just-so” stories about how biomolecules might have originated.’ Conversely, ‘Intelligent design is a scientific inference based on knowledge,’ and, ‘The more we learn about living cells, the more they look like things that can only be made by design.’ He further clarifies, ‘Science, properly conducted, follows the evidence wherever it leads,’ which is exactly how ID is practiced. ID ‘is open to any kind of causation--random or designed--in accordance with the evidence.’ Not so with evolution, however. Egnor argues that in fact it is not evidence which propels Darwinism, but a malignant ‘fundamentalist atheism’ that causes biologists to ‘defend Darwinism in spite of the evidence.’⁷⁸²

The contention that ID pursues scientific evidence to its appropriate conclusions is restated by other *News and Views* contributors. For instance, Casey Luskin insists that, unlike Darwinism, ‘ID simply wants to follow the evidence where it leads.’⁷⁸³

⁷⁷⁹ Jonathan Wells, "Art as Lust," Center for Science and Culture, http://www.evolutionnews.org/2009/01/art_as_just015681.html.

⁷⁸⁰ ———, "'Junk' DNA: Darwinism's Last Stand?," Center for Science and Culture, http://www.evolutionnews.org/2009/06/junk_dna_darwinisms_last_stand021061.html.

⁷⁸¹ Michael Egnor, "My Reply to Jerry Coyne: Why Darwinism is False," Center for Science and Culture, http://www.evolutionnews.org/2009/02/my_reply_to_jerry_coyne_why_da017681.html.

⁷⁸² Ibid.

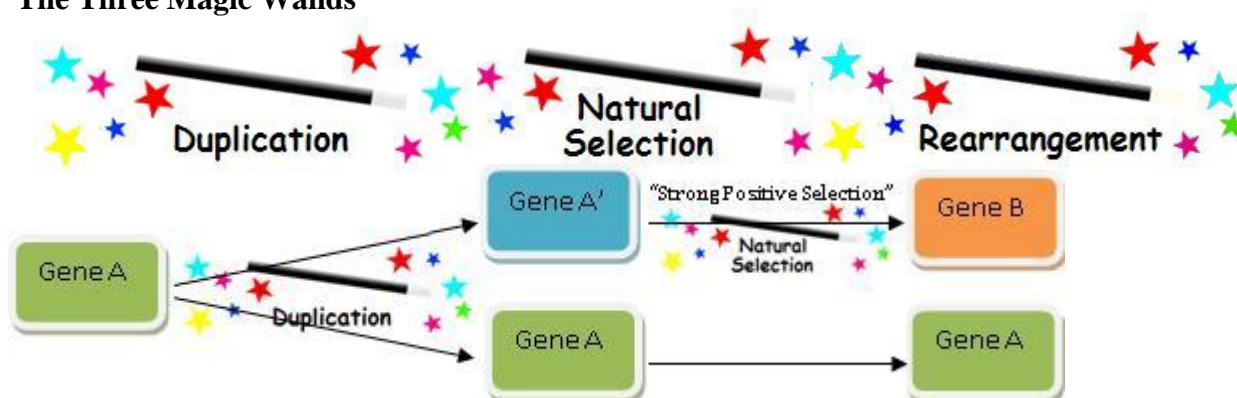
⁷⁸³ Casey Luskin, "The False Dichotomy between Intelligent Design and Natural Causes," Center for Science and Culture, http://www.evolutionnews.org/2011/09/the_false_dichotomy_between_in050701.html.

Alternatively, evolutionists are forced to ignore data entirely, and resort to embellishing or fabricating pro-Darwinist evidence:

Empirical science tests hypotheses by comparing them with the evidence, but Darwinists never allow evidence to jeopardize their basic claims. Darwin called *The Origin of Species* ‘one long argument,’ but his followers are engaged in one long bluff. Books and articles promoting Darwinism invariably make inflated claims based on little evidence -- or worse, evidence that is misrepresented or even faked.⁷⁸⁴

In like manner, Darwinists are even mockingly portrayed as invoking magic to account for incomprehensible evolutionary processes. For example, Luskin provides the images found in figure 6.3, and sardonically tells readers, ‘Using the three magic wands of duplication, rearrangement, and natural selection you can provide a full and complete detailed explanation for the evolution of virtually any gene.’⁷⁸⁵

FIGURE 6.3
The Three Magic Wands⁷⁸⁶



Likewise, John G. West reports that ‘Over at BioLogos, biologist Kathryn Applegate has offered what has to be one of the more creative alternatives to the intelligent design of the bacterial flagellum: Magic. I’m not kidding.’ Furthermore, while the flagellum’s self-assembly is difficult to understand, ‘Dr. Applegate assures her readers that this is

⁷⁸⁴ Wells, "Art as."

⁷⁸⁵ Casey Luskin, "How to Play the Gene Evolution Game," Center for Science and Culture, http://www.evolutionnews.org/2010/02/how_to_play_the_gene_evolution032141.html.

⁷⁸⁶ Ibid.

not really a problem because “Natural forces work *like magic*. Presto, chango, something appears!’⁷⁸⁷

Within this discourse CSC writers consistently assault the moral integrity of proevolutionists. Various scientists are directly accused of such offences as ‘bluffing, evasion, error, and distortion,’ as well as the ‘intentional misrepresentation’ of science.⁷⁸⁸ This is especially the case when articles detail the expert testimonies evolutionists have supplied for American state legislators. For instance, one article identifies numerous ‘instances of egregious falsehood’ throughout the testimonies that David Hillis and Ronald Wetherington offered to the Texas State Board of Education. After listing a series of apparent untruths in Wetherington’s statement, David Klinghoffer comments:

I’m not calling Wetherington a deliberate liar. Rather, it seems obvious that men and women who invest themselves in their work over a lifetime may come to tell lies to themselves without ever knowing it, in order to maintain crucial fictions on which their life’s work depends. It’s human nature... Wetherington chose to be fooled and to fool those of his listeners who also wished to be fooled.⁷⁸⁹

These poor character assessments extend back to Darwin himself. He is depicted as a man who ‘presented to the public an elaborate and even deceptive story about himself and his work to advance a philosophical agenda,’ as well as a rather narcissistic individual, possessing ‘an obsession with notoriety and recognition, something he saw

⁷⁸⁷ John G. West, "Behe Critic on Bacterial Flagellum: No Intelligence Required Because "Natural Forces Work 'Like Magic'", Center for Science and Culture, http://www.evolutionnews.org/2010/08/behe_critic_on_bacterial_flage037561.html.

⁷⁸⁸ David Klinghoffer, "My Son the Expert! Part II: More on the Texas Evolution Debate," Center for Science and Culture, http://www.evolutionnews.org/2009/04/my_son_the_expert_part_ii018991.html; Michael Egnor, "Darwinist Steven Novella Endorses Darwin's Discredited "Tree of Life", Center for Science and Culture, <http://www.evolutionnews.org/2009/02/novella016831.html>.

⁷⁸⁹ David Klinghoffer, "My Son the Expert! Part Iii: A Challenge to Texas Darwinists," Center for Science and Culture, http://www.evolutionnews.org/2009/04/my_son_the_expert_part_iii_a_c019021.html.

his theory could provide.’⁷⁹⁰ In contrast, ID’s contemporary founders, such as Phillip Johnson, are characterized as having humble natures, and even ‘gentlemanly responses to critics.’⁷⁹¹

Evolutionists are further charged with practicing censorship and attempting to indoctrinate the public with fallacious unscientific dogma through insincere propaganda. CSC’s allegations of censorship prove to be widespread and are covered extensively in section 6.5, while claims of indoctrination mainly focus on evolutionist teaching materials. For example, science textbooks are described as ‘Forcing Students to Assent to Darwin,’ and being infused with lies.⁷⁹²

Another school year is set to begin at high schools and colleges where the next round of biology students will be filled with evolutionary misinformation. At the center of this propaganda campaign are the many biology textbooks used to indoctrinate young minds with old dogma. These textbooks contain the latest evolutionary newspeak, but the underlying lies are no different.⁷⁹³

These indoctrination attempts are condemned because they are designed to expressly reach young audiences, and not only suppress counter-evolutionist data, but conceal the fact evolution is a scientifically questionable theory.⁷⁹⁴ ‘Darwinian propagandists would like the public to believe that there is no scientific debate about the adequacy of evolutionary theory,’ notes Robert Crowther, ‘though scientists have actually been

⁷⁹⁰ Sonja West, "New Book Uncovers "the Life and Lies of Charles Darwin"," Center for Science and Culture, http://www.evolutionnews.org/2009/06/new_book_uncovers_the_life_and021251.html; David Klinghoffer, "How Evolution's Co-Discoverer Discovered Intelligent Design, Part II," Center for Science and Culture, http://www.evolutionnews.org/2009/06/how_evolutions_codiscoverer_di_1021741.html.

⁷⁹¹ Casey Luskin, "Why Phillip Johnson Matters: A Biography," Center for Science and Culture, http://www.evolutionnews.org/2011/11/the_significance_of_phillip_jo053071.html.

⁷⁹² ———, "Darwinian Dogmatism Permeates Recent Biology Textbooks," Center for Science and Culture, http://www.evolutionnews.org/2011/10/darwinian_dogmatism_permeates051731.html.

⁷⁹³ Cornelius Hunter, "Back to School: Do You Know What Your Child Is Learning?," Center for Science and Culture, http://www.evolutionnews.org/2010/07/back_to_school_do_you_know_wha036971.html.

⁷⁹⁴ Casey Luskin, "Back to School with the Nsf: Targeting "Young Children" to Believe in Evolution," Center for Science and Culture, http://www.evolutionnews.org/2010/09/back_to_school_with_the_nsf_ta038071.html.

debating it ever since *The Origin of Species* was published in 1859.⁷⁹⁵ In contrast, ID proponents are depicted as defending academic freedom and the communication of scientific truth. ‘What you're promoting is called dogmatism and intolerance,’ states Luskin regarding the proevolutionist Barbara Forrest, ‘What we're promoting is called academic freedom.’⁷⁹⁶

In a number of cases CSC writers further assert that evolution is an entirely useless scientific enterprise, and that fervent evolutionists are societal parasites. ‘Evolution is worthless to experimental biology and worthless to medical research,’ remarks Egnor, ‘A lot of taxpayers realize that Darwinist “just-so stories” are of little value to the real research going on in biology and medicine.’⁷⁹⁷ This language is perhaps most striking when Egnor compares the majority of principled, civic-minded scientists with parasitic Darwin advocates:

Scientists aren't parasites. Experimental biologists, physicists, astronomers, chemists, and medical researchers are employees of the people who fund them, generally taxpayers. Most scientists do their work with humility and integrity. They understand, at least implicitly, that they have a responsibility to the public that pays their way. Few scientists engage in censorship, restriction of academic freedom, and boycotts. And they don't consider such anti-science advocacy a ‘civic responsibility;’ they exercise civic responsibility by welcoming and even encouraging questions about their scientific theories. They respectfully engage those who disagree with their scientific viewpoints. They don't censor and they don't boycott, because boycotts and censorship are ideological tactics, not scientific discourse...

I reserve the appellation “parasites” for Darwinists, at least those Darwinists who oppose academic freedom and who sneer at most Americans for whom scientific explanations in nature need not be restricted to unintelligent causes. Many

⁷⁹⁵ Robert Crowther, "What Darwin Got Wrong: Intelligent Design Proponents Welcome Fodor and Piattelli-Palmarini to the Growing Ranks of Darwin's Critics," Center for Science and Culture, http://www.evolutionnews.org/2010/02/what_darwin_got_wrong_intellig031681.html.

⁷⁹⁶ Casey Luskin, "Barbara Forrest Exposes Her Intolerance, Misrepresents Darwin-Doubting Scientist," Center for Science and Culture, http://www.evolutionnews.org/2009/10/barbara_forrest_exposes_her_int026261.html.

⁷⁹⁷ Michael Egnor, "An Open Letter to the Society for Integrative and Comparative Biology," Center for Science and Culture, http://www.evolutionnews.org/2009/03/an_open_letter_to_the_society_2017821.html.

Darwinists -- at least Darwinian fundamentalists like Myers -- are atheist ideologues who despise the religious beliefs of ordinary Americans who pay their way. Darwinist 'civic responsibility' consists of denying other people the freedom to act in accordance with their own views of civic responsibility, which include the civic responsibility to establish educational policy for their own children in their own schools.⁷⁹⁸

With added warning, evolutionists are told: 'Keep in mind that you're living off the people you're censoring and boycotting. Your livelihood is dependent on their largesse, and, in "comparative biology" vernacular, it's unwise for parasites to boycott their hosts.'⁷⁹⁹

Center for Science and Culture writers also volley comparable accusations against environmental researchers who contend that global warming is a human caused phenomenon. These claims parallel anti-global warming indictments scattered throughout AiG materials, and they involve attacking the apparent lack of empirical data and truthfulness maintained by climate-change scientists. Described as 'huckstering snake-oil salesmen and "global warming" profiteers,' these researchers are charged with trying to indoctrinate the public while hiding the actual dearth of climate change evidence.⁸⁰⁰ In particular, environmental scientists and evolutionists are together indicted with appealing to 'consensus science,' rather than genuine data.⁸⁰¹ Intelligent Design proponents, on the other hand, are characterized as fighting for the free and open exchange of ideas, with the intent of revealing science's true conclusions.

⁷⁹⁸ ———, "P.Z. Myers: Americans Who Fund Scientific Research Are an "Ignorant Mob"," Center for Science and Culture, http://www.evolutionnews.org/2009/03/pz_myers_americans_are_an_igno017961.html.

⁷⁹⁹ Egnor, "An Open."

⁸⁰⁰ Michael Egnor, "'Consensus Science' is to Science as Money-Laundering is to Finance," Center for Science and Culture, http://www.evolutionnews.org/2009/11/monckton_on_ricoscience028621.html.

⁸⁰¹ ———, "Oops. They Dumped the Original Data. You'll Just Have to Take Their Word for It.," Center for Science and Culture, http://www.evolutionnews.org/2009/12/oops_they_dumped_the_original028781.html; John G. West, "Santorum Compares Lack of Free Speech on Global Warming to Darwin Debate," Center for Science and Culture, http://www.evolutionnews.org/2009/12/santorum_compares_lack_of_free030031.html; Egnor, "Consensus Science."

Within such condemnations, evolutionists are portrayed as close-minded ideologues, foolishly ignoring or suppressing obvious ID inferences. At the same time, evolution itself is described as a type of atheistic mythology and a naturalistic religious faith, with only the appearance of being scientific. 'Darwin's theory is the creation myth of atheism,' explains Egnor, 'and for the past century Darwinists have worked very hard to impose their ideology using the science curriculum in public schools.'⁸⁰² These comments mirror similar remarks made by Institute for Creation Research writers, and they delineate that evolution is primarily 'religious dogma' and 'atheist metaphysics.'⁸⁰³ To be sure, Darwin's *Origin* is actually a 'metaphysical treatise supported by some biological speculations and those speculations give it the appearance of science,' and 'Darwin's theory is the creation myth of atheism.'⁸⁰⁴ With this in mind, CSC contributors describe proevolutionists as atheistic missionaries, who are trying to evangelize the world with Darwinist religion.⁸⁰⁵ A particularly interesting case is an article that reviews an online educational packet developed by *Nature*, which Luskin states should have been subtitled 'A [sic] evangelism packet for those wishing to spread the good news about Darwinism.' In the article Luskin explains that the packet 'is to be used not just in schools, but also in home evangelism or relationship evangelism' and he draws readers' attention to a depiction of Darwin 'with animals flocking about him (lizards, birds, monkeys, flowers, sponges, turtles, etc.), much like the pictures of Jesus

⁸⁰² Michael Egnor, "Reviewing Jerry Coyne," Center for Science and Culture, http://www.evolutionnews.org/2009/01/reviewing_jerry_coyne016301.html.

⁸⁰³ Hunter, "Back To."; Egnor, "P.Z. Myers."

⁸⁰⁴ Michael Egnor, "Happy Atheist Day," Center for Science and Culture, http://www.evolutionnews.org/2009/02/darwinist_steven_novella_endor016811.html; Klinghoffer, "How Evolution's."

⁸⁰⁵ Casey Luskin, "Nature's Microevolutionary Gems Part 2: Bird-Sized Evolutionary Change," Center for Science and Culture, http://www.evolutionnews.org/2010/07/natures_microevolutionary_gems_1037051.html; ———, "Muscling Past Homology Problems in Nature's Vertebrate Skeleton "Evolutionary Gem"," Center for Science and Culture, http://www.evolutionnews.org/2010/08/muscling_past_homology_problem037201.html.

posing with lions and lambs on some cheesy religious tract.’⁸⁰⁶ Such images are said to reflect the religious nature of evolution, and the canonization of Darwin as a sort of scientific saint to be revered at the expense of scientific data.

FIGURE 6.4
Nature’s Darwin Illustration⁸⁰⁷



Evolutionist religious zeal is also expressed as dulling its adherents with a type of insular fundamentalism, ensuring that no contrary evidence will threaten Darwinistic blind faith. In this vein, Klinghoffer remarks: ‘Responses from the Darwin faithful to anything touching upon intelligent design are often so thoughtless it takes your breath away. I guess this is how they manage to stay impervious to the evidentiary challenge to their religion -- they just don't think it through, or even read it.’⁸⁰⁸ This religious fanaticism is contrasted with ID’s scientific objectivism, and proevolutionists are often

⁸⁰⁶ Casey Luskin, "Evaluating Nature's 2009 "15 Evolutionary Gems" Darwin-Evangelism Kit," Center for Science and Culture, http://www.evolutionnews.org/2010/07/evaluating_natures_2009_15_evo036991.html.

⁸⁰⁷ Henry Gee, Rory Howlett, and Philip Campbell, "15 Evolutionary Gems: A Resource from Nature for Those Wishing to Spread Awareness of Evidence for Evolution by Natural Selection," Nature, <http://www.nature.com/nature/newspdf/evolutiongems.pdf>.

⁸⁰⁸ David Klinghoffer, "New Scientist and Jerry Coyne's Responses to ID Advocate Thomas Jefferson: Cases of Necromancy and Alzheimer's," Center for Science and Culture, http://www.evolutionnews.org/2009/07/jerry_coyne_and_new_scientists023071.html.

berated for falsely conflating ID with religious belief.⁸⁰⁹ Unlike evolution, ID is not a religion, and any claims to that effect are boldfaced lies or ignorant misrepresentations of ID's actual fundamentals. CSC writers insist that there are several other misrepresentations of Intelligent Design which have been falsely propagated by proevolutionists. Identifying these distortions, and comparing them with ID's true nature, comprises a significant element of CSC's negative contrast.

6.2.2 Negative Contrast II: Misunderstanding and Misrepresenting ID

CSC writers assert that ID has been dealt a great injustice in the way that it has been both misunderstood and misrepresented to the public. At the heart of these popular distortions are evolutionists, who are either badly informed or consciously twisting ID's image. Such claims are linked with the negative contrast described above, and one of the most significant misrepresentations mentioned by CSC contributors involves seditiously conflating ID with Young Earth Creationism and Christian fundamentalism:

In the history of modern propaganda with its technique of the Big Lie, it's hard to think of a brazen untruth more successful in shaping opinion than the one that equates intelligent design with Christian fundamentalist creationism. Almost as influential is the related lie that there is no serious scientific controversy over Darwinism, that main support pillar of contemporary materialist or naturalist doctrine.⁸¹⁰

⁸⁰⁹ Casey Luskin, "Darwinist Opposition to Academic Freedom Bills Demonstrates the Need for Legislation to Protect Academic Freedom," Center for Science and Culture, http://www.evolutionnews.org/2009/02/darwinist_opposition_to_academ017651.html; Robert Crowther, "Big Win in Texas as State Now Leads Nation in Requiring Critical Analysis of Evolution in High School Science Classes," Center for Science and Culture, http://www.evolutionnews.org/2009/03/big_win_in_texas_as_state_now018781.html.

⁸¹⁰ David Klinghoffer, "The Universe is Haunted: Reflections on the "Nature of Nature"," Center for Science and Culture, http://www.evolutionnews.org/2011/03/the_universe_is_haunted_reflec044781.html.

Luskin further explains that ‘By branding scientific views they dislike as “religion” or “creationism,” the Darwin lobby scares educators from presenting contrary evidence or posing critical questions - a subtle but effective form of censorship.’⁸¹¹

This false image is persistently contrasted with ID’s non-YEC, veritably scientific nature. Repeatedly, *News and Views* writers emphatically insist that Intelligent Design is not a form of creationism, it isn’t linked with Christian fundamentalism, and even if ID’s ‘source of the intelligence were identified as a deity, that wouldn’t make it creationism in this sense of Genesis literalism.’⁸¹² Furthermore, ‘Unlike creationism, intelligent design is an inference from scientific evidence, not a deduction from religious authority.’⁸¹³ However, CSC writers lament that no matter how many times ID proponents clearly demonstrate the wholly scientific and non-YEC nature of its enterprise, proevoutionists somehow still misapprehend ID:

It's like a kind of Alzheimer's with these guys. I have a Darwinist email correspondent who simply can't grasp that I'm not a young-earthier. He's has [sic] queried me on this more than once, and each time I respond that I am not. He then goes ahead and forgets that he asked me once before: ‘Do you really believe that the earth (and the universe) is roughly 6,000 years old?’⁸¹⁴

As a result, Anika Smith tells readers, ‘Having one’s position repeatedly mischaracterized by those who refuse to be corrected is an annoyingly common problem for intelligent design.’⁸¹⁵

⁸¹¹ Casey Luskin, "Ncse's Steve Newton and the "Creationism" Gambit," Center for Science and Culture, http://www.evolutionnews.org/2011/04/ncses_steve_newton_and_the_cre045721.html.

⁸¹² Michael Flannery, "Alfred Russel Wallace, Co-Discoverer of Evolution by Natural Selection -- and "Creationist"," Center for Science and Culture, http://www.evolutionnews.org/2010/08/alfred_russel_wallace_co-disco037401.html.

⁸¹³ "Leading Advocate of Intelligent Design Challenges Criticism of Science Exam in Britain," Center for Science and Culture, http://www.evolutionnews.org/2009/07/leading_advocate_of_intelligen022601.html.

⁸¹⁴ Klinghoffer, "New Scientist."

⁸¹⁵ Anika Smith, "Melanie Phillips Gets It Right: Why Intelligent Design Is Not Creationism," Center for Science and Culture, http://www.evolutionnews.org/2009/04/melanie_phillips_gets_it_right020061.html.

CSC writers further state that evolutionists wrongly portray ID as merely an appeal to ignorance or as a basic God of the Gaps argument. Nonetheless, Richard Sternberg tells readers, ‘The reality is that the case for Darwinian evolution is much more reasonably shown to depend on gaps,’ and evolutionists can appropriately be described as defending ‘Darwin of the gaps.’⁸¹⁶ In association with such claims, CSC contributors also bemoan insincere proevolutionist charges that ID theorists do not produce peer-reviewed research, that no peer-reviewed studies support ID, and that ID actually has no functioning research program. ‘You’ve heard it a million times, often in the same language,’ protests Klinghoffer, ‘No legitimate, peer-reviewed scientific research supports intelligent design.’⁸¹⁷ However, as West maintains, this sort of allegation is described as being patently false, even though ID proponents must overcome evolutionist censorship in order to get research published: ‘But the fact that intelligent design scholars do publish peer-reviewed articles is no thanks to Darwinists, many of whom do their best to ensure that peer-reviewed articles by intelligent design scientists never see the light of day.’⁸¹⁸ Luskin also clarifies that Intelligent Design’s critics ‘are more than welcome to disagree with ID, but if they’re going to attack ID, they may wish to at least make sure their arguments are defensible and sound.’ This is because, in direct opposition with Darwinist conjectures, ‘ID does have a working research program, as seen in the work being done at the Biologic Institute and the Evolutionary Informatics Lab, among other examples.’⁸¹⁹

⁸¹⁶ Richard Sternberg, "When "Junk DNA" Isn't Junk: Farewell to a Darwinist Standard Response," Center for Science and Culture, http://www.evolutionnews.org/2009/04/when_junk_dna_isnt_junk_farewe019981.html.

⁸¹⁷ David Klinghoffer, "No Peer-Reviewed I.D. Research. Just Ask Lauri Lebo!," Center for Science and Culture, http://www.evolutionnews.org/2011/03/no_peer-reviewed_id_research_j044851.html.

⁸¹⁸ John G. West, "Journal Apologizes and Pays \$10,000 after Censoring Article," Center for Science and Culture, http://www.evolutionnews.org/2011/06/journal_apologizes_and_pays_10047121.html.

⁸¹⁹ Casey Luskin, "NCSE Theologian Parrots Dawkins: ID "Practitioners" Are "Ignorant of Science or Seriously Deluded or Fundamentally Dishonest", " Center for Science and Culture, http://www.evolutionnews.org/2009/11/ncse_theologian_parrots_dawkin028151.html.

Additional misrepresentations include accusations that ID proponents are merely seeking monetary gain, that ID is primarily an American movement, and that ID's founders have been conspiratorially promulgating their ideas in order to lead the public away from both evolution and philosophical materialism.⁸²⁰ All of these claims are denied and contrasted with ID's true characteristics. To this end West remarks sarcastically, 'There you have it: The real reasons ID proponents persist in their fallacious views are money, ideology, politics, PR, and ego, rather than an honest quest for the truth.' He further assures readers:

As someone who has seen first-hand the personal damage inflicted by the Darwin lobby, I can assure you that if you are interested in getting money for research or protecting your reputation, you don't want to be a proponent of intelligent design. Indeed, embracing intelligent design is one of the quickest ways to destroy any prospect for government grants and to be shunned by your colleagues.⁸²¹

Center for Science and Culture contributors often specifically indict theistic evolutionists and members of the National Center for Science Education as key perpetrators of such distortions. For example, it is expressed that Kenneth Miller 'uses the same arguments against intelligent design (ID) when he lectures, and unfortunately, his arguments are not only weak, but they are rife with misrepresentations of ID.' This occurs even though 'Dr. Miller has been informed about many of these errors before, which makes it unfortunate that he continues to promote them.'⁸²² *News and Views* articles also challenge any attempts by theistic evolutionists and the NCSE to reconcile religion with Darwinism. Criticisms of these mediation efforts represent the last major facet of CSC's negative contrast.

⁸²⁰ M. "The Year."; Luskin, "Why Phillip."; John G. West, "Refuting Intelligent Design, Biologos Style," Center for Science and Culture, http://www.evolutionnews.org/2011/06/refuting_intelligent_design_bi047391.html.

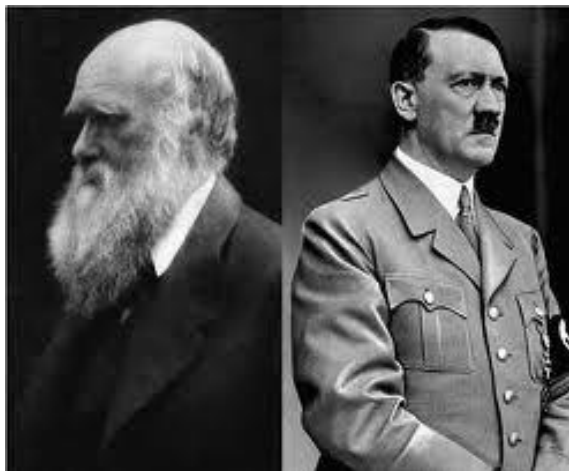
⁸²¹ West, "Refuting Intelligent."

⁸²² Casey Luskin, "Truth or Dare with Dr. Ken Miller: A Lecture Guide to the Anti-Intelligent Design Claims by Dr. Kenneth Miller," Center for Science and Culture, http://www.evolutionnews.org/2009/11/truth_or_dare_with_dr_ken_mill027891.html.

6.2.3 Negative Contrast III: Criticizing Reconciliation Efforts

News and Views writers insist that Intelligent Design's most virulent opposition frequently emanates from theistic evolutionists, such as members of BioLogos. 'One sometimes wonders what the BioLogos Foundation would do if it didn't have intelligent design (ID) as its favorite punching bag,' comments West. He adds that 'those affiliated with BioLogos seem to devote an inordinate amount of time and energy to simply bashing intelligent design.'⁸²³ While articles claim that ID proponents seek open discourse with evolutionists, Francis Collins is described as avoiding sincere dialogue, and Karl Giberson is accused of actively trying to '[s]mear the integrity' of ID.⁸²⁴ However, CSC's primary concern with theistic evolutionists is not necessarily their closed approach to ID, but their inescapable failure to reconcile religion with evolution.

FIGURE 6.5
The Darwin-Hitler Link⁸²⁵



In contrast with ID's sound empirical foundations, theistic evolution is presented as being both scientifically and theologically bankrupt. Thus Egnor remarks, 'Theories of theistic evolution are generally stated with such imprecision as to render them

⁸²³ West, "Refuting Intelligent."

⁸²⁴ John G. West, "Where's the Dialogue? Alas, Colleague of Francis Collins at "Biologos" Doesn't Offer Any," Center for Science and Culture, http://www.evolutionnews.org/2009/06/wheres_the_dialogue_alas_colle021051.html.

⁸²⁵ Joshua Youngkin, "Richard Weikart on Darwinism and Hitlerism," Center for Science and Culture, http://www.evolutionnews.org/2011/09/why_darwinism_should_keep_to_i051001.html.

sentiment rather than science,' and, 'They are generally poor theology as well.'⁸²⁶ Audiences are told that theistic evolution represents a form of 'surrender' to ontological materialism, usually 'at the cost of clarity, orthodoxy, or both.'⁸²⁷ Though people like Collins earnestly desire to integrate the 'science-flavored' theory of evolution with Christianity, Klinghoffer assures readers that these efforts are wasted on an 'impossible quest.'⁸²⁸ This is partly because, at least from a Jewish perspective, anybody who rejects ID is a heretic that necessarily rejects fundamental tenets of Jude-Christian faith.⁸²⁹ At the same time, the NCSE's endeavours to reconcile evolution with religion are characterized as disingenuous, and evolution is described as being threatening to religious belief.⁸³⁰

Amid such allegations are reports that Darwinism is a worldview essentially incompatible with religion because it is founded upon naturalism and randomness. Moreover, with its discourse on the survival of the fittest, the evolutionary worldview has provided an impetus for much evil. In fact, Darwin's ideas actually helped shape the *weltanschauung* of Hitler himself, such that 'Nazism is indeed a kind of applied Darwinism, unintended by Charles Darwin himself, of course.'⁸³¹ This Darwin-Hitler connection appears in several places throughout *News and Views*, and readers are told 'Adolf Hitler's murderous policies arose from a scientific racism inspired by Charles

⁸²⁶ Michael Egnor, "Ontology Recapitulates Philology," Center for Science and Culture, http://www.evolutionnews.org/2009/08/ontology_recapitulates_philolo023851.html.

⁸²⁷ David Klinghoffer, "Against Surrender: Richard M. Weaver's "Metaphysical Dream"," Center for Science and Culture,

http://www.evolutionnews.org/2010/05/against_surrender_richard_m_we034931.html; "God and Evolution at Biola University," Center for Science and Culture,

http://www.evolutionnews.org/2010/10/god_and_evolution_at_biola_uni038871.html.

⁸²⁸ David Klinghoffer, "Fond Dreams of Biologos," Center for Science and Culture,

http://www.evolutionnews.org/2009/05/fond_dreams_of_biologos020471.html.

⁸²⁹ ———, "A "Heretic" in Jewish Terms? Someone Who Denies Intelligent Design," Center for Science and Culture, http://www.evolutionnews.org/2009/08/a_heretic_in_jewish_terms_some024191.html.

⁸³⁰ Casey Luskin, "Eugenie Scott Claims Evolution Is Threatening to Certain Christian Traditions," Center for Science and Culture,

http://www.evolutionnews.org/2009/06/eugenie_scott_claims_evolution022041.html.

⁸³¹ David Klinghoffer, "The Strange Case of Little Green Footballs II," Center for Science and Culture, http://www.evolutionnews.org/2009/02/the_strange_case_of_little_gre_1016671.html.

Darwin's most famous ideas.' Apparently, 'In their scientific racism, little daylight passes between Hitler and Darwin,' and,

In Hitler's mind, this world-to-come would be the inevitable result of Natural Selection, a blind and unforgiving process he would merely speed along by expansionist warfare, eugenics, and institutional racism. In Hitler's view, evolutionary progress was so great an end that any means used to achieve it would be moral, even programmatic genocide.

The most ghoulish evils of Nazi foreign and domestic policy were made possible in the first place because Hitler sought to apply Darwinian concepts to the world outside the biology lecture hall. Mere ideas are not to blame for mortal suffering, true, but in light of Hitler's Ethic, the exportation of Darwinian ideas outside the confines of biological study merits close watch.⁸³²

Like ICR and AiG writers, CSC members warn of 'the uncanny way evolution has had of supplying the rationale and creating the backdrop for the most twisted, monstrous social movements that have sprung up in Western culture in the past century and half.'⁸³³ In addition to Nazism, evolution is associated with the Columbine shootings as well as eugenics.⁸³⁴ 'Darwin also laid the groundwork in *Descent of Man* for the emergence of eugenics, the crusade to breed better humans by weeding out those deemed biologically "unfit,"' notes West. 'Darwin warned that civilized societies were sinning against natural selection by helping the poor, treating the sick and inoculating people against smallpox.'⁸³⁵ Egnor explains further:

⁸³² Youngkin, "Richard Weikart."

⁸³³ David Klinghoffer, "Slouching toward Columbine: Darwin's Tree of Death," *Beliefnet*, <http://blog.beliefnet.com/kingdomofpriests/2009/04/slouching-toward-columbine-charles-darwins-poisonous-legacy.html>. quoted in John G. West, "Slouching toward Columbine: Darwin's Tree of Death," Center for Science and Culture, http://www.evolutionnews.org/2009/04/slouching_toward_columbine_dar019691.html.

⁸³⁴ West, "Slouching Toward."; David Klinghoffer, "Putting a Contemporary Face on Darwin-Inspired Eugenics," Center for Science and Culture, http://www.evolutionnews.org/2011/12/putting_a_cont054041.html.

⁸³⁵ John G. West, "There Is No 'Politically Correct' Science," *Forbes.com*, http://www.forbes.com/2009/02/05/racism-eugenics-economics-opinions-darwin09_0205_john_west.html. in Robert Crowther, "Forbes.Com Balances Darwin and Evolution Coverage with Wide Range of Thinkers on Both Sides," Center for Science and Culture, http://www.evolutionnews.org/2009/02/forbescom_balances_darwin_and016751.html.

In the atheist/Darwinian view, eugenics is moral, even virtuous. The Darwinian understanding of man's origins is that man arose through a struggle for survival. Our highest traits are the result of Natural Selection. The kindness and charity that are inherent to civilization threaten mankind, because it impairs Natural Selection, which is the source of our humanity.⁸³⁶

Though the negative effects of Darwinism are apparently quite apparent, CSC writers insist that the popular media have been whitewashing its continued detrimental influence. For example, Klinghoffer suggests that reporters intentionally did not mention the 2009 Holocaust Memorial shooter's Darwinist convictions. With this in mind, he argues that it is not reasonable to 'give Darwinism's social influence a special pass, forbidding any mention of it as somehow out of bounds.' Klinghoffer further explains that this is 'nothing less than a cover-up,' and asks readers, 'Is it somehow petty, offensive, exploitative, and beyond the pale to point out how the Holocaust Memorial Museum shooter, who murdered a guard on Wednesday, writes about evolution in his sick manifesto?' In the same article he associates evolutionary theory with numerous disreputable social movements, and enquires rhetorically, 'Should it be ignored?'⁸³⁷ Klinghoffer's series of questions not only express CSC's concerns with evolution, negative contrast, and even the Scarcity Principle, but they also represent the numerous cases of Asking Questions found throughout *News and Views*.

6.3 CSC and Asking Questions

News and Views demonstrates 847 Asking Questions incidents, which appear exclusively as rhetorical queries. These occurrences correspond with a frequency rate of 2.030 cases every 1000 words, and 1.811 incidents in the average *News and Views*

⁸³⁶ Michael Egnor, "Dr. Jeffery Shallit on Eugenic Morality: "Why, Exactly, Would the World Be Better Off with More Down's Syndrome Children?," Center for Science and Culture, http://www.evolutionnews.org/2009/05/dr_jeffery_shallit_why_is_euge020261.html.

⁸³⁷ Klinghoffer, "Whitewashing Darwinism's."

article. Like ICR and AiG propaganda, *News and Views* features a greater number of negative rhetorical questions than either neutral or positive enquiries.

FIGURE 6.6
CSC Asking Questions Subcategory Frequencies

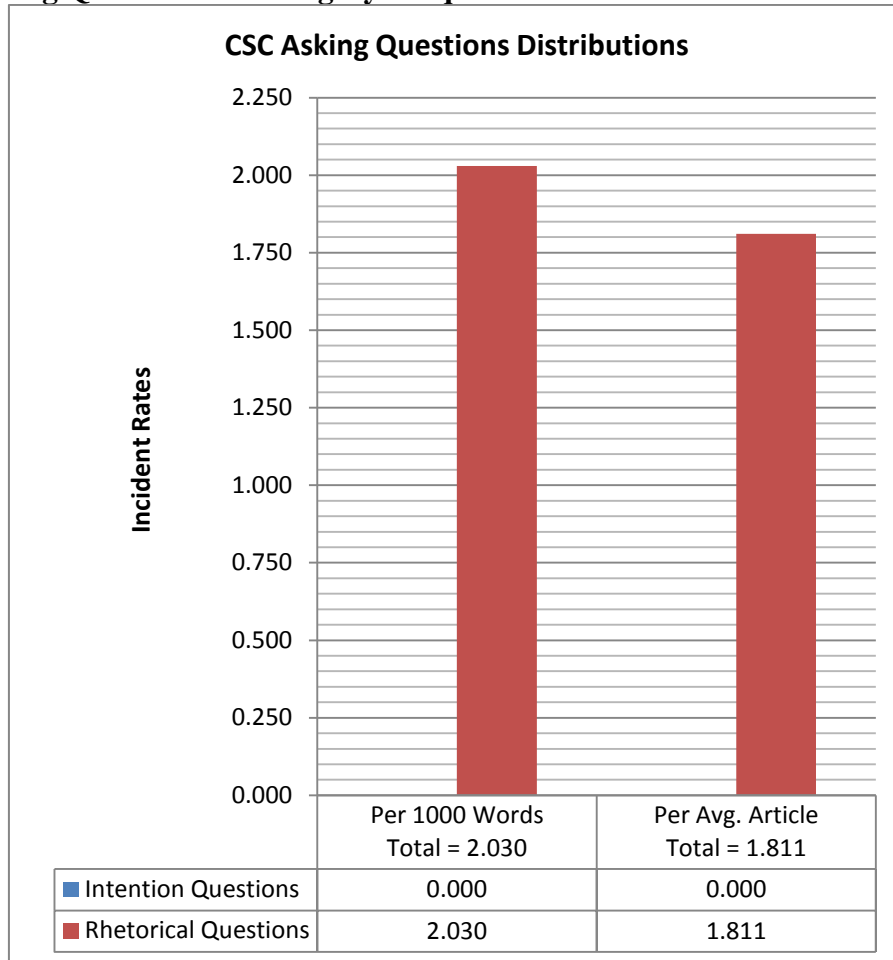
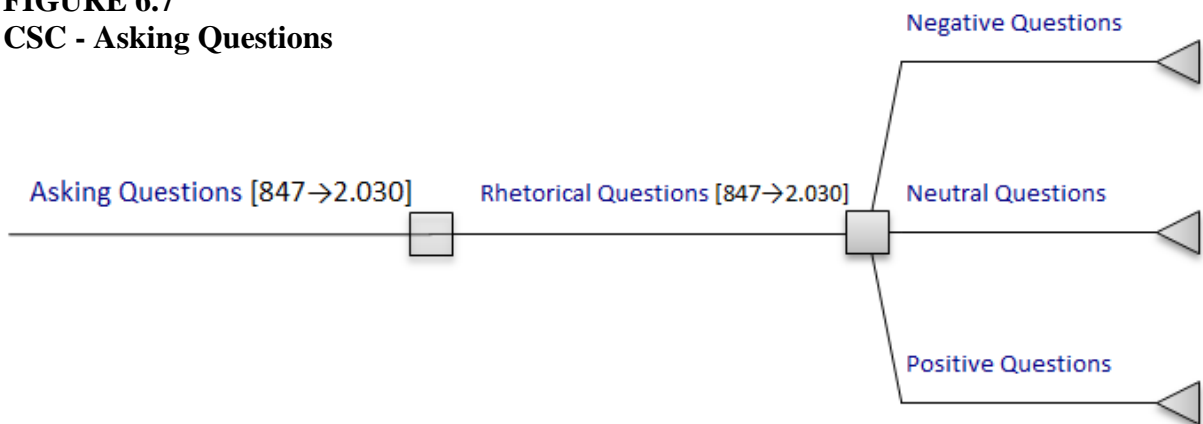


FIGURE 6.7
CSC - Asking Questions



The Center for Science and Culture’s cases of neutral rhetorical questions occur rather infrequently, and they are simply used to advance topics whilst attempting to seize the

audience's attention. Due to their rarity, such neutral cases will not be analyzed here, though CSC's negative questions are abundant and affiliated with the Contrast Principle and Negativity Effect. Such rhetorical queries cast doubt upon the scientific validity of evolution and the moral character of evolutionists.

Throughout *News and Views* articles, rhetorical questions are often utilized in response to proevolutionist scientific data, or following brief descriptions of evolutionary models. In particular, such questions tend to appear as hypophora, which are concentrated in articles written by CSC member Casey Luskin. Luskin alone has authored 151, or 32.3%, of the 468 articles analyzed within this study, and he largely employs hypophora to discredit proevolutionist evidence and conclusions. For instance, in an article entitled "A Fishy Story About Antifreeze Gene Evolution," Luskin explains that scientists have announced the likely evolutionary pathway for the origin of an Antarctic fish's antifreeze protein. After detailing the model's primary concepts, he states: 'Sounds simple and compelling, right? Don't be too impressed.' Luskin then refers back to his earlier claim that evolutionists simply employ three magic wands to 'concoct a just-so story' to explain the origin of gene sequences, with 'no details required.'⁸³⁸ Such questions are also often affiliated with refutations of anti-ID arguments. In another piece, Luskin reviews a scientific journal article critiquing ID explanations of common design. The paper, appearing in *the Journal of Eukaryotic Microbiology*, attempts to do this by using an evolutionary model for the origin of the enzyme alcohol dehydrogenase 2 in protozoa. After highlighting the main components of the article's counter-ID argument, Luskin asks the following assortment of questions:

- 'Where was the evidence for Darwinian evolution?'
- 'Is it probabilistically likely to occur?'

⁸³⁸ Casey Luskin, "A Fishy Story About Antifreeze Gene Evolution," Center for Science and Culture, http://www.evolutionnews.org/2011/01/a_fishy_story_about_antifreeze043141.html.

- ‘Perhaps, but what are the odds of a mutation fusing these two genes in the right fashion so both parts could remain functional? And is there a Darwinian pathway to fixing the other residues necessary for the ALDH half to properly function? They don't say.’
- ‘Even if such a fusion mutation is possible, does that really explain the Darwinian origin of EhADH2?’

Luskin concludes that this particular argument ‘in no way refutes “common design,” because ID predicts that non-random features will be reused in different organisms.’ He then asks readers, ‘Since that's exactly what we find, how is common design, in their words “unfounded” or “improbable?”’⁸³⁹

In similar fashion, Luskin readily employs negative questions while criticizing a myriad of other scientific data. For instance, throughout an article that surveys and assesses the weaknesses of numerous proevolutionist findings, he asks rhetorically:

- ‘This is indeed a fascinating study about the mechanisms controlling molar development in mice, but what does it have to do with natural selection?’
- ‘But is this “macroevolutionary data” or is it a study of mere comparative tooth morphology?’
- ‘Double-Jawed Moray Eels: Very Cool Structures, but What's Evolution Got to Do With It?’
- ‘Where's the Evolution?’

Correspondingly, Luskin assesses the evidence for evolution acquired from studying the differential dispersion of wild bird populations. After recapitulating proevolutionist

⁸³⁹ ———, "Critics in the Journal of Eukaryotic Microbiology Take the Easy Way out in Attacking Intelligent Design," Center for Science and Culture, http://www.evolutionnews.org/2010/01/critics_in_the_journal_of_euka030941.html.

arguments, he notes, ‘We've all heard this story before -- but is there more to it?’ In conclusion he assures readers, ‘None of this suggests how large-scale evolutionary change could occur.’⁸⁴⁰

Repeatedly such questions also appear in Luskin’s numerous attempts to dismantle and discredit academic studies used to support the evolutionary development of new genetic information. For example, in the *Kitzmiller v. Dover* trial, Judge John E. Jones accepted that a number of academic studies, cited by Kenneth Miller and used by the NCSE, adequately demonstrate evolutionary mechanisms for accruing new genetic information. Luskin asks, ‘But are Judge Jones's, Ken Miller's, and the NCSE's bold proclamations supported? Does Long et al. actually reveal the origin of new biological information?’ He immediately communicates that the answer to both questions is ‘no,’ and tells audiences that such ‘citations are largely bluffs, revealing little about how new genetic functional information could originate via unguided evolutionary mechanisms.’ In fact, ‘Judge Jones was not merely in error,’ because ‘the misinformation he propounded in his ruling entered media and academic culture, becoming enshrined as a Darwinian myth, alongside many others.’⁸⁴¹ Regarding this same subject matter, he asks audiences, ‘Can evolutionists provide a compelling -- or even plausible -- explanation for the origin of new genes?’⁸⁴² Luskin’s critical answer is implicit.

Analogous rhetorical queries permeate articles refuting proevolutionist data associated with such topics as arthropod biomimicry, comparative embryology, fossils, macroevolution, the origins of viruses, and universal common ancestry.⁸⁴³ In light of

⁸⁴⁰ Luskin, "Nature's Microevolutionary."

⁸⁴¹ Casey Luskin, "Judge Jones's Misguided NCSE-Scripted Kitzmiller Ruling and the Origin of New Functional Genetic Information," Center for Science and Culture, http://www.evolutionnews.org/2010/02/judge_joness_misguided_ncsescr031891.html#fn4.

⁸⁴² ———, "New Book, *Probability's Nature and Nature's Probability*, Provides Accessible Introduction to Technical Aspects of Intelligent Design," Center for Science and Culture, http://www.evolutionnews.org/2009/05/new_book_probability_nature_an020781.html.

⁸⁴³ ———, "Butterfly Mimicry: A "Huge" Problem for Evolutionary Biology," Center for Science and Culture, http://www.evolutionnews.org/2011/02/butterfly_mimicry_a_huge_prob044101.html; ———,

the evidential difficulties suggested by such questions, CSC writers further ask audiences how it could possibly be that Darwinists would persist in supporting the theory. Egnor explains, 'I saw that Darwinism was a Potemkin village. But it wasn't clear to me why evolutionary biologists were so passionately devoted to such pallid science. The evidence that the Darwinian understanding of biological origins was inadequate has been in hand for quite a while.' He then delivers the following series of questions:

Why, when the genetic code was unraveled, didn't scientists question Darwin's assumption of randomness? Why didn't Darwinists ask the difficult questions that are posed for their theory by the astonishing complexity of intracellular molecular machinery? Why do Darwinists claim that intelligent design is untestable, and simultaneously claim that it is wrong?⁸⁴⁴

Such queries insinuate that evolutionary scientists may not be acting aboveboard in their treatment of evolution's evidence and opposition. Other rhetorical inquiries lead audiences to similar conclusions. For instance, after conceding that a majority of scientists single-mindedly endorse evolution, Smith concludes an article by asking, 'Yet to what extent is that uniformity coerced -- specifically, by employment pressure?'⁸⁴⁵ In another article, Klinghoffer denounces attempts by proevolutionists to censor Intelligent Design scientists, and includes the following questions and remarks:

"Marsupials Embryos Develop Differently from "Virtually Every Other Vertebrate", " Center for Science and Culture, http://www.evolutionnews.org/2011/01/marsupials_embryos_develop_dif042271.html; Paul Nelson, "Seeing Ghosts in the Bushes -- or How to Keep the Theory of Evolution from Breaking Your Heart and Driving You Crazy " Center for Science and Culture, http://www.evolutionnews.org/2010/01/seeing_ghosts_in_the_bushes_or030831.html; Casey Luskin, "Nature's "Gems": Microevolution Meets Microevolution," Center for Science and Culture, http://www.evolutionnews.org/2010/08/nature_gems_microevolution_mee037171.html; ———, "Swine Flu, Viruses, and the Edge of Evolution," Center for Science and Culture, http://www.evolutionnews.org/2009/05/swine_flu_viruses_and_the_edge020071.html; ———, "Sea Monkey Hypotheses Refute the Ncse's Biogeography Objections to Explore Evolution," Center for Science and Culture, http://www.evolutionnews.org/2010/03/sea_monkey_hypotheses_refute_t032451.html.

⁸⁴⁴ Michael Egnor, "A Neurosurgeon, Not a Darwinist," Center for Science and Culture, http://www.forbes.com/2009/02/06/neurosurgeon-intelligent-design-opinions-darwin09_0205_michael_egnor.html. quoted in Crowther, "Forbes.Com Balances."

⁸⁴⁵ Anika Smith, "Playing "Science Says" Is a Political Game," Center for Science and Culture, http://www.evolutionnews.org/2011/01/playing_science_says_is_a_poli042541.html.

- ‘Did you ever think about what actually drives these people?’
- ‘How much of this is about science and how much of it is about personal status, social and professional esteem?’
- In any case, this is the current culture of science. Does anyone seriously think it doesn't impede the free exploration of ideas?’

‘One thing's clear,’ he tells readers, ‘Social anxiety plays some role in the fear and dread that intelligent design provokes among people who are too dedicated to their own brand image.’⁸⁴⁶

Rhetorical questions are markedly used when CSC writers emphasize the dubious methods wielded by evolutionists to prop up their claims. For instance, Luskin argues that evolutionists rely on appeals to authority in order to strengthen their claims, and then asks, ‘If the evidence is on their side, why do they feel the need to do this?’⁸⁴⁷ In another article he accuses an ID critic of name-calling, asking: ‘Is there a reason why evolutionists so often increase the ad hominem attacks when their case is weak?’⁸⁴⁸ Other questions are noticeably intended to mock evolutionists outright, such as when Cornelius Hunter denounces biology textbook writers. He explains, ‘The apologists make a pathetic attempt to enlist the fossil record as powerful evidence for evolution, and end up with only the usual religious dogma.’ Hunter then asks sarcastically, ‘And how do evolutionary clowns know so much? From where did Johnson and Lobos learn such ultimate truths? If evolution is not correct then such orderly change is not expected? Tell us more.’ Following this ridicule, he demands, ‘What are all the

⁸⁴⁶ David Klinghoffer, "At Bloggingheads, Fleeing the Ritual Contamination of "Creationism"," Center for Science and Culture, http://www.evolutionnews.org/2009/09/the_contamination_of_creationi024741.html.

⁸⁴⁷ Casey Luskin, "Contradictions, Irony, and Appeals to Authority Permeate the Language of Science and Faith," Center for Science and Culture, http://www.evolutionnews.org/2011/05/contradictions_irony_and_appea046961.html.

⁸⁴⁸ _____, "Gotcha! Checking Stephen Meyer's Spelling and Other Weighty Criticisms of Signature in the Cell," Center for Science and Culture, http://www.evolutionnews.org/2010/05/gotcha_on_checking_stephen_mey035051.html.

possibilities aside from evolution and why do none of them predict “such orderly change”? Why is it that evolution, and only evolution, predicts such an outcome?’⁸⁴⁹

Perhaps the most contemptuous use of rhetorical questions in this manner occurs within Egnor’s open letter to the Society for Integrative and Comparative Biology. In 2009 this organization boycotted Louisiana in reaction to the state’s Science Education Act, prompting Egnor to write the following question-infused denunciation:

Where do you think the money that you're denying the citizens of New Orleans came from?... The ordinary taxpaying God-fearing Americans you tried to slap down in Louisiana are paying your way, and they've always paid your way, while you sneered at them, ridiculed their faith, and used a judicial cudgel to indoctrinate their children in their schools. And now you think that you can blackmail them by...refusing to visit their state?...

If you're not careful, “creationists” (80% of Americans) might notice this irony: you boycott their states, but you forgot to boycott their *money*. If one percent of the people you've censored and boycotted wrote letters to their congressmen demanding a defunding of evolutionary research -- a boycott of *you* -- the grant money currently allocated to advancing Darwinist ideology (it's ideologues, not scientists, who censor) would be re-allocated to genuine non-ideological science

Do you think they'd be successful? The arguments that your allies have used would be the basis for defunding you. The appellation “consensus science” could be used as a litmus test for withdrawal of funding. Why fund research on “settled” science? Why waste precious research dollars on studying a “fact” like Darwinism, when there are so many pressing problems in medicine and other sciences that remain unsolved? Research funding properly goes to controversies, not settled issues. How many scientific theories that are taught to public school students as non-controversial are the basis for substantial federal funding? How much money does the NSF devote to research on Newtonian gravitation or heliocentrism?⁸⁵⁰

As the preceding excerpt communicates, evolutionists are accused of censoring opposing viewpoints. Section 6.5 provides a detailed analysis of such claims, but it is important to note that Center for Science and Culture writers often include rhetorical

⁸⁴⁹ Hunter, “Back To.”

⁸⁵⁰ Egnor, “An Open.” (his italics).

questions within these accusations. An illustration of this can be found in an article criticizing efforts to prohibit counter-evolutionist viewpoints from being taught in American classrooms. Egnor brings the piece to a close with the following sentences: ‘Here’s a question to ponder: most scientific disciplines welcome scrutiny and debate. That’s how science is done. Why is censorship of scrutiny so much a part of evolutionary science?’⁸⁵¹ In relation to the same topic, Luskin concludes an article by asking ‘What kind of society would we live in if Eugenie Scott and the Darwin lobby had their way, and it was illegal to ask hard questions about scientific theories? Not a good one.’⁸⁵² Likewise, Crowther uses rhetorical questions while pondering the dismissal of David Coppedge from NASA's Jet Propulsion Laboratory for distributing ID materials:

Now, though, this exemplary employee has been demoted. Why? Did he do something to jeopardize the mission? No. Was he guilty of incompetence? No. Was he lazy or just lackadaisical in his work? No. David Coppedge's sin was a thought crime, the mere willingness to challenge the ruling authority of Darwinian evolution.⁸⁵³

West examines another case of possible censorship, and addresses evolutionists with following request: ‘If you are a proponent of Darwin's theory, I'd urge you to think long and hard about how far you are willing to go down the path of trashing the Constitution.’ He then asks these individuals, ‘Are you really willing to jettison the First Amendment in your obsession to shield Darwinian theory from scrutiny?’ The article’s final two sentences further press evolutionists: ‘Are you that insecure? Do you

⁸⁵¹ Michael Egnor, "Why Is Censorship of Scrutiny So Much a Part of Evolutionary Science?," Center for Science and Culture, http://www.evolutionnews.org/2009/04/why_is_censorship_of_scrutiny019511.html.

⁸⁵² Casey Luskin, "Eugenie Scott Misrepresents the Law on Evolution Education," Center for Science and Culture, http://www.evolutionnews.org/2011/07/eugenie_scott_misrepresents_th048621.html.

⁸⁵³ Robert Crowther, "How Nasa's Jet Propulsion Laboratory Punished David Coppedge for His Views on Intelligent Design," Center for Science and Culture, http://www.evolutionnews.org/2010/04/how_nasas_jet_propulsion_labor033931.html.

think that the evidence for your theory is so weak that you need to resort to government censorship to prevent anyone from even hearing another point of view?’⁸⁵⁴

West’s rhetorical enquiries suggest that evolutionist censorship is driven by a genuine fear of rival perspectives. Allied charges are expressed by other negative questions located throughout *News and Views*. For example, on the subject of the apparent suppression of an ID movie screening, Luskin asks ‘Are Darwin's defenders so paranoid that they are afraid of a single night's movie showing?’ He promptly tells readers, ‘The evidence would indicate that the answer is “yes.” The evidence also shows that the showing was cancelled precisely because of that paranoia.’⁸⁵⁵

Proevolutionist responses to other ID film presentations are similarly criticized. West asks, ‘Are Darwinists really so afraid of the evidence that this is the best they can muster?’ , while Crowther notes, ‘If Darwin's theory is the be all end all of science, why are they so worried by a small, independent film? Because, it is the power of the ideas in the film that have them scared.’⁸⁵⁶ Similarly, Luskin describes the proevolutionist ‘censorship agenda’ in education, and wonders ‘What makes evolutionists so scared that they must resort to these tactics?’⁸⁵⁷

Negative rhetorical queries are also associated with CSC assertions that evolution is linked with social evils and that endeavours to reconcile Darwinism with religion will ultimately fail. Hence, various *News and Views* contributors ask, ‘Can

⁸⁵⁴ John G. West, "Why the California Science Center's Censorship of Pro-Intelligent Design Film is a Big Deal," Center for Science and Culture, http://www.evolutionnews.org/2009/12/why_the_california_science_cen030421.html.

⁸⁵⁵ Casey Luskin, "Documents Reveal Intolerance Towards Intelligent Design at the California Science Center," Center for Science and Culture, http://www.evolutionnews.org/2010/08/documents_reveal_intolerance_t037441.html.

⁸⁵⁶ John G. West, "Reality Check: Oklahoma Darwinists' "Gotcha" Moment at Cambrian Explosion Film Falls Flat," Center for Science and Culture, http://www.evolutionnews.org/2009/09/reality_check_oklahoma_darwini026071.html; Robert Crowther, "In Oklahoma, Darwinist Choir Sings the Praises of Suppression and Censorship," Center for Science and Culture, http://www.evolutionnews.org/2009/09/its_funny_how_a_little025351.html.

⁸⁵⁷ Casey Luskin, "Texas Evolution Lobby Making Power Grabs to Promote Their Censorship Agenda," Center for Science and Culture, http://www.evolutionnews.org/2009/05/texas_evolution_lobby_making_p020811.html.

Darwinists Condemn Hitler and Remain Consistent with Their Darwinism?,' 'But how can God "direct" an "undirected" process?,' and, 'Does Darwinism jive with traditional morality and faith in God?'⁸⁵⁸ Furthermore, such questions exist within claims that evolutionists misrepresent ID time and again. In one CSC article evaluating anti-ID essays published in a philosophy journal, Luskin explains, 'A tragically amusing article in the issue of *Synthese* is John Wilkins' piece with the less-than-civil title, "Are creationists rational?"' Irritated, he goes on to ask, 'And of course guess what gets lumped as the same as "creationism"? You guessed it: intelligent design.'⁸⁵⁹ Elsewhere Luskin asks in amazement, 'Can't these top-rate philosophers rebut ID without misrepresenting the arguments?'⁸⁶⁰

In addition to these negative queries, CSC contributors also use positive rhetorical questions to lead audiences towards pro-ID conclusions. These positive questions are less common than the negative variety, though their presence is still important. Most frequently, such positive questions reinforce that Intelligent Design is a valid option for explaining scientific data. 'Which suits biology better,' asks Luskin, 'ID-inspired language that allows purpose, or the newspeak of evolutionary biology which disallows any mention of purpose?'⁸⁶¹ Regarding the improbability that unguided chance and necessity would select precisely the 20 amino acids used in living

⁸⁵⁸ Richard Weikart, "Can Darwinists Condemn Hitler and Remain Consistent with Their Darwinism?," Center for Science and Culture, http://www.evolutionnews.org/2011/10/can_darwinists_condemn_hitler052331.html; John G. West, "God and Evolution: A Response to Stephen Barr (Part 2)," Center for Science and Culture, http://www.evolutionnews.org/2009/06/god_and_evolution_a_response_t_1021691.html; Anika Smith, "Unbelievers at the Holidays: Two Different Takes on Why There Are Still Doubts About Darwin," Center for Science and Culture, http://www.evolutionnews.org/2009/11/unbelievers_at_the_holidays_tw028591.html.

⁸⁵⁹ Casey Luskin, "Condescension, Sneers, and Outright Misrepresentations of Intelligent Design Pass for Scholarship in *Synthese*," Center for Science and Culture, http://www.evolutionnews.org/2011/01/condescension_sneers_and_outri042641.html.

⁸⁶⁰ _____, "Why Can't Intelligent Design Critics in *Synthese* Accurately Represent Their Opponents?," Center for Science and Culture, http://www.evolutionnews.org/2011/01/why_cant_intelligent_design_cr042651.html.

⁸⁶¹ _____, "The "Newspak" of Evolutionary Biology Hopes to Banish the Term "Design," by Design," Center for Science and Culture, http://www.evolutionnews.org/2011/04/the_newspak_of_evolutionary_b045551.html.

systems, Jonathan M. speculates, 'If chance and necessity are seemingly inadequate, either on their own or in co-operation, what about the causal powers of agent causality?'

In his conclusion he goes on to state:

If, in every other realm of experience, such features are routinely attributed to intelligent causes, and we have seen no reason to think that this intuition is mistaken, are we not justified in positing and inferring that these systems we are finding in biology also originated at the will of a purposive conscious agent?⁸⁶²

Other questions draw audiences to analogous suppositions:

- 'But there is no good reason why evidence for design cannot be considered in whatever area it is found. When one discovers the same fine-tuning inside the cell that one finds in the universe as a whole, why shouldn't one be able to draw the same inference?'⁸⁶³
- 'Is there something greater at work here which transcends the mere demands of survival and reproduction?'⁸⁶⁴
- 'Any scientist committed to the pursuit of truth must follow the evidence where it leads. Can the elegant processes that regulate antibody development provide insights for how living organisms may be designed to adapt to changes in the environment?'⁸⁶⁵
- 'This suggests purpose, intelligence, thought, design. Or is there something I'm missing?'⁸⁶⁶

⁸⁶² Jonathan M., "Does Life Use a Non-Random Set of Amino Acids?," Center for Science and Culture, http://www.evolutionnews.org/2011/04/does_life_use_a_non-random_set045661.html.

⁸⁶³ West, "Where's the."

⁸⁶⁴ Casey Luskin, "When Evolutionary Psychology Collides with Moralities," Center for Science and Culture, http://www.evolutionnews.org/2010/08/when_evolutionary_psychology_c037691.html.

⁸⁶⁵ Donald L. Ewert, "Adaptive Immunity: Darwinism in Miniature or High-Tech Tinkering with Stasis?," Center for Science and Culture, http://www.evolutionnews.org/2010/11/adaptive_immunity_darwinism_in040561.html.

⁸⁶⁶ David Klinghoffer, "A Good Question from Michael Denton About the Fixity of Animal Body Plans," Center for Science and Culture, http://www.evolutionnews.org/2011/09/post_30050611.html.

Finally, positive rhetorical questions are occasionally used to supplement *News and Views* pleas for ID to be taught in American schools, and CSC assertions that including legitimate antievolutionist data in science pedagogy encourages academic freedom. ‘It is not logical to have both sides of an argument represented?’ asks a teenage columnist, ‘It is a part of the scientific process to test a hypothesis, but if you only test the one variable, how are our future generations going to know the validity of the other side?’⁸⁶⁷ Elsewhere a CSC contributor wonders ‘why is academic freedom bad?’ while Luskin asks audiences, ‘But isn't that what science is about: encouraging students to think skeptically, and not dogmatically?’⁸⁶⁸ Not only do many of these questions steer readers towards pro-ID conclusions, but they also invoke the authority of what science apparently is, and what it is meant to do. In this way, such questions are affiliated with CSC’s numerous appeals to the credibility of science, and the tremendous weight of scientific evidence that is said to brace ID.

6.4 CSC and Source Cues

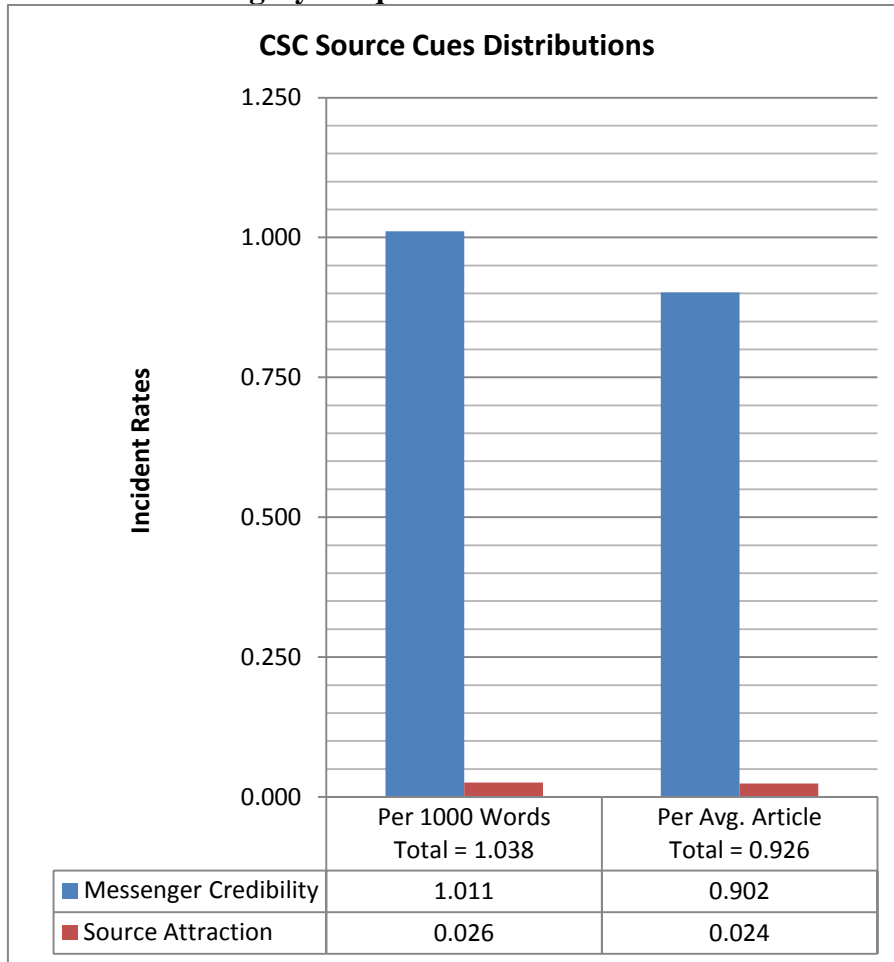
News and Views contains the lowest frequency rate of Source Cues when compared with ICR or Answers in Genesis communications. Consequently, the Center for Science and Culture is the only group that does not exhibit this variable as its most ubiquitous persuasive element. In fact, with 1.038 occurrences per 1000 words, CSC materials actually demonstrate a Source Cue recurrence value that is less than half of what is found in either ICR or AiG propaganda. Represented by only 433 incidents,

⁸⁶⁷ Noel Bauer, "Letters: Bill Doesn't Exclude Evolution, Warming," Knoxnews.com, <http://www.knoxnews.com/news/2011/may/26/letters-bill-doesnt-exclude-evolution-warming/>. quoted in "Tennessee Teen Schools Columnist on Evolution and Science Education," Center for Science and Culture, http://www.evolutionnews.org/2011/06/tennessee_teen_schools_knoxvil047171.html.

⁸⁶⁸ "Reviewing a Law Review: A Darwin Defending Law Professor Seeks New Ways to Censor Skeptics," Center for Science and Culture, http://www.evolutionnews.org/2011/08/reviewing_a_law_review_a_darwi049011.html; Casey Luskin, "Louisiana Preserves Science Education Act That Encourages Academic Freedom to Discuss Criticisms of Darwinism," Center for Science and Culture, http://www.evolutionnews.org/2011/05/science_law_and_economics_come046871.html.

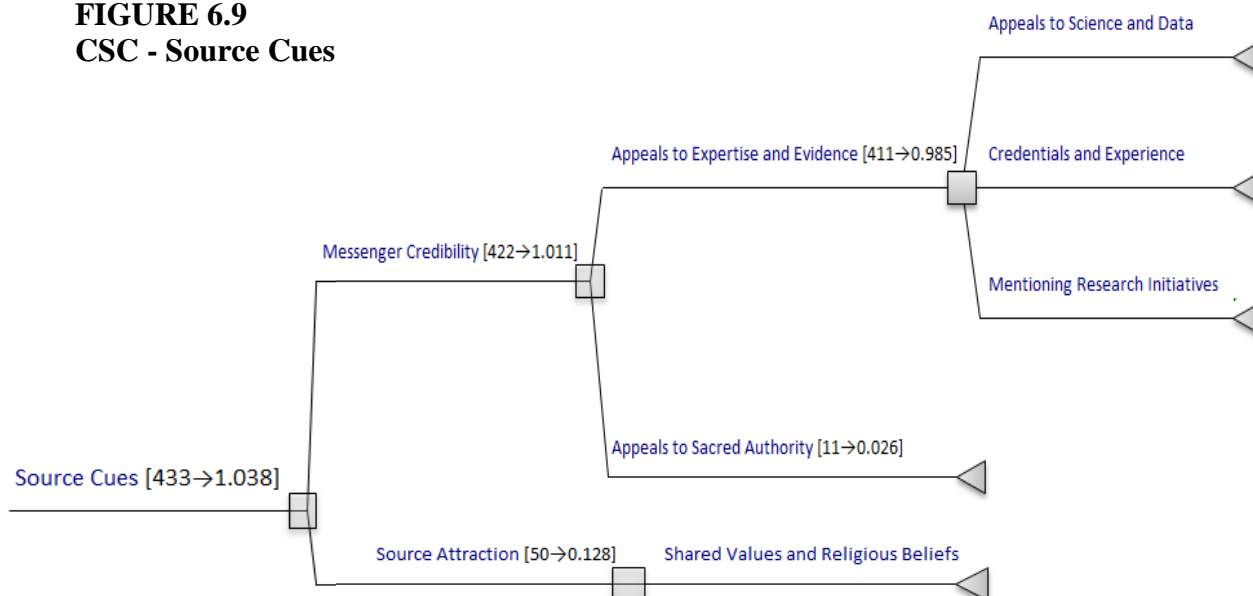
0.926 appearances of this ELM cue can be identified in the average *News and Views* article.

FIGURE 6.8
CSC Source Cues Subcategory Frequencies



Also, just 12 occurrences are classified as Source Attraction, which means that CSC further demonstrates the lowest frequency rate of this Source Cue subcategory. Particularly idiosyncratic of *News and Views* is that it contains only 11 appeals to sacred authority, which is indicative of CSC’s assertion that Intelligent Design is not a religious enterprise. Therefore, CSC’s incidents of Source Cues are primarily cases of Messenger Credibility involving appeals to evidence and expertise.

FIGURE 6.9
CSC - Source Cues



Unlike within Institute for Creation Research and Answers in Genesis materials, *News and Views* articles do not typically contain profiles outlining the credentials of each contributing writer. On the few occasions that such profiles are included, however, the *News and Views*' editor often provides a brief note at the beginning of an article listing the writer's prestigious education, scientific accomplishments, and academic awards. For example, in a piece by Ann Gauger, entitled 'The Frailty of the Darwinian Hypothesis, Part 1,' the editor details Gauger's educational background and research achievements, including a post-doctoral fellowship at Harvard and several research awards.⁸⁶⁹ More commonly, though, CSC writers simply emphasize the expertise of ID proponents when mentioning their names and their important contributions to the corpus of Darwin-sceptic work. Furthermore, after describing an ID supporter's academic proficiencies, *News and Views* articles sometimes emphasize that such individuals are "genuine" scientists. These statements are typically used to counter assertions that the ID movement does not possess credentialed researchers. This is demonstrated in an article responding to anti-ID statements made by Barbara Forrest concerning the

⁸⁶⁹ Ann Gauger, "The Frailty of the Darwinian Hypothesis, Part 1," Center for Science and Culture, http://www.evolutionnews.org/2009/07/the_frailty_of_the_darwinian_h022901.html.

evolution-sceptic Don Ewert. 'Don Ewert earned his Ph.D. in microbiology from the University of Georgia in 1976, and did his post doc under the father of evolutionary immunology, Max Cooper, at the University of Alabama,' explains the article. Details are further provided about his research at the 'prestigious Wistar Institute,' Ewert's publications 'in leading scientific journals,' and his funding from the NIH, NSF, and the Department of Agriculture. Readers are then told, 'Don Ewert is a *credible scientist* if there ever was one, and he holds serious scientific doubts about neo-Darwinian evolution.'⁸⁷⁰ Similar wording is employed when Harvey Mansfield, a Darwin-critic from Harvard, is described as 'a *serious scholar* who knows what he's saying.'⁸⁷¹

Additionally, Center for Science and Culture writers frequently mention if an ID advocate holds an academic degree from an esteemed university. Such comments are illustrated in numerous references to CSC's director, Steve Meyer. Repeatedly, *News and Views* articles explain that Meyer 'earned his PhD from Cambridge University,' and that he is 'a Cambridge PhD,' 'Cambridge-educated,' and 'Cambridge University-trained.'⁸⁷² Plus, other notably credentialed scientists from around the world are described as approving of Meyer's work, and as being part of ID's well-educated global community. 'Scientists who have endorsed Meyer's book include one of the U.K's top geneticists, Dr. Norman C. Nevin,' explains a *News and Views* article, 'O.B.E., Emeritus Professor in Medical Genetics, Queen's University, Belfast, who has praised

⁸⁷⁰ Luskin, "Barbara Forrest." (my italics)

⁸⁷¹ Anika Smith, "Mansfield Mans up in Critique of Evolution," Center for Science and Culture, http://www.evolutionnews.org/2009/03/mansfield_mans_up_in_critique018901.html. (my italics)

⁸⁷² ———, "Blown Away by Signature in the Cell," Center for Science and Culture, http://www.evolutionnews.org/2009/09/blown_away_by_signature_in_the024761.html; Robert Crowther, "Following the Evidence vs. Framing Science: Stephen Meyer and Chris Mooney, Monday on Medved," Center for Science and Culture, http://www.evolutionnews.org/2009/11/framing_science_vs_following_t028271.html; ———, "Can DNA Prove the Existence of an Intelligent Designer? An Interview with Stephen Meyer," Center for Science and Culture, http://www.evolutionnews.org/2010/07/can_dna_prove_the_existence_of036451.html; "Leading Advocate."

Signature in the Cell as “a landmark in the intelligent design debate.”⁸⁷³ Furthermore, Logan Gage remarks that ‘My friends in the ID movement have doctorates from Cambridge, The University of Chicago, University of Pennsylvania, CalTech, etc. They've done post-docs at Columbia, Harvard, and other major institutions.’⁸⁷⁴

While highlighting the expertise of Intelligent Design supporters, *News and Views* contributors also repeatedly stress that such individuals are generating peer-reviewed academic publications. These comments overlap with declarations that numerous credible ID research projects exist, and they affirm that ‘there are peer-reviewed scientific critiques of neo-Darwinian evolution in the mainstream scientific literature.’⁸⁷⁵ This is exemplified within articles mentioning James Le Fanu, a ‘distinguished British physician and author of peer-reviewed medical journal essays,’ and as Klinghoffer further notes, also a Darwin-sceptic:⁸⁷⁶

A British medical doctor who publishes in peer-reviewed medical journals like the *Journal of the Royal Society of Medicine* and the *British Medical Journal*, a columnist for the *London Telegraph*, winner of the *Los Angeles Times Book Award* for his book *The Rise and Fall of Modern Medicine* (2001), Dr. Le Fanu turns out to be a flaming Darwin doubter, too.⁸⁷⁷

In this way, the expression ‘peer-reviewed’ is used as a marker of credibility, distinguishing the academic authority of ID’s promoters, and the research which validates antievolutionism. As a result, CSC writers stress the peer-reviewed support for ID, often mentioning when an ID supporter publishes peer-reviewed work, or if a conceivably pro-ID paper appears within academic journals:

⁸⁷³ "Leading Advocate."

⁸⁷⁴ Gage, "Intelligent Design."

⁸⁷⁵ "Radio Hot Talker Thom Hartmann Uses Classic Darwin Lobby Tricks to Ignore Challenges to Evolution," Center for Science and Culture, http://www.evolutionnews.org/2011/07/radio_hot_talker_thom_hartmann048451.html.

⁸⁷⁶ Klinghoffer, "Who Is."

⁸⁷⁷ David Klinghoffer, "Who Is James Le Fanu?: Part I: Darwin Doubter Signals Paradigm Shift in Evolution Debate," Center for Science and Culture, http://www.evolutionnews.org/2009/04/who_is_james_le_fanu_i019451.html.

- ‘Peer-Reviewed Research Paper on Plant Biology Favorably Cites Intelligent Design and Challenges Darwinian Evolution.’⁸⁷⁸
- ‘Peer-Reviewed Pro-Intelligent Design Article Endorses Irreducible Complexity.’⁸⁷⁹
- ‘Peer-Reviewed Pro-Intelligent Design Paper Suggests “Agents” and “Choice Contingency” Needed to Explain Life's Programming.’⁸⁸⁰
- ‘Doug Axe of Biologic Institute has a new peer-reviewed scientific paper in the journal *BIO-Complexity* titled “The Limits of Complex Adaptation: An Analysis Based on a Simple Model of Structured Bacterial Populations.”’⁸⁸¹
- ‘Scientific critiques of modern Darwinian theory have a legitimate scientific basis in peer-reviewed scientific studies and teaching students about these scientific arguments against Darwinian evolution in no way injects religion into the classroom.’⁸⁸²
- In the peer-reviewed article he wrote for *Applied Mathematics Letters*, Sewell argued that the basic principles underlying the second law of

⁸⁷⁸ Casey Luskin, "Peer-Reviewed Research Paper on Plant Biology Favorably Cites Intelligent Design and Challenges Darwinian Evolution," Center for Science and Culture, http://www.evolutionnews.org/2010/12/peer-reviewed_research_paper_o042191.html.

⁸⁷⁹ ———, "Peer-Reviewed Pro-Intelligent Design Article Endorses Irreducible Complexity," Center for Science and Culture, http://www.evolutionnews.org/2011/01/peer-reviewed_pro-intelligent042261.html.

⁸⁸⁰ ———, "Peer-Reviewed Pro-Intelligent Design Paper Suggests "Agents" and "Choice Contingency" Needed to Explain Life's Programming," Center for Science and Culture, http://www.evolutionnews.org/2011/01/peer-reviewed_pro-intelligent_042251.html.

⁸⁸¹ ———, "Bio-Complexity Paper Shows Many Multi-Mutation Features Unlikely to Evolve in History of the Earth," Center for Science and Culture, http://www.evolutionnews.org/2011/01/bio-complexity_paper_shows_man042611.html.

⁸⁸² John G. West, "Scientists Issue Letter Supporting Louisiana Science Education Act," Center for Science and Culture, http://www.evolutionnews.org/2011/05/scientists_issue_letter_supportor046881.html.

thermodynamics, when properly applied, might be a bar to Darwinian evolution after all.⁸⁸³

Moreover, *News and Views* authors also elucidate that there is not only an impressive collection of peer-reviewed ID articles, but a growing contingent of antievolutionist scientists. This company of Intelligent Design scientists are referred to as a source of credibility for the CSC's antievolutionist claims. For example, Luskin tells readers, 'a critical mass of well-credentialed scientists in fact don't support neo-Darwinian evolution,' and even though the majority of scientists endorse evolution 'there are credible scientists who dissent from it--hundreds of Ph.D.s in fact--and that there are plenty of discussions of doubts about core claims of neo-Darwinism in the scientific literature.'⁸⁸⁴ Readers are also told of 'the 800+ scientists who have courageously signed a statement agreeing that they are skeptical of the creative power of natural selection,' and that, 'For decades now, a growing minority of scientists have argued that the standard explanations of biological origins are prime examples of this--cherished ideas that are spectacularly wrong.'⁸⁸⁵ Though Social Cues are not particularly common in CSC materials, such assertions overlap with Social Proof, as they describe how an important, multiplying population of scientists is championing ID. In this vein, Crowther tells audiences, 'Look for more scientists hammering Darwin's coffin shut at a campus near you in the future. In the meantime, just peruse the scientific literature and you'll see the nails have already been driven pretty deep.'⁸⁸⁶

⁸⁸³ Casey Luskin, "The First Law of Darwin Lobbying and the Second Law of Thermodynamics," Center for Science and Culture, http://www.evolutionnews.org/2011/06/the_first_law_of_darwin_lobbyi044561.html.

⁸⁸⁴ ———, "NPR Interview on Texas Evolution Decision Reveals Media Bias," Center for Science and Culture, http://www.evolutionnews.org/2009/04/npr_interview_on_texas_evoluti019301.html.

⁸⁸⁵ Luskin, "Evaluating Nature's."; Douglas Axe, "The Science of Denial," Center for Science and Culture, http://www.evolutionnews.org/2009/10/the_science_of_denial026381.html.

⁸⁸⁶ Robert Crowther, "Uk Education Ministry and Smu Prof Want Kids to Sit Down & Shut up About Flaws with Darwinism," Center for Science and Culture, http://www.evolutionnews.org/2010/09/i_was_treated_to_a038651.html.

What's more, *News and Views* contributors also insist that a throng of celebrated scientists, philosophers, and theologians throughout history were ID proponents. The credibility of these individuals is then used to validate ID claims and increase the Messenger Credibility of CSC. As Egnor explains:

ID has a long pedigree in science and philosophy. The great Greek philosophers -- Socrates, Plato, Aristotle, Plotinus -- noted the obvious evidence for design in nature, and the design inferences of leading Christian theologians -- Augustine, Aquinas, Abelard, Pascal -- were inferences to evidence in nature and did not depend on a literal reading of Genesis. Most (virtually all) of the great scientists since the enlightenment (Copernicus, Galileo, Newton, Kepler, Pascal, Faraday, Maxwell, Einstein, Planck, Schrodinger) inferred design in nature. ID has been the scientific understanding of nature throughout most of history. ID didn't 'evolve' from creationism.⁸⁸⁷

In another article Egnor contends that 'Copernicus, Galileo, Newton, Faraday, Maxwell, and Einstein all believed that nature revealed intelligent agency.'⁸⁸⁸

Such assertions resemble ICR statements that a crowd of scientific pioneers were creationist allies. However, *News and Views* cases tend to differ in their references to the academic authority of non-Christians. Particularly notable are several appeals to the scientific credibility of Alfred Russell Wallace and his authority as a co-founder of natural selection. For instance, West notes excitedly that 'significant numbers of philosophers, scientists, and other scholars have espoused some form of intelligent design over the past century, including the co-discoverer of the theory of evolution by natural selection, Alfred Wallace!'⁸⁸⁹ Michael Flannery also explains that 'Wallace believed that nature gives manifest evidence of "creative power, directive mind, and ultimate purpose,"' and boasts, 'That's right, *the co-discover of natural*

⁸⁸⁷ Egnor, "Reviewing Jerry."

⁸⁸⁸ Michael Egnor, "Jerry Coyne: "...Adherence to ID... Should Be Absolute Grounds for Not Hiring a Science Professor.," Center for Science and Culture,

http://www.evolutionnews.org/2011/03/jerry_coyne045001.html.

⁸⁸⁹ West, "Why the."

*selection--indeed, the man who prompted Darwin to stop dawdling and rush his *Origin of Species* to press--believed in intelligent design!*⁸⁹⁰ Through these claims, CSC contributors annex the authority of one of the authors of natural selection, and even argue that Wallace was ‘effectively the founder’ of ID.⁸⁹¹ Therefore, even while Darwin was apparently advancing a materialistic view of evolution and the origin of species, natural selection’s co-founder was in fact a veritable ID supporter, who would have approved of CSC’s interpretation of science.

Additionally, Center for Science and Culture writers maintain that the United States’ founding fathers had important Intelligent Design leanings, and that these suppositions influenced the Declaration of Independence. In this way, *News and Views* contributors acquire both Messenger Credibility and Source Attraction by affiliating ID with the very naissance of America. These claims are evident within discussions of Thomas Jefferson and his apparent ID sensibilities. Klinghoffer tells American readers that ‘we can trace our own liberty back to [Jefferson’s] ideas, which are branches from an intellectual tree that is today called “intelligent design,”’ and, ‘If you like the Declaration of Independence, thank intelligent design.’⁸⁹² Likewise, Meyer notes that Jefferson and the founding fathers adhered to noteworthy ID concepts, basing ‘their vision on a belief in an intrinsic human dignity, bestowed by virtue of our having been made according to the design and in the image of a purposeful creator.’ With this in mind he concludes: ‘The growing evidence of design in life has stunning and gratifying implications for our understanding of America’s political history--and for our country’s future. On the anniversary of the Declaration of Independence, the evidence for

⁸⁹⁰ Michael Flannery, "Smu Religious Studies Professor Mark A. Chancey Attempts to Discredit Intelligent Design with Bad History," Center for Science and Culture, http://www.evolutionnews.org/2010/10/smu_religious_studies_professo039081.html. (his italics)

⁸⁹¹ David Klinghoffer, "How Microscopy Hastened the Demise of Darwinism," Center for Science and Culture, http://www.evolutionnews.org/2011/02/how_microscopy_hastened_the_de043551.html.

⁸⁹² Klinghoffer, "New Scientist."

“Nature's God” and thus for the reality of our rights, is stronger than ever.⁸⁹³ This comment not only refers to ID’s role in the founding of America, but also to the accumulation of pro-ID evidence from which CSC writers also garner Messenger Credibility.

News and Views writers clarify that ID’s credibility is fixed upon the authority of scientific evidence, and that the integrity of CSC’s message comes from a host of ID-confirming data. West remarks, ‘The debate over design in nature has been one of the great debates in Western civilization reaching back as far as Plato.’ Furthermore, this dispute is destined to continue, because the ‘accumulated evidence for intelligent design supplied by discoveries in physics, cosmology, astronomy, chemistry, biology, mathematics and related fields is simply too great.’⁸⁹⁴ Readers are told of ‘the overwhelming scientific evidence that favors design in biology,’ that ‘ID is based on the available scientific data,’ and that the ‘possibility of an intelligent cause is both a valid scientific assumption, and borne out by the evidence itself.’⁸⁹⁵ Additionally, Intelligent Design is not only fortified by scientific data, but is itself an incredibly useful scientific paradigm, which best fits all of the scientific facts. ‘The benefits of an ID model are potentially wide-ranging,’ notes Donald E. Johnson. ‘If ID had been accepted, virtually all data recently found concerning the universe's fine tuning, the complexity of life, and the information of life (including in “junk DNA”) would be seen as confirmation of the ID model.’⁸⁹⁶ Such statements often accompany incidents of the Contrast Principle and

⁸⁹³ Stephen C. Meyer, "We Hold Some Truths to Be Self Evident," Center for Science and Culture, http://www.evolutionnews.org/2010/07/we_hold_some_truths_to_be_self036411.html.

⁸⁹⁴ West, "Where's the."

⁸⁹⁵ Egnor, "Reviewing Jerry.;" "New Centre for Intelligent Design Opens in Uk," Center for Science and Culture, http://www.evolutionnews.org/2010/09/new_centre_for_intelligent_des038621.html; Luskin, "Peer-Reviewed Pro-Intelligent."

⁸⁹⁶ Donald E. Johnson, *Probability's Nature and Nature's Probability : A Call to Scientific Integrity* (Charleston: BookSurge, 2009), 108. Quoted in Luskin, "New Book."

Negativity Effect, as the persistent increase in data supporting ID is compared with the apparent shortage of evidence reinforcing Darwinism:

In a year in which Darwin's disciples were celebrating the 200th anniversary of his birth that the 150th anniversary of the publication of *On the Origin of Species*, mainstream scientific journals published articles declaring: 1) the modern synthesis was dead, 2) Darwin's tree of life should be abandoned, 3) new "missing links" were a bust, 4) limits to Darwinism were demonstrated in the lab, 5) evolutionary icons like the peppered moths reverted back to their old colors, 6) the Cambrian Explosion lacks any plausible materialist explanation, and 7) an interdisciplinary revolution is occurring in biology that rejects the reductionist paradigm of Darwinian evolution. Meanwhile the evidence for design continues to mount with 1) peer-reviewed articles and books by ID theorists, 2) the information content in DNA demanding a non-materialistic source, 3) scientists continuing to "reverse engineer" amazing designs from biological systems, and 4) the irreducible complexity in living systems continuing to be discovered and documented. Wow, what a year!⁸⁹⁷

As has been mentioned previously, occasionally *News and Views* writers also amass Messenger Credibility by stating that ID is associated with a vigorous research agenda. Such assertions serve to bolster Intelligent Design's genuinely scientific foundation, and they are used to oppose complaints that ID does not have functional research ventures. 'The anti-ID crowd has an old canard about there being no serious scientists who doubt Darwin, let alone any that support intelligent design,' notes Crowther, 'And they like to say that there is no science being done by ID scientists. Both ideas are not just false, but absurdly so.'⁸⁹⁸ Crowther then directs readers to the work of numerous ID scientists.

Unlike ICR propaganda, CSC communications rarely include images of science-in-action, and very few cases of Source Attraction accompany *News and Views*

⁸⁹⁷ Casey Luskin, "Access Research Network Publishes Top Intelligent Design Stories for 2009," Center for Science and Culture, http://www.evolutionnews.org/2010/01/access_research_network_publis030881.html.

⁸⁹⁸ Robert Crowther, "European Scientists Working in Conjunction with Biologic Institute," Center for Science and Culture, http://www.evolutionnews.org/2009/08/eropean_scientists_working_in023781.html.

Messenger Credibility incidents. These infrequent occurrences include pictures of the American flag or other U.S. cultural symbols, along with relatively intermittent statements that ID members support important socio-religious values. For example, after outlining various links between Darwinism and eugenics, Egnor details his own perspective, which would resonate with a theist audience:

I believe that man is created by God, for a purpose, and that each of us is in part the image of God. Our dignity is that we carry that image. We are not mere animals to be bred and culled. Our dignity is not that we are smart, or strong, or that we have prevailed in our struggle for survival. Our dignity is that we are human and carry our Creator's image, and we retain that full dignity despite the accidents of illness or genetics.⁸⁹⁹

Notably, on the few occasions that *News and Views* articles do integrate cultural symbols these images appear within articles discussing the assiduous censorship of counter-Darwinist ideas by evolutionists. It is to these important allegations that this study will now turn.

FIGURE 6.10
CSC Use of American Symbols⁹⁰⁰



6.5 CSC and the Scarcity Principle

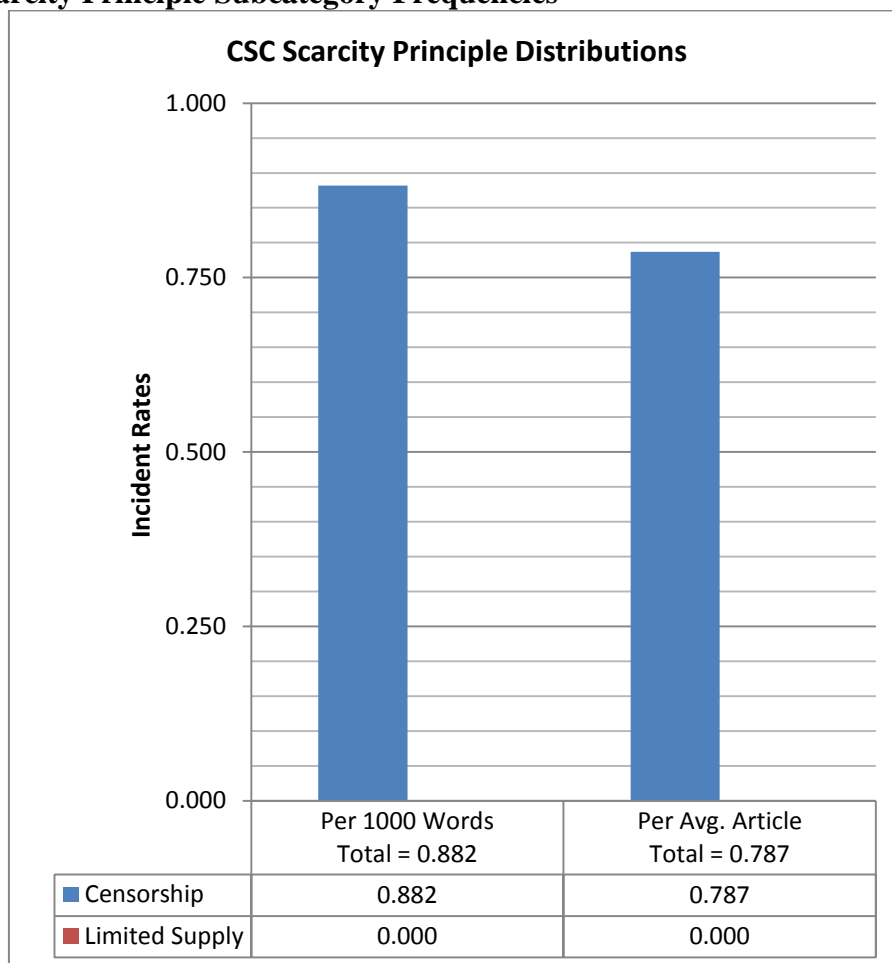
One of the most characteristic features of CSC propaganda is that it exhibits a substantial number of Scarcity Principle incidents. These 368 cases correspond with a

⁸⁹⁹ Egnor, "Dr. Jeffery Shallit."

⁹⁰⁰ Casey Luskin, "Lobbyists Resort to Myth Information Campaign on Academic Freedom Legislation," Center for Science and Culture, http://www.evolutionnews.org/2011/02/lobbyists_resort_to_myth-infor044241.html.

frequency rate of 0.882 occurrences per 1000 words, and can be likened to 0.787 appearances in the average article. It is important to note that throughout *News and Views* the Scarcity Principle is never associated with statements that a commodity is in short supply. Instead this message variable is associated exclusively with claims that evolutionists are fervidly performing censorship in the desperate attempt to suppress anti-Darwinist information.

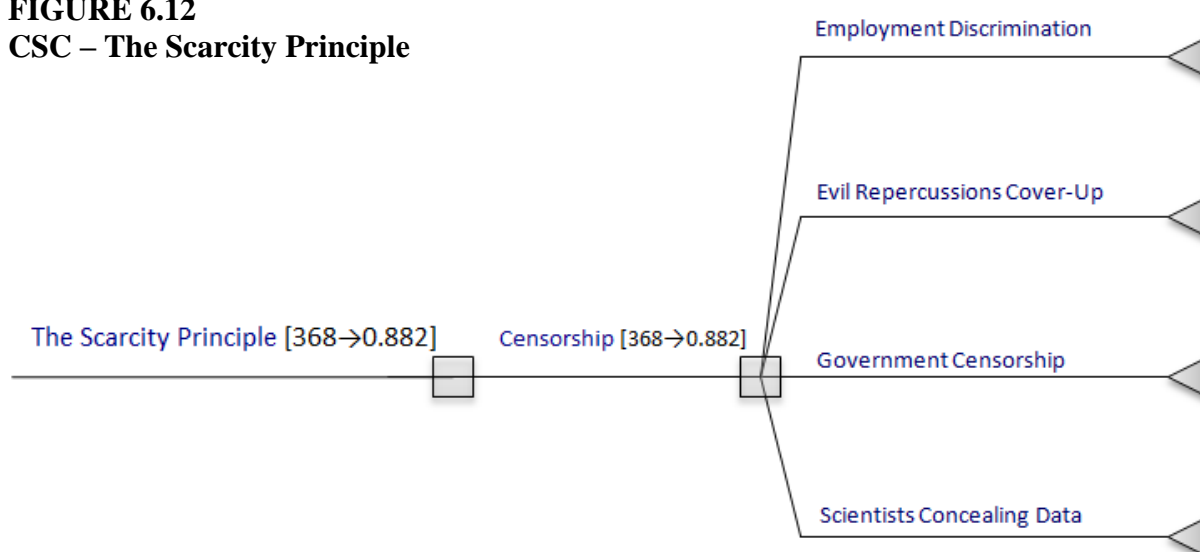
FIGURE 6.11
CSC Scarcity Principle Subcategory Frequencies



Such assertions overlap with several other persuasive cues, and they can be subdivided into declarations that the evil repercussions of Darwinism are being concealed, that scientists are covering up pro-ID and/or antievolutionist empirical data, that Darwin-sceptics are experiencing intense employment discrimination, and that government-

affiliated organizations are censoring ID. The first of these subcategories proves to be the least common variety of CSC's Scarcity Principle incidents, and statements related to this topic have been briefly considered in section 6.2.3. The most prevalent expressions of the Scarcity Principle, however, are related to the second form of this persuasive element, and they imply that Intelligent Design concepts and scientific evidence have fallen victim to an insidious anti-ID cover-up.

FIGURE 6.12
CSC – The Scarcity Principle



Center for Science and Culture writers maintain that evolutionists have effectively secured a pro-Darwinist monopoly regarding how data is interpreted within the scientific community, and they rigorously try to control what facts about evolution are being disseminated to the public. As Smith explains, Darwinists often deny ‘that evidence against evolution exists,’ and when ‘scientists do lab work and publish papers in journals’ endorsing ID and discrediting evolution, their chief tactic is to ‘deny that *they* exist and cover it up as fast as you can.’⁹⁰¹ This censorship is described as a grave attack upon academic freedom and the freedom of speech. In fact, readers are told that ‘fairness and academic freedom are exactly what evolution lobbyists like Dr. Forrest

⁹⁰¹ Anika Smith, "Darwin Day Poll Elicits Response from Richard Dawkins," Center for Science and Culture, http://www.evolutionnews.org/2009/02/darwin_day_poll_elicits_respon016901.html. (her italics)

fear the most,' and it seems as though 'the first rule for many Darwin lobbyists is this: "stifle academic freedom for dissenting scientists at any cost, but don't invite real scientific dialogue over these issues.'"⁹⁰² It is further explained that various 'Darwin defenders,' such as the journalist Chris Mooney and the NCSE, have 'recommended such things as suppressing dissenting views from the media, to spinning science in such a way as to manipulate public opinion,' and make it their primary activity 'to suppress [sic] critique of Darwin's theory -- that is, to suppress science.'⁹⁰³ This suppression of antievolutionary ideas is expressed in language that suggests the activity of a dictatorial regime's secret police force, actively 'discovering and punishing those who disagree.'⁹⁰⁴

FIGURE 6.13
Darwinian Censorship⁹⁰⁵



⁹⁰² Luskin, "Barbara Forrest."; ———, "The First."

⁹⁰³ Crowther, "Following the."; Michael Egnor, "Why Doesn't the NCSE Have an Atheism Project?," Center for Science and Culture, http://www.evolutionnews.org/2010/12/why_doesnt_the_ncse_reach_out_041191.html.

⁹⁰⁴ David Klinghoffer, "Dear Lauri Lebo, Please Help Me Understand Your Conspiracy Theory," Center for Science and Culture, http://www.evolutionnews.org/2010/08/dear_lauri_lebo_please_help_me037211.html.

⁹⁰⁵ "California Science Center Pays \$110,000 to Settle Intelligent Design Discrimination Lawsuit," Center for Science and Culture, http://www.evolutionnews.org/2011/08/california_science_center_pays050081.html; West, "Journal Apologizes."

Readers are told that there exists a ‘Darwinian intelligentsia,’ who are tenaciously repressing the free speech of underdog antievolutionists, and forcing scientists to conceal pro-ID data.⁹⁰⁶ Though some debate regarding Darwinism is allowed, anything resembling an ID conjecture is strictly prohibited. Luskin explains, ‘The message is clear: Dissent from neo-Darwinism is tolerated so long as it lends no credence or “ammunition” to proponents of intelligent design (whom they would lump with the “creationists” or “fundamentalists”).’ He further notes, ‘If dissent from neo-Darwinism is so difficult to make that one must carefully frame it so as not to lend any support to ID, imagine how difficult it is for ID proponents to promote their viewpoints in the academy.’⁹⁰⁷ Certainly, the ‘positively Stalinist’ enforcement of this anti-ID censorship and intimidation has led to the understanding that, ‘When it comes to intelligent design, silence is the safe policy. The preferable strategy is to align your view with Darwinian orthodoxy.’⁹⁰⁸ In fact, if these authoritarian restrictions were not in place, there would truly be an appreciable increase of scientific opposition to evolution. Thus, Luskin contends ‘even more scientists would come out of the closet to express their doubts about evolution were it not for the intolerance in the scientific community towards dissent from Darwinism,’ and ‘were it not for the climate of intolerance, we’d see far more doubters and skeptics breaking their silence.’⁹⁰⁹ In an article entitled “Academic Elites Don’t Appreciate Uppity Scientists Who Buck the Consensus,” Crowther further details how the prevailing culture of evolutionist bullying and censorship in academia quiets dissenting views:

⁹⁰⁶ Luskin, "Documents Reveal."

⁹⁰⁷ Casey Luskin, "'Expelled Exposed' Is Wrong: Materialists Allowed to Challenge Neo-Darwinian Orthodoxy, Intelligent Design Proponents Are Not," Center for Science and Culture, http://www.evolutionnews.org/2009/07/expelled_exposed_is_wrong_mate022511.html.

⁹⁰⁸ David Klinghoffer, "Robert Wright's Bloggingheads.Tv Censors Intelligent Design Interview," Center for Science and Culture, http://www.evolutionnews.org/2009/08/robert_wrights_bloggingheadstv024581.html; Klinghoffer, "At Bloggingheads."

⁹⁰⁹ Luskin, "NPR Interview."

The average scientist can find lots of fruitful areas of research that won't get her in hot water with the pointy-headed elites who's [sic] all-seeing academic eyes keep a watch out for anything that is out of line with the current orthodoxy. And journal editors will avoid publishing controversial papers for fear of reprisal. If you are already overwhelmed in your job, you are unlikely to take on a risky paper. Better to just steer clear of such areas.⁹¹⁰

This censorial activity is said to be particularly evident in the 'anti-freedom behavior' of evolutionists struggling to ban pro-ID information from school curricula.⁹¹¹

'If anyone is seeking to censor scientific information from students, it's the Darwin lobby,' argues Luskin, because this assembly is using the courts to 'impose nothing less than the one-sided teaching of evolution in public schools, where any scientific evidence that challenges the prevailing consensus of neo-Darwinian evolution is effectively censored from students.'⁹¹² As Egnor confirms:

The real evolution of ID-Darwinism debate has been the evolving willingness of Darwinists to use increasingly stringent court-imposed censorship to defend Darwinist dogma in public schools. They have been quite successful at imposing their ideology on our children. The underpinning of Darwinists' aversion to open discussion or criticism of Darwin's 'Fact' in public schools is their obvious fear of the scientific evidence itself. The survival of Darwinist ideology as the only acceptable theory of biological origins depends almost entirely on censorship. There is no other field of science in which scientists go to court to silence opposing theories.⁹¹³

In affiliation with such claims, *News and Views* contributors further maintain that scientists who claim global warming is a human-induced fact are also guilty of censorship.⁹¹⁴ It is asserted that both groups do whatever they can to forward their

⁹¹⁰ Crowther, "Academic Elites."

⁹¹¹ Luskin, "Darwinist Opposition."

⁹¹² Casey Luskin, "How the Science Teachers' Lobby Keeps Its Constituents in the Dark on Evolution," Center for Science and Culture, http://www.evolutionnews.org/2011/03/how_the_science_teachers_lobby044471.html; ———, "New Law Review Article: The Constitutionality and Pedagogical Benefits of Teaching Evolution Scientifically," Center for Science and Culture, http://www.evolutionnews.org/2010/05/new_law_review_article_the_con034601.html.

⁹¹³ Egnor, "Reviewing Jerry."

⁹¹⁴ ———, "Consensus Science."

evidentially-feeble ideologies: ‘Censorship, invocation of “consensus science” to elide scrutiny, real or threatened use of judicial coercion, and professional destruction of skeptics- which are characteristic tactics of global warming alarmists and of Darwinists- are tactics used to circumvent the scientific process.’⁹¹⁵

The previous excerpt communicates that pro-evolutionists target Darwin-sceptics with employment discrimination. CSC writers profess that this unscrupulous activity has become a primary means by which evolutionists are silencing Intelligent Design advocates and censoring their opinions. *News and Views*’ most frequently discussed case of employment inequity is the demotion of David Coppedge, a NASA computer system administrator who was chastised for loaning ID documentaries to co-workers. Crowther explains that Coppedge’s predicament ‘would correctly be described as ideologically based persecution,’ while Jay W. Richards exclaims:⁹¹⁶

This is yet another case of the materialist zeal for punishing thought crimes, and exhibits, yet again, the metaphysical insecurity of many who claim to be defending science. They are reduced here to the raw and preferably secret exercise of power against the very presence, apparently, of people who might voluntarily commend ideas they don't like. Well, the secret's out. This unjust exercise of power is no longer under the cover of darkness.⁹¹⁷

In addition to Coppedge’s reprimand, CSC articles mention the denial of tenure for the astronomer Guillermo Gonzalez, which ensued from an ‘ideological witch hunt in which he was punished for [ID] views he holds outside the classroom.’⁹¹⁸ CSC materials also discuss Richard Sternberg, who was ‘persecuted’ for editing a ‘peer-reviewed research paper supportive of intelligent design,’ and the legal case of Martin

⁹¹⁵ Ibid.

⁹¹⁶ Crowther, "How Nasa's."

⁹¹⁷ Jay W. Richards, "Do the Jpl Supervisors Who Demoted Coppedge Know Who Appears in the Privileged Planet?," Center for Science and Culture,

http://www.evolutionnews.org/2010/04/do_the_jpl_supervisors_who_dem034021.html.

⁹¹⁸ Crowther, "Aaup Responds."

Gaskell, an astronomer 'rejected for a job because he expressed very modest Darwin doubts.'⁹¹⁹

Finally, *News and Views* contributors warn audiences of censorship perpetrated by government-funded organizations, including the California Science Center. This tax-funded government agency initially rented its IMAX theatre to the American Freedom Alliance, which intended to show a pro-ID documentary. However, when the centre learned that the film advocated ID it breached a legal contract by cancelling the event. This cancellation is described as 'blatant viewpoint discrimination,' resulting from evolutionist pressure as well as fear that the institution would be seen as legitimizing ID.⁹²⁰ CSC writers also alert readers to the fearful consequences that may ensue if government-funded organizations were to regularly censor unwanted opinions. 'Those who think that the Science Center (again, a government agency) did nothing wrong in banning the privately-sponsored screening of an intelligent design film might want to consider how far they are willing to apply their support for government censorship,' comments West. 'Would they also approve a town council deciding that a public park can be rented for a demonstration to denounce Obama administration policies, but not for a counter-demonstration supporting the Obama administration?' he asks. Because, 'There is no in principle difference between a government agency denying equal access to the rental of park facilities for demonstrations and a government agency denying equal access to the rental of a government auditorium.'⁹²¹

⁹¹⁹ David Klinghoffer, "Pickpocketed by the Smithsonian Institution," Center for Science and Culture, http://www.evolutionnews.org/2010/11/pickpocketed_by_the_smithsonia040041.html; ———, "Martin Gaskell and the Argument from Scientific "Consensus"," Center for Science and Culture, http://www.evolutionnews.org/2010/12/martin_gaskell_and_the_argumen041781.html.

⁹²⁰ Robert Crowther, "Los Angeles Times Reporting on Lawsuit against California Science Center for Cancelling Intelligent Design Film," Center for Science and Culture, http://www.evolutionnews.org/2009/12/los_angeles_times_reporting_on030391.html.

⁹²¹ West, "Why the."

News and Views writers also reassure audiences that several victimized Darwin-sceptics have experienced justice by suing censorial organizations. Luskin explains, ‘The growing trend is that those who discriminate against intelligent design face stiff penalties.’⁹²² In fact, the California Science Center eventually settled its lawsuit with the AFA by paying \$110,000 to avoid a public trial, while the University of Kentucky paid \$125,000 to settle with Martin Gaskell. Furthermore, readers are told that such tactics of suppression demonstrate that evolutionists rely on any number of unprincipled schemes to protect Darwinism, rather than science itself. ‘Censorship and the use of legal force to shelter atheist creation myths from public scrutiny,’ argues Luskin, ‘are filthy politics, and not science of any kind.’⁹²³ This is contrasted with ID’s reliance upon science, which is represented in the CSC’s use of Statistics and Technical Jargon.

6.6 CSC’s Use of Statistics and Technical Jargon

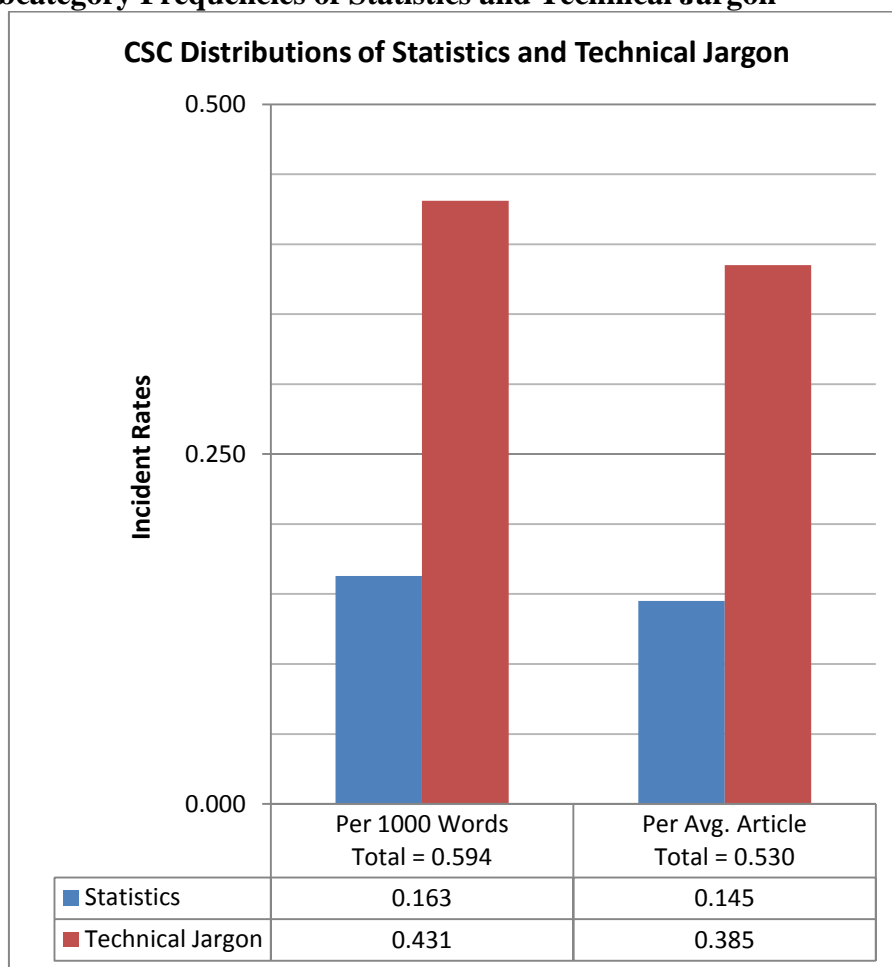
248 incidents of Statistics and Technical Jargon are identified throughout CSC materials. This denotes a frequency rate of 0.594 occurrences per 1000 words, corresponding to 0.530 appearances in the average *News and Views* article. Of these 248 incidents, 180 are associated with the use of jargon, while 68 correspond with the utilization of statistics. Consequently, the Center for Science and Culture exhibits the lowest frequency value of this persuasive element, while still demonstrating the highest number of incidents and the greatest rate of recurrence linked specifically with statistics. Jargon, however, is still the most common variety of this ELM cue, and as with ICR and AiG cases, these occurrences can be further subdivided according to their subject-matter. However, only a very small selection of CSC’s jargon concerns theology, the

⁹²² "Series of Costly Case Settlements Warns Darwin's Bullies: Stop Censoring Intellectual Freedom," Center for Science and Culture, http://www.evolutionnews.org/2011/08/settlement_of_intelligent_desi050161.html.

⁹²³ Michael Egnor, "Steven Novella on Michelle Bachmann and Teaching Evolution," Center for Science and Culture, http://www.evolutionnews.org/2011/06/steven_novella_bachmann_promot047551.html.

earth and atmospheric sciences, or mathematics, physics, and astronomy.⁹²⁴ In fact, technical jargon in *News and Views* is almost exclusively related to the biological sciences.

FIGURE 6.14
CSC Subcategory Frequencies of Statistics and Technical Jargon



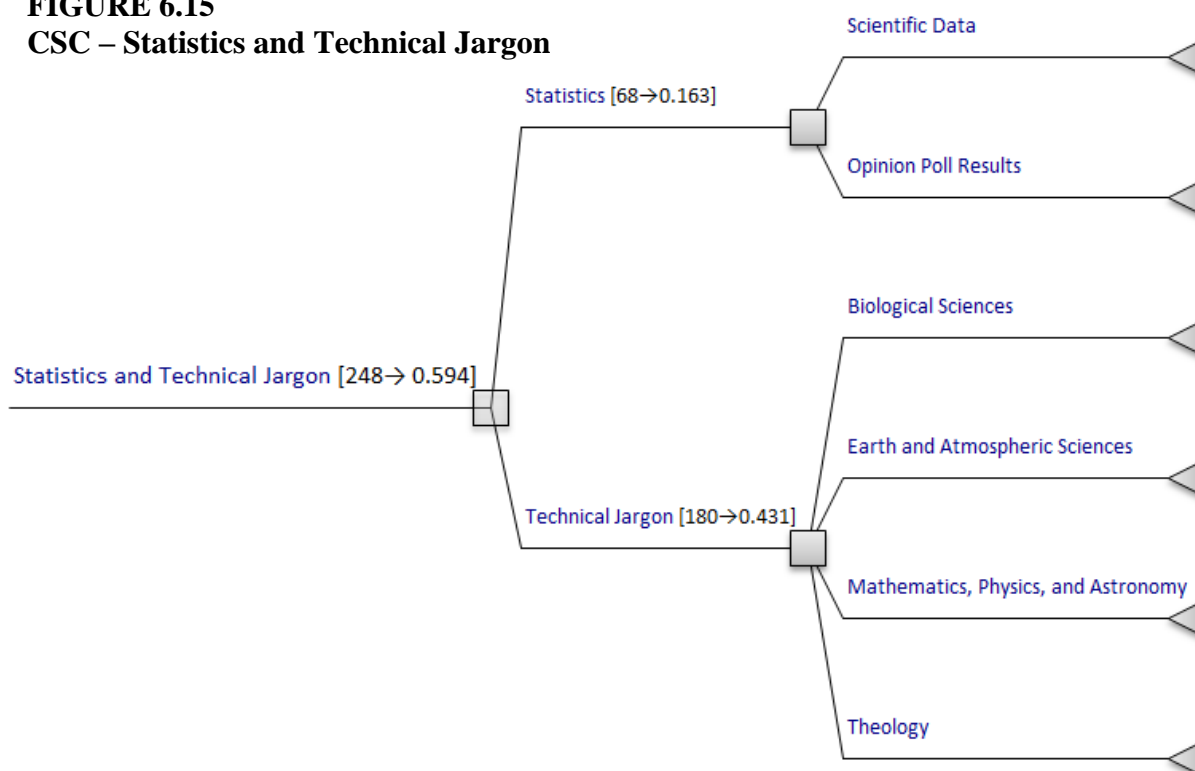
As with other EW propaganda, *News and Views* exhibits a number of Statistics and Technical Jargon cases involving the use of binomial nomenclature.⁹²⁵ However,

⁹²⁴ For examples, see: Klinghoffer, "A "Heretic"."; David Klinghoffer, "Just a Coincidence?," Center for Science and Culture, http://www.evolutionnews.org/2010/01/just_a_coincidence031161.html#more; Casey Luskin, "Uncensoring and Simplifying the Scientific Case for Intelligent Design," Center for Science and Culture, http://www.evolutionnews.org/2010/06/uncensoring_and_simplifying_th035971.html; Nelson, "Seeing Ghosts."

⁹²⁵ "Biology and Mathematics," Center for Science and Culture, http://www.evolutionnews.org/2011/05/biology_and_mathematics046671.html; Jonathan M., "Beyond the Genome: A Non-Reductionist Perspective on Development," Center for Science and Culture, http://www.evolutionnews.org/2011/06/beyond_the_genome_a_non-reduct047021.html; Casey Luskin,

the majority of CSC jargon is associated with describing complex biochemical systems and aspects of genetics. This language often occurs within articles contending that the various molecular processes in living organisms demonstrate irreducible complexity.

FIGURE 6.15
CSC – Statistics and Technical Jargon



For example, a number of CSC writers discuss the oft-cited bacterial flagellum and its intracellular workings, said to represent unmistakable ‘engineering genius’ and a ‘clear incidence of design.’⁹²⁶ Complex details regarding the flagellum are scattered throughout *News and Views* articles, and they often necessitate university-level competencies in biochemistry to fully comprehend. This includes data illustrated in figures 6.16-17, as well as other, somewhat complicated and field specific discourse. These discussions communicate ideas about ‘the transfer of phosphoryl groups (autophosphorylation) from ATP to a conserved histidine residue,’ and incorporate such analyses as those found in the following statement: ‘Thus, in order to inhibit the σ^{28} ,

"Do Amphibian-Like Fish Necessarily Confirm Darwinian Evolution? Not at All," Center for Science and Culture, http://www.evolutionnews.org/2011/12/do_amphibian-li054191.html.

⁹²⁶ Jonathan M., "Engineering at its Finest: Bacterial Chemotaxis and Signal Transduction," Center for Science and Culture, http://www.evolutionnews.org/2011/09/engineering_at_its_finet_bact050911.html.

the anti-sigma factor (FlgM) alluded to above inhibits its activity and prohibits it from interacting with the RNA polymerase holoenzyme complex.⁹²⁷

FIGURE 6.16
Bacterial Flagellum Assembly Jargon⁹²⁸

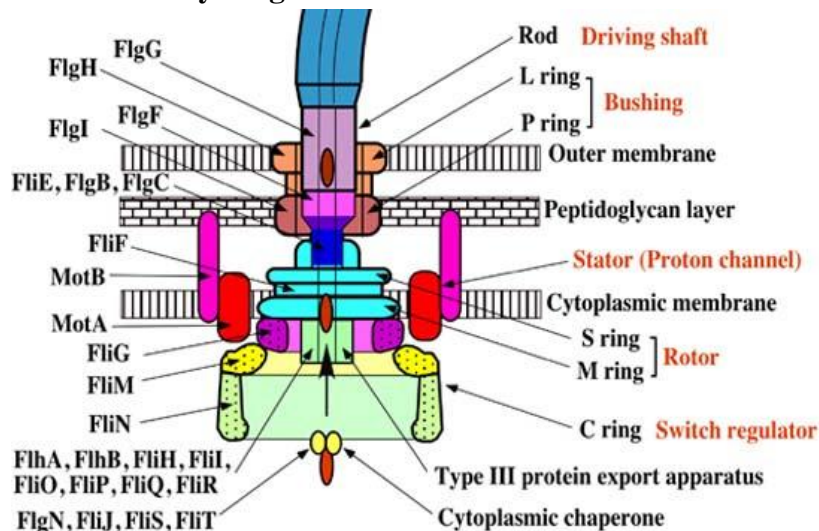
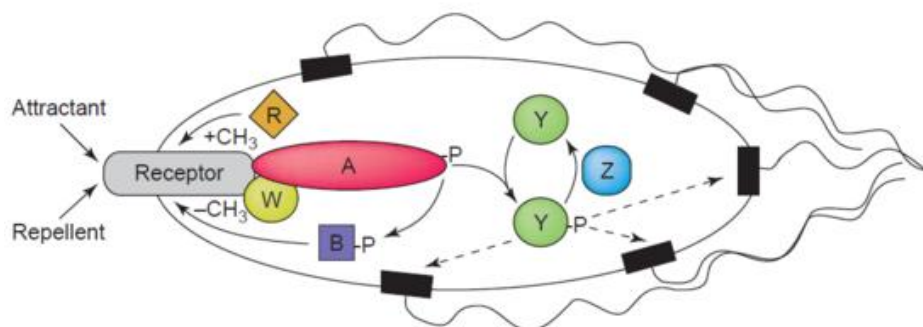


FIGURE 6.17
Bacterial Flagellum Signal Transduction Jargon⁹²⁹



At the same time that irreducible complexity is defended, similar biochemical jargon is employed in articles criticizing the explanatory limitations of Darwinism.⁹³⁰ This includes commentaries on the inability of evolution to truly account for elaborate molecular machinery, such as DNA repair mechanisms, because the ‘Darwinian step-by-step process of natural selection acting on random mutations does not currently have

⁹²⁷ Ibid; ———, "Michael Behe Hasn't Been Refuted on the Flagellum," Center for Science and Culture, http://www.evolutionnews.org/2011/03/michael_behe_hasnt_been_refute044801.html.

⁹²⁸ M. "Michael Behe."

⁹²⁹ ———, "Engineering At."

⁹³⁰ Michael Behe, "Richard Lenski, "Evolvability," and Tortuous Darwinian Pathways," Center for Science and Culture, http://www.evolutionnews.org/2011/04/richard_lenski_evolvability_an045921.html.

the explanatory capacity for this type of system.⁹³¹ Furthermore, jargon peppers articles that question the substantial genetic similarities between humans and chimpanzees, as well as the ability of pure chance and materialism to explain the origin of life. These are topics also frequently addressed in ICR and AiG propaganda, though *News and Views* articles incorporate a greater focus on biochemistry and genomics within such claims. CSC writers tackling this subject-matter reference the ‘10 million single nucleotide polymorphisms (SNPs) and about 1.5 million insertion and deletion polymorphisms (INDELs) in the human genome,’ ‘interstitial telomeric sequences,’ and how various researchers have used ‘pH manipulation, phosphate buffers and irradiation all at the correct times and amounts to achieve their goal, which was to produce “activated pyrimidine ribonucleotides.”’⁹³² Similarly, technical jargon pervades CSC criticisms of evolutionary theories regarding how new genetic information arises, and various conclusions about junk-DNA. For example Jonathan M. tells readers how scientists ‘generated transgenic mice carrying an entire 100-kilobase human globin gene locus with or without the ERV-9 LTR, a class of retrotransposons found in human and chimpanzee globin gene loci, which possess enhancer and promoter activities in embryonic and hematopoietic progenitor cells.’⁹³³

Throughout *News and Views*, statistics regularly appear alongside technical jargon, especially in articles that question human-chimp genetic similarities as well as

⁹³¹ "Regulating DNA Repair Mechanisms," Center for Science and Culture, http://www.evolutionnews.org/2010/11/regulating_dna_repair_mechanis040801.html.

⁹³² Casey Luskin, "Critically Analyzing the Argument from Human/Chimpanzee Genetic Similarity," Center for Science and Culture, http://www.evolutionnews.org/2011/09/critically_analyzing_the_argum051321.html; Richard Sternberg, "Guy Walks into a Bar and Thinks He's a Chimpanzee: The Unbearable Lightness of Chimp-Human Genome Similarity," Center for Science and Culture, http://www.evolutionnews.org/2009/05/guy_walks_into_a_bar_and_think020401.html; Casey Luskin, "Scientists Say Intelligent Designer Needed for Origin of Life Chemistry," Center for Science and Culture, http://www.evolutionnews.org/2009/07/scientists_say_intelligent_des022621.html.

⁹³³ Jonathan M., "The 'Junk DNA' Paradigm Continues to Collapse as New Functions Are Discovered for Retrotransposons," Center for Science and Culture, http://www.evolutionnews.org/2010/07/the_junk_dna_paradigm_continue036461.html.

evolutionary junk-DNA hypotheses. Readers are told, ‘A popular Darwinian meme is that humans and chimp genomes are ninety-something percent identical.’⁹³⁴ In response to this, Center for Science and Culture writers use counter-statistics to demonstrate the hollowness of such claims:

- ‘Also, the 99% identity figure is often derived from protein-coding regions that only comprise about 1.5% of the two genomes.’⁹³⁵
- ‘More than 30% of the chimp Y chromosome lacks an alignable counterpart on the human Y chromosome, and vice versa, whereas this is true for less than 2% of the remainder of the genome.’⁹³⁶
- ‘[T]he overall similarity of the human genome will prove to be close to 70% (and very far from 99%).’⁹³⁷

Rather similarly, Sternberg states, ‘This brings me to the false fact. It has been said that 90% of all genomic DNA (in eukaryotes) is junk.’ He then provides statistics to falsify this claim: ‘Instead of 90% of the human or fly genome being junk, it seems that 90% or more of chromosomal DNA has some kind of specific developmental function, given the available data.’⁹³⁸

Additionally, statistics are used to demonstrate that most Americans do not accept evolution and want alternatives taught in schools. These numbers are derived from opinion poll results, which ‘consistently show that the vast majority of Americans reject neo-Darwinian evolution and over 75% are united in believing that ID should be

⁹³⁴ Jay W. Richards, "Are Chimps and Humans Really All That Much Alike?," Center for Science and Culture, http://www.evolutionnews.org/2010/02/are_chimps_and_humans_really_a031631.html.

⁹³⁵ Sternberg, "Guy Walks."

⁹³⁶ Casey Luskin, "Recent Genetic Research Shows Chimps More Distant from Humans, Neanderthals Closer," Center for Science and Culture, http://www.evolutionnews.org/2010/04/recent_genetic_research_shows034291.html.

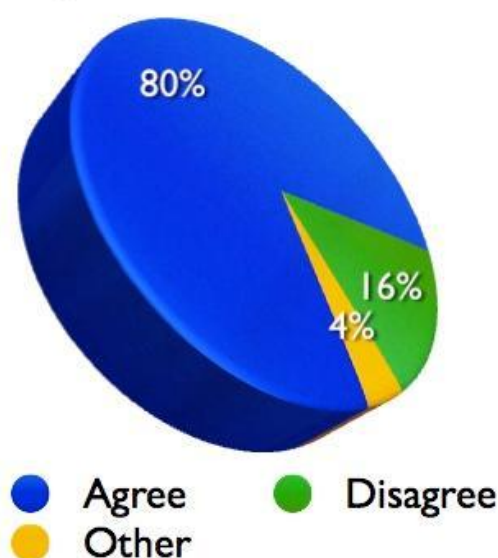
⁹³⁷ Richards, "Are Chimps."

⁹³⁸ Richard Sternberg, "How the Junk DNA Hypothesis Has Changed since 1980," Center for Science and Culture, http://www.evolutionnews.org/2009/10/how_the_junk_dna_hypothesis_ha026421.html.

taught in schools.’⁹³⁹ Such statistics are affiliated with CSC’s relatively intermittent cases of Social Consensus, and indicate that the preponderance of U.S. citizenry support the Intelligent Design movement’s struggle for academic freedom. As one survey reveals: ‘A large majority of respondents (80%) agree that teachers and students should have academic freedom to discuss both the strengths and weaknesses of evolution as a scientific theory, with more than half (54%) saying they strongly agree. Only 16% disagree.’⁹⁴⁰

FIGURE 6.18
Darwin Day Poll Shatters Stereotypes⁹⁴¹

Students/Teachers Should Have Freedom to Discuss Strengths and Weaknesses of Evolution



The statistical backing for ‘academic freedom’ is contrasted with and the Darwin lobby’s modest public support. This is demonstrated in table 6.3, taken from an article

⁹³⁹ Casey Luskin, "A Partisan Affair (Part 6): False Claims About Science Education Policy in Edward Humes' Pseudo-History of Kitzmiller, "Monkey Girl", Center for Science and Culture, http://www.evolutionnews.org/2009/01/a_partisan_affair_part_6_false015161.html.

⁹⁴⁰ Anika Smith, "Darwin Day Poll Shatters Stereotypes: Democrats Favor Freedom to Discuss Evolution's Strengths and Weaknesses More Than Republicans," Center for Science and Culture, http://www.evolutionnews.org/2009/02/poll_shatters_stereotypes_with016931.html.

⁹⁴¹ Ibid.

that notes, ‘The Darwin lobby wants only the pro-Darwin-only viewpoint taught. They want to censor any science that challenges neo-Darwinian evolution.’⁹⁴²

Therefore, audiences are told that a statistical minority of people, composing the insidious Darwin Intelligentsia, is forcing its evolutionist dogma onto an obvious majority of citizens. Plus, this majority is composed of individuals from a variety of socio-political backgrounds.⁹⁴³ Concerning such poll results, Luskin concludes, ‘Clearly, support for the freedom to teach the controversy about Darwinian evolution cuts across religion, party affiliation, political ideology, and educational levels.’⁹⁴⁴

TABLE 6.3
The Darwin Lobby vs. Darwin Sceptics⁹⁴⁵

Group	Teach Evidence Supporting Darwin?	Teach Evidence Against Darwin?	Teach Creationism?	Teach Intelligent Design?	Expose Students to Multiple Scientific Viewpoints (including those you disagree with)?	% of Public That Agrees
Darwin Lobby	Yes	No	Ban it	Ban it	No	16%
Darwin Sceptics like Discovery Institute	Yes	Yes	No (courts have made it clear creationism is religion)	No (but don't ban it either)	Definitely yes.	80%

6.7 From CSC Propaganda to Media Effects, Reality Maintenance, and Branding

The message variables detailed within this chapter establish how Center of Science and Culture propaganda includes a variety of persuasive constituents. In many ways these five ELM cues noticeably overlap with those exhibited throughout Institute for Creation Research and Answers in Genesis materials, though *News and Views* articles are clearly seasoned with ID’s distinct perspectives. Having established this

⁹⁴² Luskin, "How the."

⁹⁴³ Casey Luskin, "James Carville Wrongly Frames the Evolution Debate as a Democrat vs. Republican Issue," Center for Science and Culture, http://www.evolutionnews.org/2009/07/james_carville_flauts_his_int023141.html.

⁹⁴⁴ Smith, "Darwin Day."

⁹⁴⁵ Luskin, "How the."

content analysis data, the current study will now explore how each group's Evolution Wars communications may influence indirect media effects by conceptualizing how such message variables might impact agenda-setting, cumulative exposure, and cultivation effects. Furthermore, the ways in which these persuasive cues serve as therapy and nihilation machinery for antievolutionist reality maintenance will also be considered, which corresponds to the construction of distinct EW brands.

CHAPTER SEVEN

Media Effects, Reality Maintenance, and Evolution Wars Branding

Therapy entails the application of conceptual machinery to ensure that actual or potential deviants stay within the institutionalized definitions of reality, or, in other words, to prevent “inhabitants” of a given universe from “emigrating”... Therapy uses a conceptual machinery to keep everyone within the universe in question. Nihilation, in its turn, uses a similar machinery to liquidate conceptually everything *outside* the same universe.

Peter L. Berger and Thomas Luckmann⁹⁴⁶

What can have a brand? In short, anything: products, services, organizations, places, and people. Even you.

Matthew Healey⁹⁴⁷

7.1 EW Propaganda and the Content Analysis Control Group

A 2010 AiG article notes that ‘subscribers often call *Answers* the “Christian *National Geographic*.”’⁹⁴⁸ These reader assessments may not be entirely coincidental because the Evolution Wars materials investigated within this study often resemble popular science writings. In particular, both *Acts&Facts* and *Answers* incorporate physical layouts similar to those exhibited in *New Scientist* or the *Popular Science* magazine. Also, all three EW organizations include reports on contemporary science news that approximate articles typically found in popular science circulars, and various EW contributors are described as fulltime science writers. These attributes themselves may be interpreted as types of persuasive cues, because they identify antievolutionist materials with the relative accuracy, objectivity, and familiarity of popular science

⁹⁴⁶ Berger and Luckmann, *The Social*, 130, 32.

⁹⁴⁷ Matthew Healey, *What is Branding?* (Mies: RotoVision, 2008), 6.

⁹⁴⁸ Dale T. Mason, "Be an “Aunt Lois”," *Answers* 5, no. 3 (2010): 6.

writing. Hence, *News and Views* describes itself as not only including ‘original reporting and analysis about the debate over intelligent design and evolution,’ but also ‘breaking news about scientific research.’⁹⁴⁹ The notable difference, of course, is that EW pieces invariably combine science reporting with intentional antievolutionist messages. With regard to this, it is interesting to note that other organizations of the past also appropriated the style and motif of popular science texts in a rather similar fashion. For instance, Aileen Kennedy Fyfe identifies ‘Evangelical popular science works’ in Victorian Britain, which promoted religious conversion and ‘demonstrated that there was nothing about the sciences which was contradictory to Christianity, when both were properly interpreted.’⁹⁵⁰ In many ways ICR, AiG, and Center for Science and Culture propaganda represent modern equivalents of these Victorian documents. Due to the similarities between Evolution Wars materials and popular science writings, this study employs *New Scientist* magazine as its content analysis control group.

The control sample for this project comprises randomly selected *New Scientist* articles, gathered from the magazine’s 2009-11 digital archives.⁹⁵¹ Unlike EW propaganda, this circular examines current research developments without emphatically referencing the same limited selection of issues, such as evolution or problems with the science of global warming. This does not mean that its contributors never express personal opinions, veiled biases, or that the magazine does not revisit the same themes throughout its many editions. In fact, editorials and other articles occasionally criticize an assortment of ideas, and periodically reiterate certain predilections from issue to issue. Also, it could be argued the magazine regularly articulates a distinctive, perhaps exceedingly reverential, pro-science sentiment; in which the positive outcomes of

⁹⁴⁹ "Evolution News and Views," Center for Science and Culture, <http://www.evolutionnews.org/>.

⁹⁵⁰ Aileen Kennedy Fyfe, "Industrialised Conversion: The Religious Tract Society and Popular Science Publishing in Victorian Britain" (University of Cambridge 2000), 230.

⁹⁵¹ Random.org’s online randomizer was again used to formulate this sample.

scientific research and its importance for humanity are eagerly communicated.

Crucially, however, *New Scientist* is not produced by what may be described as a limited-issue group, such as ICR, AiG, or CSC, which employ mass media to expressly disseminate a handful of very specific convictions.

New Scientist would doubtlessly be characterized by ICR, AiG, and CSC writers as a medium for Darwinist lies, in the same manner that an *Answers* contributor identifies *National Geographic*'s 'blatant evolutionary bias.'⁹⁵² Nonetheless, this magazine can be distinguished from particularly antievolutionist EW-centred materials developed by such groups as the NCSE and the Richard Dawkins Foundation for Reason and Science. Additionally, *New Scientist* articles frequently examine many of the same topics that appear throughout EW propaganda. For instance, the control sample contains articles that discuss whether science and religion are compatible, if creationism is truly scientific, whether dinosaur-bird evolutionary links exist, randomness in evolution, evolutionary ethics, the Big Bang, if the famed *Ida* fossil is in fact a missing link, and whether some environmentalists 'make claims that go beyond the science.'⁹⁵³ This topical overlap is important because the manner in which these identical subjects are addressed by the control group, versus EW propaganda, helps to

⁹⁵² Mason, "Be An," 6.

⁹⁵³ Graham Lawton, "Templeton Prizewinner: We Need Science Plus Morality" *New Scientist*, <http://www.newscientist.com/article/mg20627546.800-templeton-prizewinner-we-need-science-plus-morality.html>; James O'Donoghue, "Living Dinosaurs: Are We Sure Birds Are Dinos?," *New Scientist*, <http://www.newscientist.com/article/dn19849-living-dinosaurs-are-we-sure-birds-are-dinos.html>; Henry Nicholls, "Uncertainty Principle: How Evolution Hedges its Bets," *New Scientist*, <http://www.newscientist.com/article/mg20927940.100-uncertainty-principle-how-evolution-hedges-its-bets.html?full=true>; Laura Spinney, "The Underhand Ape: Why Corruption is Normal," *New Scientist*, <http://www.newscientist.com/article/mg21228372.200-the-underhand-ape-why-corruption-is-normal.html>; Kate Douglas, "10 Mysteries of You: Altruism," *New Scientist*, <http://www.newscientist.com/article/mg20327201.200-10-mysteries-of-you-altruism.html>; Roger Highfield, "View a Colossal Telescopic Eye into the Cosmic Past," *New Scientist*, <http://www.newscientist.com/article/mg21228390.100-view-a-colossal-telescopic-eye-into-the-cosmic-past.html>; "Overselling *Ida*," *New Scientist*, <http://www.newscientist.com/article/mg20227102.500-overselling-ida.html>; Chris Beard, "Why *Ida* Fossil is Not the Missing Link," *New Scientist*, <http://www.newscientist.com/article/dn17173-why-ida-fossil-is-not-the-missing-link.html>; "Honesty is the Best Policy for Climate Scientists," *New Scientist*, <http://www.newscientist.com/article/mg20527492.500-honesty-is-the-best-policy-for-climate-scientists.html>.

add content analysis reliability and verify the significance of findings. That is, similarities or differences in message variable occurrences delineated through Evolution Wars and control group articles, which may explore the same topics, help to demonstrate two important premises: first, whether EW materials actually possess an appreciably greater number of ELM cues, and, secondly, how such persuasive elements may be distinctively influencing communications. With this in mind, the variable frequencies identified throughout ICR, AiG, and CSC materials will be contrasted with the control group to help ascertain how such persuasive elements may be kindling indirect media effects, influencing antievolutionist reality maintenance, and fostering distinct EW brands.

It must be noted that within the current project, evaluations of EW propaganda, media effects, reality maintenance, and branding are essentially conceptual exercises. In this respect, the present investigation can be described as the qualitative analysis and interpretive application of content analysis data reported in the previous three chapters. This data is employed to make propositions concerning the function and conceivable outcomes of EW propaganda within the framework of communications models, the sociology of knowledge, and branding discourse. These three perspectives also offer a relevant context in which to compare and contrast Evolution Wars propaganda with the control group. Such comparisons demonstrate the particularities of EW communications, and the fundamental differences between antievolutionist propaganda and the popular science magazines which such media often resemble.

7.2 *New Scientist* Frequency Rates

The seven most prevalent ELM cues identified within EW propaganda, listed from greatest to least cumulative rates of recurrence, include: Source Cues, Asking Questions, the Contrast Principle and Negativity Effect, Statistics and Technical Jargon,

Social Consensus, the Scarcity Principle, and Message Repetition. In order to consider how these persuasive elements may influence indirect media effects, the specific frequency values for each of these variables will be juxtaposed alongside each other. This analysis will subsequently be coupled with an investigation of how such ELM cues cultivate various EW brand realities. First, however, preliminary control group content analysis observations must be briefly reviewed.

It is important to note that some constituents of persuasion should be expected within *New Scientist* articles. For example, as a popular science magazine reporting on current research news, it is reasonable to anticipate that *New Scientist* articles ought to exhibit a considerable level of Statistics and Technical Jargon. Additionally, it is not unusual for any popular magazine to incorporate rhetorical language affiliated with various ELM cues. This might especially be the case for opinion pieces, though other article genres could likewise integrate persuasive elements via intriguing prose. Nevertheless, it must be further recognized that in contrast with EW propaganda, individual variable incidents throughout publications like *New Scientist* are not necessarily connected to one specific overarching premise, such as Darwin-scepticism. This becomes apparent when incidents of Statistics and Technical Jargon in Evolution Wars materials are contrasted with those expressed throughout control group articles. Cases of this persuasive element observed in EW propaganda are always employed, without exception, to persuade audiences towards antievolutionism. On the other hand, *New Scientist* incidents of Statistics and Technical Jargon generally support only the discrete messages conveyed by the particular article in which they occur. Consequently, persuasive elements detected in the control group sample generally have no direct link with any one single explicit message that pervades each and every edition of the magazine.

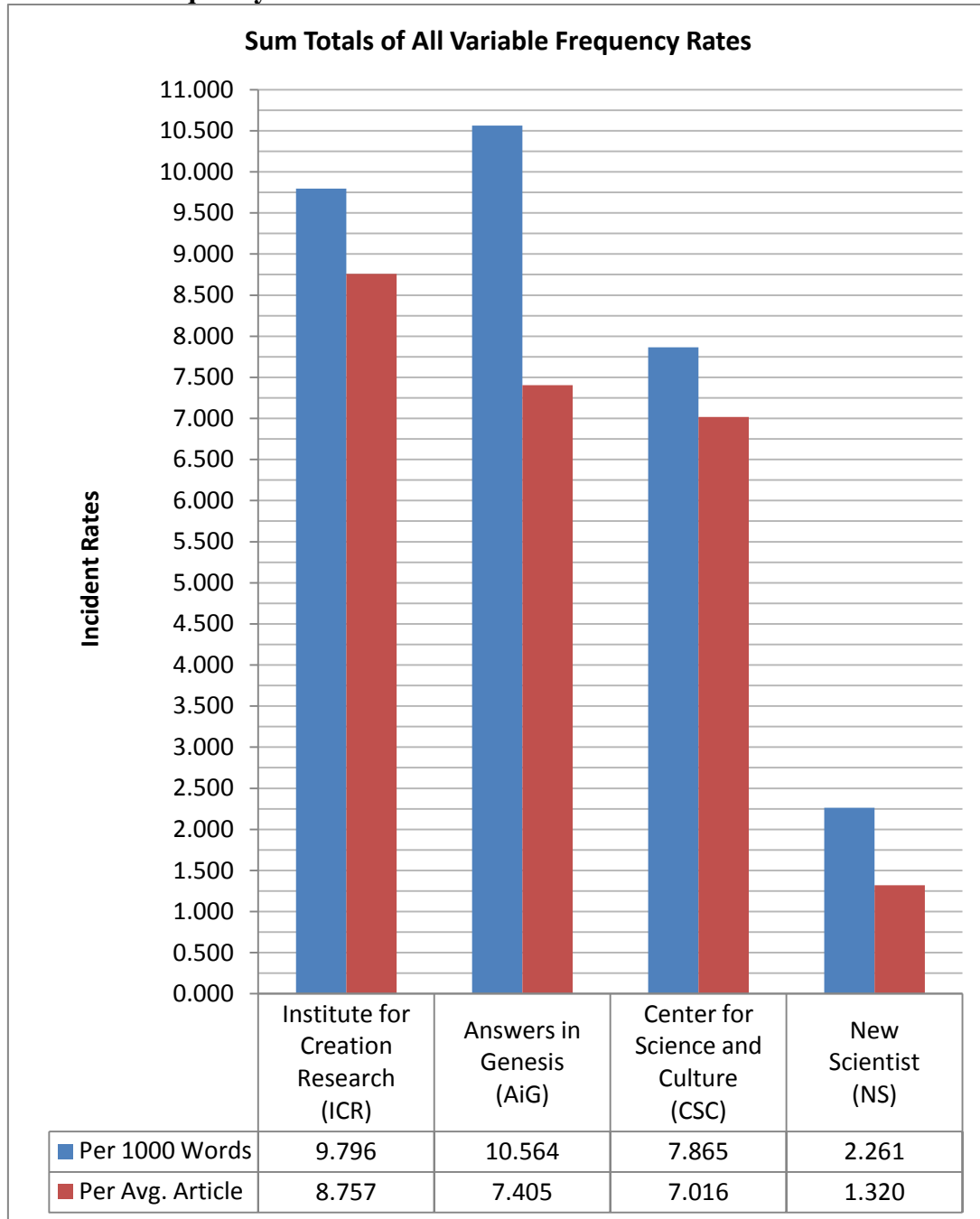
TABLE 7.1
Frequency of Message Variables in *New Scientist*

Number of Articles: 100 Total Word Count: 58383 Mean Article Word Count: 584				
Message Variable		Total Incidents	Incidents per 1000 Words	Incidents per Article (Avg.)
1. Data Delivery Options	Asking Questions	52	0.891	0.520
	Disrupt-then-Reframe	0	0.000	0.000
	Message Repetition	0	0.000	0.000
	Number of Message Arguments	0	0.000	0.000
	The Scarcity Principle	0	0.000	0.000
2. Offence-Defence	Arousal of Emotions (Fear)	0	0.000	0.000
	Source Cues	14	0.240	0.140
	Statistics and Technical Jargon	54	0.925	0.540
	The Contrast Principle and Negativity Effect	12	0.206	0.120
	Two-Sided Persuasion	0	0.000	0.000
3. Social Levers	Self-Referencing	0	0.000	0.000
	Social Consensus	0	0.000	0.000
	The Rule of Reciprocity	0	0.000	0.000
TOTAL		132	2.261	1.320

Table 7.1 reveals that *New Scientist* exhibits an assortment of persuasive elements, with the highest frequency rates concentrated in Statistics and Technical Jargon cases as well as Asking Questions incidents. Notably, the sum total of all the message variable frequencies detected in the control group is appreciably lower than what is observed throughout EW propaganda. For example, figure 7.1 demonstrates that that control sample displays a cumulative value of 2.261 incidents per 1000 words. This is 5.604 less than the total variable frequency rates expressed by Center for Science and Culture propaganda; where CSC communications exhibit the lowest overall occurrence rate in comparison to the other EW groups. As a result, CSC boasts a collective frequency rate that is 3.478 times greater than the control group, while the Institute for Creation Research and AiG exhibit 4.332 and 4.672 times more persuasive elements every 1000 words of text. To further put this discrepancy into perspective, such frequency rates denote that 1.320 occurrences of any message variable appear in

the average *New Scientist* article, in comparison to 7.016, 7.405, and 8,757 incidents per average CSC, AiG, and ICR piece.

FIGURE 7.1
Cumulative Frequency Rates



Additionally, in order to further establish the statistical significance occurring between cumulative EW propaganda and control group ELM cue frequency rates, statistical hypothesis testing was conducted through three basic t-Tests. This involved

three individual two-value t-Tests, which each compared ICR, AiG, and CSC mean frequency values with the control group. The hypothesis testing first involved gathering five total rates of recurrences, per 1000 words, derived from five random samples of twenty ICR, AiG, and CSC articles. This resulted in five individual frequency rates from ICR materials, five from AiG, and five from CSC propaganda. Each of these sets of frequency values were then tested for mean variances with analogous frequency rates gathered from five comparative samples of twenty randomly selected *New Scientist* articles. Using a confidence level of 0.95, in which the null hypothesis was to be rejected if $p < 0.05$, all three t-Tests (ICR-Control, AiG-Control, and CSC-Control) demonstrated statistical significance between Evolution Wars propaganda and the control group rates of ELM cue occurrences.

Moreover, aside from the control group's Statistics and Technical Jargon incident counts, each individual persuasive element appears far less regularly, if at all, in *New Scientist* materials when contrasted with the frequency values manifested in EW propaganda. This is even the case when the control group's Asking Questions rate of recurrence, which actually demonstrates ≥ 0.400 incidents per 1000 words, is compared with EW propaganda. Indeed, the occurrence rate of Asking Questions within Institute for Creation Research materials still proves to be 2.199 times greater than what is observed in *New Scientist* articles; where ICR exhibits the lowest EW occurrence value for this particular message variable. Therefore, it is evident that Evolution Wars propaganda *does* contain a substantially larger number of ELM cues, in a greater variety of forms, than are expressed within the control sample. This study will now consider how this concentration of persuasive variables situated throughout ICR, Answers in Genesis, and CSC propaganda may influence media effects, serve to advance Darwin-sceptic reality maintenance, and operate in EW branding.

7.3 Media Effects, Reality Maintenance, and EW Source Cues

The Composite Propaganda Effects Model detailed in Chapter Three acknowledges that moderate media effects exist, and that propaganda is capable of influencing audiences through agenda-setting processes, cumulative exposure, cultivation, and the priming of cognitive schemas. To some degree, these indirect media effects are thought to be ‘explained by understanding the nature of media content,’ such that ‘content defines effects.’⁹⁵⁴ With respect to this study, the identified and enumerated persuasive content of EW propaganda, in the form of ELM cues, are considered to be suggestive of how such mass communications may shape these media influences.

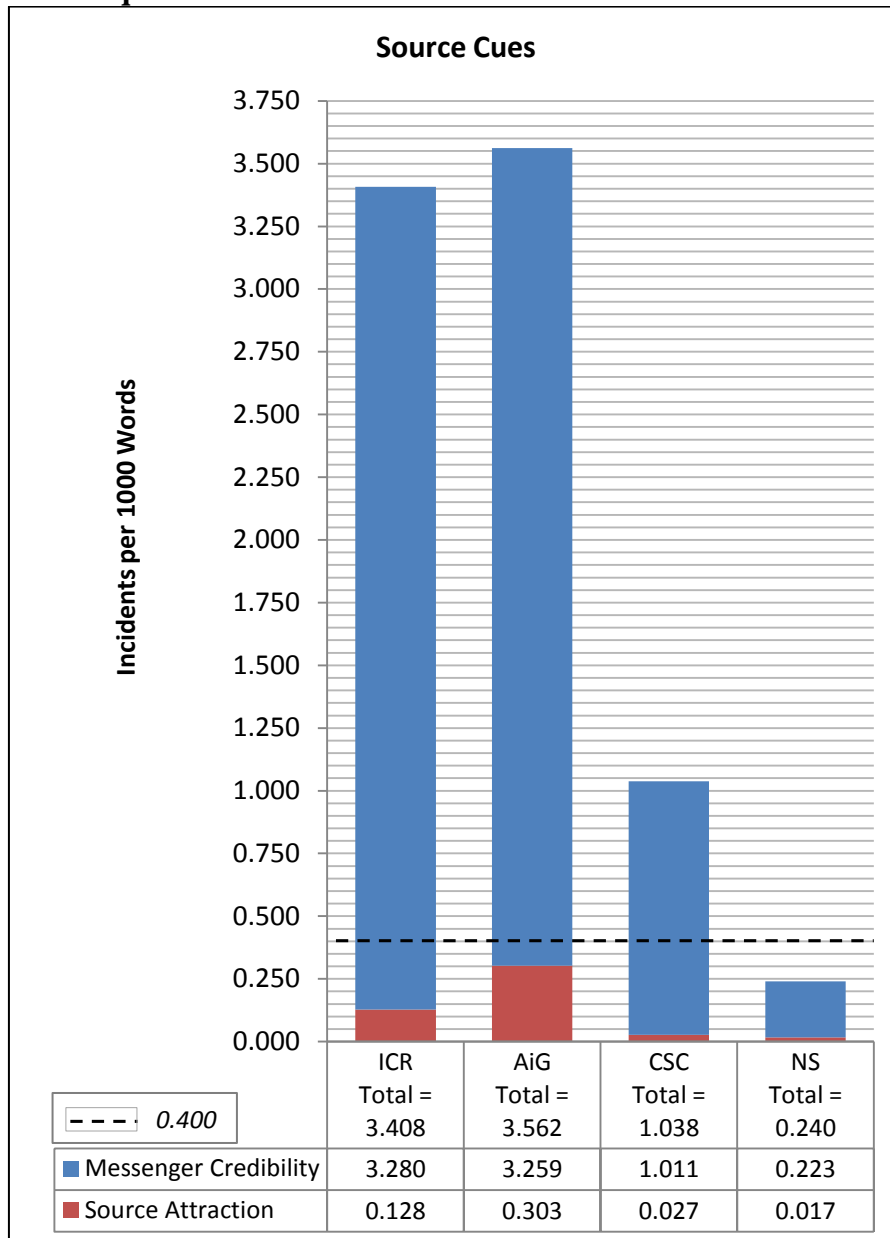
It must be remembered that instead of being able to entirely control audience opinions about certain topics, the agenda-setting properties of mass media simply help to establish which topics audiences actually think about. In this sense, mass communications provide a type of inventory regarding what is often contemplated and considered important by audiences in response to media, rather than being able to completely sculpt perceptions of those specific issues. ‘By giving a problem great coverage (e.g., whether the oil crisis or a presidential sex scandal),’ explain Petty, Priester, and Briñol, ‘newscasters make that problem readily accessible in the minds of recipients, making them more likely to think about that particular problem when they judge the “bottom line” on an attitude object.’⁹⁵⁵ Associated with such indirect media stimuli are cumulative exposure influences, cultivation effects, and the priming of mental schemas. Briefly, these involve: audiences becoming steadily more influenced by media content in all its various forms as exposure to it intensifies; mass media’s ability to cultivate perceptions of reality for audience members, especially as

⁹⁵⁴ Perse, *Media Effects*, 259.

⁹⁵⁵ Petty, Priester, and Brinol, "Mass Media," 167.

communications reception increases; and, the capacity for media to activate and influence schemas, or cognitive frameworks for organizing and interpreting information that affect how message recipients evaluate the world around them.

FIGURE 7.2
Source Cues Frequencies



In relation to persuasive message variables and indirect media effects, it is also important to examine the ways in which persuasive cues serve to establish EW brands. This involves considering how message variables function as conceptual machinery for the maintenance of antievolutionist constructed realities. It should be recalled that,

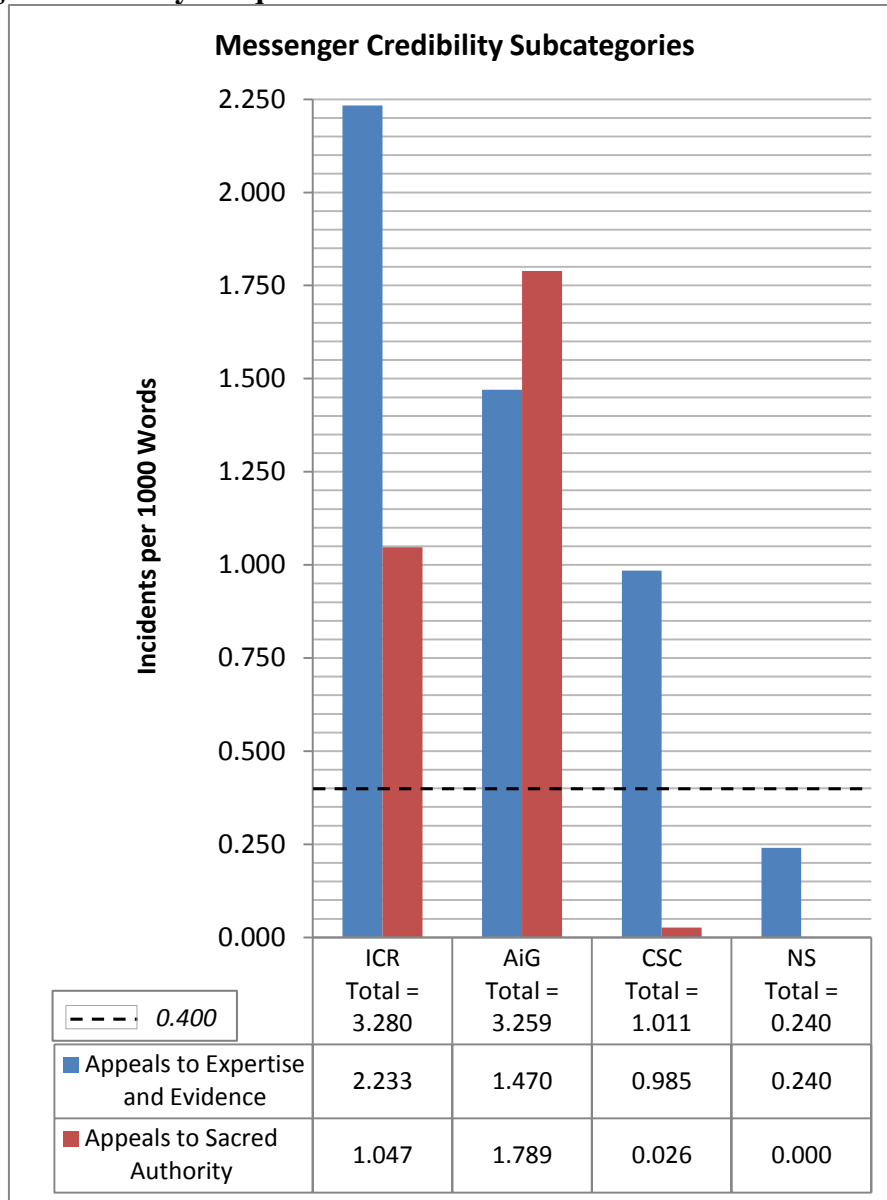
within the context of the SoK, social realities are defended and upheld via active therapy and nihilation enterprises. Therapy involves using ‘legitimizing apparatus’ to reaffirm the authority and genuineness of a threatened reality, while nihilation includes efforts to delegitimize anything that challenges a symbolic universe.⁹⁵⁶ The seven most common ELM cues manifested in ICR, AiG, and Center for Science and Culture propaganda each contribute to antievolutionist reality maintenance through such therapy-nihilation activity. Furthermore, the major persuasive themes of these therapy-nihilation endeavours reveal the foremost topical agendas being broadcast in Evolution Wars propaganda, potentially marking indirect media effects. For instance, Source Cues operate as a universe-affirming therapeutic utility, and also represent a significant part of EW communicative agendas.

Figure 7.2 demonstrates that Source Cues appear quite infrequently throughout *New Scientist* articles. Conversely, both AiG and ICR’s rates of recurrence for this single persuasive element exceed the combined sum of all the control group’s message variable frequency rates. Additionally, while CSC exhibits the smallest EW occurrence value for this particular variable, *News and Views* still displays 4.325 times more incidents per 1000 words than the control sample. This reinforces the importance of this message variable within EW propaganda as both a persuasive element and a reoccurring theme. Source Cues most often appear as Messenger Credibility incidents, and in the context of EW reality maintenance, it is clear that the message variable acts in a therapeutic manner. This is because Messenger Credibility operates as a persuasive utility to assure audiences that the communicator, who is in one way or another defending and/or promoting a particular reality, possesses expert knowledge on various

⁹⁵⁶ Berger and Luckmann, *The Social*, 130.

subjects. The credibility of the messenger and the message subsequently legitimizes the constructed reality which is being upheld.

FIGURE 7.3
Messenger Credibility Frequencies



From one EW article to the next, Messenger Credibility incidents in ICR, AiG, and CSC propaganda communicate that the reality of Darwin-scepticism is rooted firmly within empirical science, the impressive accreditation of scientists, research data, as well as the authority of religion. Figure 7.3 contrasts the frequency rates of Messenger Credibility subcategories, and provides insights regarding the characteristic

ways in which each EW group articulates Source Cues for antievolutionist therapy. For instance, Institute for Creation Research writers notably appeal to academic expertise and scientific evidence to a degree unmatched by any other Evolution Wars organization. As a result, ICR reality therapy is conceptually associated with claims that creationist assertions, which are fundamental to YEC's constructed universe, feature the support of highly-credentialed scientists, scientists of the past, and an abundance of empirical data, while also providing the basis for paradigm-altering research projects. Though creationism is also repeatedly described as receiving divine blessing, and being aligned with God's divine character, holy scripture's authentic and intended message, Jesus' hermeneutic, and the biblical authors, ICR contributors are more likely to execute reality therapy via sources of academic credibility. In fact, throughout *Acts&Facts* there is a ratio of more than two expertise and evidence cases for every sacred authority Messenger Credibility incident. Accordingly, ICR's Source Cues provide reality maintenance therapy featuring a greater proportion of secular-focussed, rather than religiously-directed, statements. In this sense the authority of ICR and its YEC message, along with the Christian creationist reality ultimately being protected by *Acts&Facts*, is chiefly embedded in scientific credentials and data, and then to a lesser extent, within sacred authority.

In contrast with Institute for Creation Research propaganda, AiG's *Answers* magazine places a greater emphasis upon the religious legitimacy of YEC's symbolic universe, as well as the biblical mandate requiring all Christians to faithfully accept a literal six-day creation event. Nonetheless, the proportion of expertise-evidence to sacred authority appeals is far closer to a 1:1 ratio than what is displayed in ICR materials. This means that despite *Answers in Genesis*' propensity to associate YEC's credibility with the authority of God's literal word and faultless character, *Answers*

writers are almost as likely to invoke the authority of science for the vindication of creationism. In fact, AiG's significant Messenger Credibility frequency rate is the product of a relatively uniform distribution of both secularly-based and religiously-centred appeals to authority. In spite of this, however, appeals to sacred legitimacy are ultimately still more prevalent throughout *Answers* articles; decisively associating YEC's authority first with religious affirmations of its reality, and then secondly with academic accreditations or scientific evidence. These religious sources of credibility, which are also said to provide the foundations of science itself, include God's literal word and wisdom, as well as Jesus and the biblical authors.

While CSC propaganda expresses the lowest frequency rate of Messenger Credibility, it is evident that like ICR materials, *News and Views* contains a greater emphasis on appeals to expertise and evidence than appeals to sacred authority. In actual fact, CSC propaganda exhibits more than 38 occurrences of appeals to expertise and evidence for each invocation of sacred authority. This leaves no doubt regarding how Source Cues operate in the therapeutic reality maintenance of ID. The legitimacy of CSC's Darwin-sceptic message, and the validity of the ID's antievolutionist constructed reality, are both established upon a burgeoning population of ID scientists, peer-reviewed research, scientific and philosophical leaders of the past, the founding fathers of America, vast reservoirs of empirical data, and claims that bona fide ID research projects exist. Effectively, CSC's unambiguous therapeutic message is that ID's antievolutionist reality is in fact a scientific reality.

Associated with Source Cues and reality maintenance are much rarer cases of Source Attraction. These also operate as tools for therapy because the allure of a messenger/message may influence the draw of a defended reality. For instance, if media convince inhabitants of a constructed universe that the population occupying that

same reality not only accept the audience's shared socio-political values, but also includes many famous celebrities, the universe's appeal may reinforce its perceived legitimacy. Though CSC's Darwin-sceptic materials very rarely exhibit Source Attraction, *Acts&Facts* articles include some claims that ICR and Young Earth Creationism share common evangelical values and beliefs with its Christian audience. Also, ICR materials occasionally affiliate American cultural symbols with creationism. In this way the attractiveness of YEC's constructed reality is integrated with the combined social universes of evangelicalism and American mythos. Answers in Genesis maintains the greatest frequency of such incidents, which therapeutically communicate to Christians that YEC shares values and religious beliefs with the constructed reality of evangelicalism, and that it has some celebrity endorsement. Consequently, within ICR and AiG propaganda, creationism's reality obtains some therapeutic aid from its attractive associations.

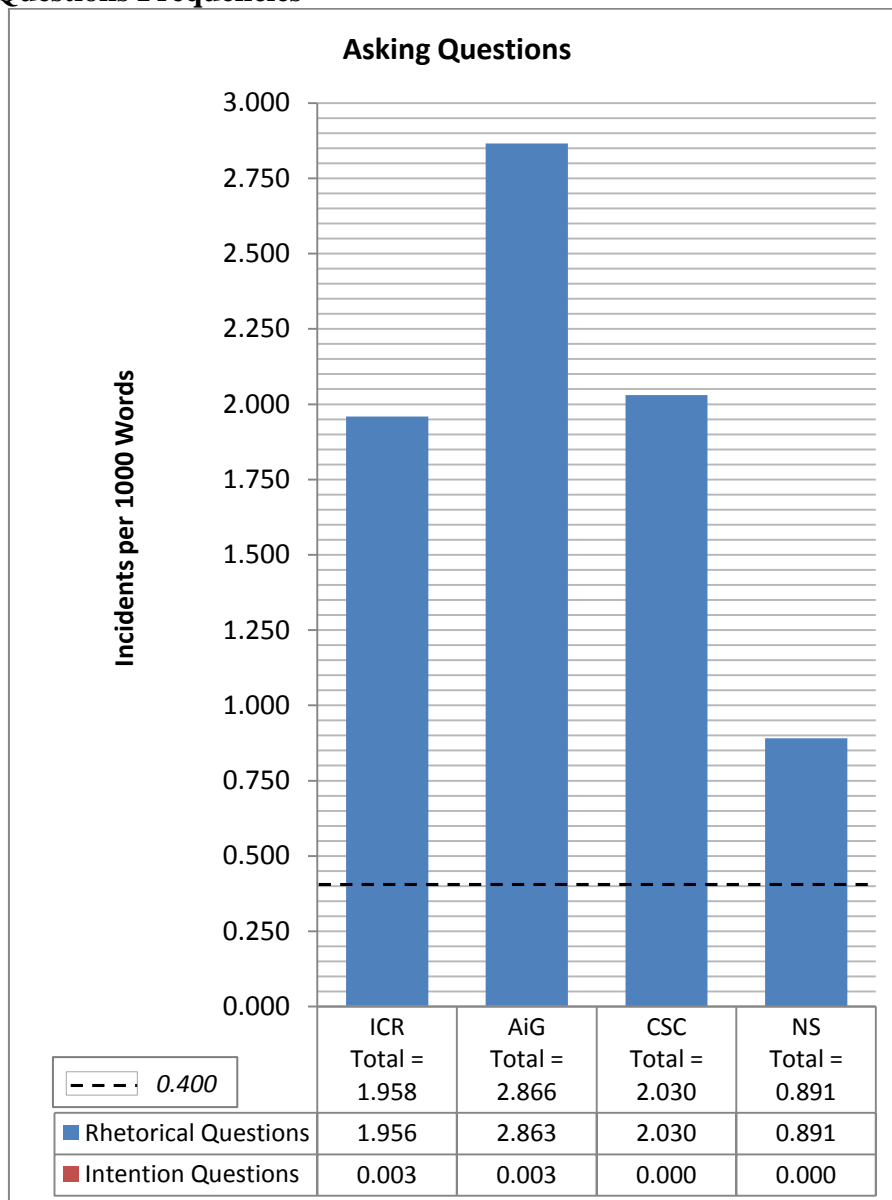
With regard to media effects, there is no escaping the principal theme of credibility throughout EW propaganda. This agenda-setting concentration varies according each organization, though it is evident that all EW propaganda repeatedly informs audiences of antievolutionism's credibility in one form or another. This is especially the case for ICR and AiG materials, which most commonly set their topical communicative agendas around antievolutionism's scientific and/or religious integrity. Therefore, even though such materials cannot wholly regulate audience opinions pertaining to the authority of YEC or Intelligent Design messages, the frequency of Source Cues incidents ensure that this is a primary theme for audiences to at least think about. Also, the value set on this topic, in terms of the effort devoted to its transmission, imparts to audiences that this is a significant issue. In fact, it is an issue that cannot be avoided due to its conspicuous presence from one article to the next. In

this light, the ubiquitous motif of credibility would also hypothetically influence cumulative exposure and cultivation. If continued exposure to mass media reduces message selectivity and can cultivate assumptions about reality, then audience perceptions concerning antievolutionism would be shaped to perceive Darwin-scepticism as scientifically and/or religiously legitimated. Finally, such references to credibility may prime cognitive schemas associated with the authority of science or religion, including the trustworthiness of God and the achievements of empirical research. For example, if schemas relating to science connect ideas of objectivity, innovation, and precise measurements, the continual association of scientific credibility with Darwin-scepticism may cause audiences to affiliate these particular notions with antievolutionism. Thus, cognitive frameworks that order ideas about science and religious authority would consequently affect perceptions of Young Earth Creationism or ID.

7.4 Asking Questions in EW Propaganda

It is particularly interesting to note that Asking Questions is the second-most regularly occurring message variable in all three EW organizations' propaganda. Additionally, of the total Asking Questions incidents, only rhetorical queries are substantially represented in ICR, AiG, and Center for Science and Culture materials. This ELM cue is also one of only two persuasive elements exhibiting a frequency value that is ≥ 0.400 incidents per 1000 words in the control group. Even so, figure 7.4 demonstrates that *New Scientist's* 0.891 occurrence measure is appreciably smaller than ICR's 1.958, AiG's 2.866, and CSC's 2.030 frequency rates. Not only is the control group's Asking Questions occurrence value substantially lower than what is observed in EW propaganda, but *New Scientist* contains relatively greater proportion of neutral questions as compared to incidents of negative and positive rhetorical inquiries.

FIGURE 7.4
Asking Questions Frequencies



In this sense, the magazine simply does not possess the considerable magnitude of negative and positive questions saturating Evolution Wars articles. This is due, at least in part, to the relative paucity of *New Scientist* Contrast Principle and Negativity Effect incidents, which are often affiliated with negative questions throughout ICR, AiG, and CSC communications. Conversely, negative and positive questions are far more common than neutral queries in EW propaganda, with negative rhetorical inquiries being the most widespread of all three varieties. These negative questions are also a

discernible ingredient of antievolutionist reality maintenance nihilation efforts, as they call into question validity of the Darwinist rival universes. On the other hand, positive rhetorical questions augment therapeutic exercises by insinuating particular answers that unequivocally reinforce antievolutionism.

Throughout *Acts&Facts*, it is clear that negative erotema, hypophora, and anacoenosis often promote uncertainty regarding the personal faith of theistic evolutionists. Similar rhetorical enquiries also question the reliability of proevolutionist understandings of scripture, what harmful repercussions will affect Christendom if the faithful become convinced of evolutionist delusions, whether evidence for evolution actually exists, and further suggest that evolutionary scientists are deceitfully misrepresenting empirical data. These sorts of negative questions rhetorically liquidate competition arising from noncreationist Christian realities, while also nullifying the evidential basis of evolution and the moral integrity of evolutionists. In concert with these negative queries, the Institute for Creation Research's less common positive cases therapeutically intimate that YEC honours the biblical message and best explains scientific data. Accordingly, ICR's rhetorical questions reveal insurmountable, vitiating problems with numerous aspects of evolution, while affirming a Darwin-sceptic universe.

A similar trend of negative-nihilation and positive-therapy queries can be identified throughout AiG propaganda. Interestingly, while this organization is called Answers in Genesis, and its magazine is *Answers*, AiG actually demonstrates the most rhetorical questions per 1000 words. Of course, such questions connote assumed answers, which often serve to negate theistic evolutionism, and foster doubt regarding the evidential strength of scientific theories purporting an ancient universe. Furthermore, AiG's positive inquiries add force to YEC's reality by implying that the

obvious answers to questions about scientific evidence or hermeneutical questions always lead to procreationist conclusions. As a result, each one of these positive or negative rhetorical questions either annuls claims hostile to YEC or sustains creationism's reality with a tumult of implied Darwin-sceptic answers.

Negative rhetorical questions likewise assist CSC's nihilation of ID-critics by asking audiences whether research used to substantiate evolution is actually conclusive. The implied answers to similar questions also suggest that evolutionary scientists are employing unscrupulous means to protect Darwinism and/or attack ID, while further insisting that evolution is linked with social evils, and that religion is fundamentally irreconcilable with Darwinism. Alternatively, *News and Views*' positive questions therapeutically indicate that ID is a compelling, scientifically-bound alternative to evolution's materialistic presuppositions, and that it is a better method for interpreting scientific data. Still other positive rhetorical queries lead audiences to specific, inexorable conclusions regarding the need to teach ID in American schools, and the understanding that supporting ID is equivalent to backing academic freedom.

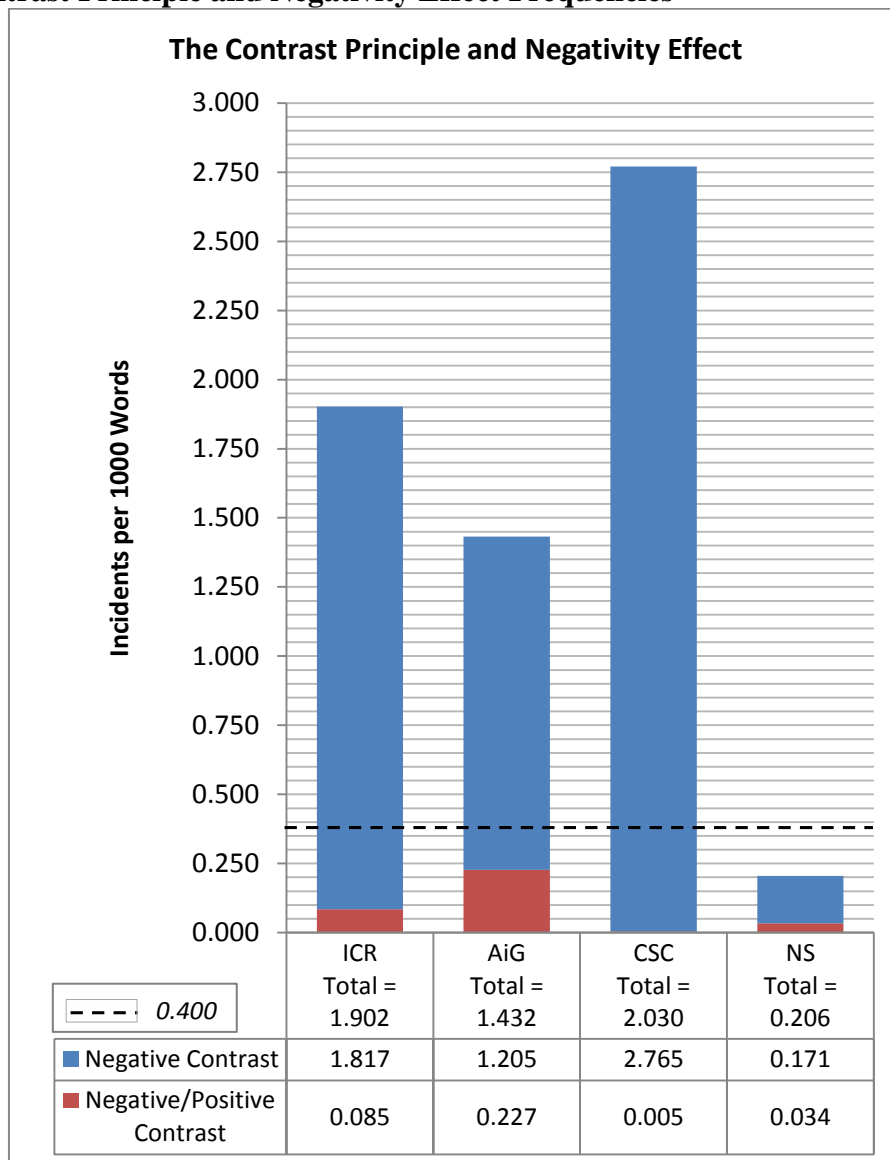
Collectively then, this message variable helps to carry out YEC/ID reality maintenance by indicating to audiences that the obvious answers to so many straightforward questions refute Darwinist competition and validate antievolutionism. The pervasiveness of this ELM cue also formulates a distinct agenda-setting media focus, as it repeatedly communicates to readers that if questions are asked, evolution is always found wanting. Additionally, the presence of so many queries implies that questions can, and in fact *need* to be asked, about evolution's scientific legitimacy and whether Young Earth Creationism or ID might be appropriate explanatory substitutes. In this way the abundance of such inquires and their corresponding answers notify audiences of the apparent importance and value found in asking Darwin-sceptic

questions. With regard to cumulative exposure and cultivation, the profusion of Asking Questions incidents expresses to audiences that numerous thought provoking questions are successfully being asked regarding the inadequacies of evolutionary theory, shifting perceptions to the claimed weaknesses of the theory. Surely, so many questions could not be asked, and so many obvious evolution-maiming answers would not exist, if serious problems with Darwinism's evidential support were not a reality. These same apparent weaknesses are regularly the subject-matter of the Contrast Principle and Negativity effect, which further emphasizes the inferiority of evolutionist realities.

7.5 The Contrast Principle and Negativity Effect in EW Propaganda

The differences between EW propaganda and *New Scientist* articles are further accentuated by examining incident rates associated with the Contrast Principle and Negativity Effect. As figure 7.5 illustrates, this message variable appears relatively infrequently in the control group sample when compared to EW materials. In fact, while the Contrast Principle and Negativity Effect is a relatively significant feature of Evolution Wars propaganda, *New Scientist* only marshals an occurrence value of 0.206 incidents per 1000 words. This is 6.951 times smaller than AiG's frequency rate, 9.233 times less than ICR's, and 9.854 times smaller than CSC's occurrence value. However, even though the control group exhibits fewer incidents, these intermittent manifestations still reflect a greater ratio of negative to neutral/positive contrast, which is also found in EW propaganda. For example, 16.7% of all *New Scientist* occurrences are classified as neutral/positive contrast, while 15.8% of AiG's total cases fall into this subcategory. The remaining two EW groups express more disparate proportions of negative contrast, as 4.45% of ICR's incidents, and only 0.173% of CSC's cases, are identified as neutral/positive contrast.

FIGURE 7.5
The Contrast Principle and Negativity Effect Frequencies



Despite the fact that the majority of Contrast Principle and Negativity effect incidents are of the negative variety, it is apparent that this message variable does not simply function only as a tool for nihilation. Certainly, such cases assist in undermining various evolutionist threats to the symbolic universes of YEC and Intelligent Design, but at the same time each occurrence also serves to contrast the unfavourable features of an assaulted opponent with the positive qualities of Darwin-scepticism and its adherents. In this manner, each and every incident of this persuasive cue simultaneously performs both a nihilation and a therapeutic operation. The twofold

nature of this message variable is expressed in *Acts&Facts*, which denounces the compromising hermeneutical approaches of noncreationist Christians, while concurrently lauding ICR's steadfast commitment to a god-honouring, literal interpretation of Genesis. Similarly, both nihilation and therapy are combined within frequent claims that evolutionary theory is a derivation of false evidence, in contrast with YEC, which is founded upon empirical science and scriptural proof. Furthermore, this is likewise represented in direct comparisons of YEC's divinely-inspired nature with the evil-inciting, blind faith characteristics of evolution that are being defended through the artifice of bullying scientists.

The dual action of this persuasive cue is similarly articulated within AiG's *Answers*. The magazine's writers regularly compare the benefits of scripture-based, evidentially-supported YEC with noncreationist distortions of biblical text, the scientific inadequacies and faulty assumptions of old-earth conjectures, as well as the wilful ignorance of evolutionists. Additionally, while creationism is portrayed as being legitimately founded upon God's word and character, the acceptance of evolution is linked with the depreciation of Christendom's population, the rejection of scripture, and the erosion of moral values in society. Expounding upon the systemic problems of non-YEC realities helps to jointly emphasize, and therapeutically brace, the superiority of creationism's symbolic universe. It is important to note that AiG's neutral/positive cases also operate in this dualistic manner. When compared to ICR and CSC propaganda, *Answers* contains the greatest frequency rate of neutral/positive contrast, yet these occurrences likewise manifest both nihilation and therapy even though they do not contain explicit criticisms of an evaluated party.

Finally, because CSC possesses the most significant frequency rate of the Contrast Principle and Negativity Effect, it is difficult to separate *News and Views* from

this variable's nihilation-therapy elements. To be sure, expressions of both therapy and nihilation infuse the Institute for Creation Research's multitudinous claims that evolution lacks evidence and that evolutionists are morally deficient. Not only do evolutionists fraudulently depict evolution as a definite, empirically-substantiated fact, but these close-minded, parasitic ideologues earnestly censor opposing viewpoints. Such anti-ID efforts coincide with purposeful misrepresentations of ID as simply a variant of Young Earth Creationism. This evolutionist sedition is differentiated from ID's truly scientific nature, non-religious attributes, and the Center for Science and Culture's sincere pursuit of academic freedom. ID's positive qualities also distinguish it from the futile efforts of theistic evolutionists, who attempt to fuse religion with a theory that has demonstrably provided an impetus for unmitigated evils throughout history. Therefore, whenever ID is juxtaposed with its rivals throughout *News and Views*, it therapeutically emerges as a factually-based enterprise that is determinedly fighting for pedagogical liberty.

In contrast with what is found in ICR, AiG, and CSC materials, the lower frequency value of this persuasive element within the control group seems, to some extent, indicative of the fact that *New Scientist* is not consistently attempting to defend a limited collection of premises. The control group articles do not isolate an assembly of competitors in the same way that EW organizations identify enduring opposition in the form of noncreationists or anti-ID advocates. For that reason, its articles do not contain persistent comparisons with rival ideologies, and the Contrast Principle and Negativity Effect does not formulate a recurrent, agenda-setting theme. On the other hand, it is apparent that this ELM cue represents a key subject of EW communications, informing audiences that a topic worthy of consideration is the stark evidential and ethical distinctions between Darwin-scepticism and its rivals. Furthermore, when such

comparisons are made, either YEC or ID is always demonstrated to be a superior choice. As a result, repeated exposure to these messages would indicate to audiences that these dissimilarities are considerable, and that the scientific, theological, and moral chasms dividing Darwin-scepticism from both evolution and its adherents are truly vast. The idea would accordingly be cultivated that antievolutionism is not only scientifically and/or religiously legitimate, as Source Cues also implore, but that Darwinism is categorically deficient in these areas.

In association with the priming of cognitive schemas, references to discrepancies between the credibility and (a)moral constitutions of Darwin-sceptics versus evolutionists could play a particularly notable role. This might especially be the case when associations are made between evolution, Satan, and social evils, because ‘Negative automatic thoughts and intermediate beliefs are heavily influenced by underlying cognitive schemas, particularly when these schemas are activated.’⁹⁵⁷ The schemas triggered by references to Adolf Hitler or the devil, for instance, could prompt negative thoughts relating to the holocaust, brutal intolerance, and horrific malevolence. Consequently, the provocation of cognitive frameworks grouping notions of satanic forces, or anti-Semitic pogroms, may cause associated negative sentiments to be coupled with Darwinism itself. Moreover, it must also be recalled that persuasion research has demonstrated how negative communications seem to result in more substantial, relatively automatic persuasion effects in relation to comparatively positive messages. In this sense, the frequently defamatory nature of EW Contrast Principle and Negativity Effect incidents would add negative persuasion influences to the elicitation of cognitive schemas. At the same time, positive schema associations that are

⁹⁵⁷ Lawrence P. Riso and Carolina McBride, "Introduction: A Return to a Focus on Cognitive Schemas," in *Cognitive Schemas and Core Beliefs in Psychological Problems*, ed. Lawrence P. Riso, et al. (Washington: American Psychological Association, 2007), 4.

contiguous with perceptions of God, the bible, and the trustworthiness of science, would be allied with antievolutionism.

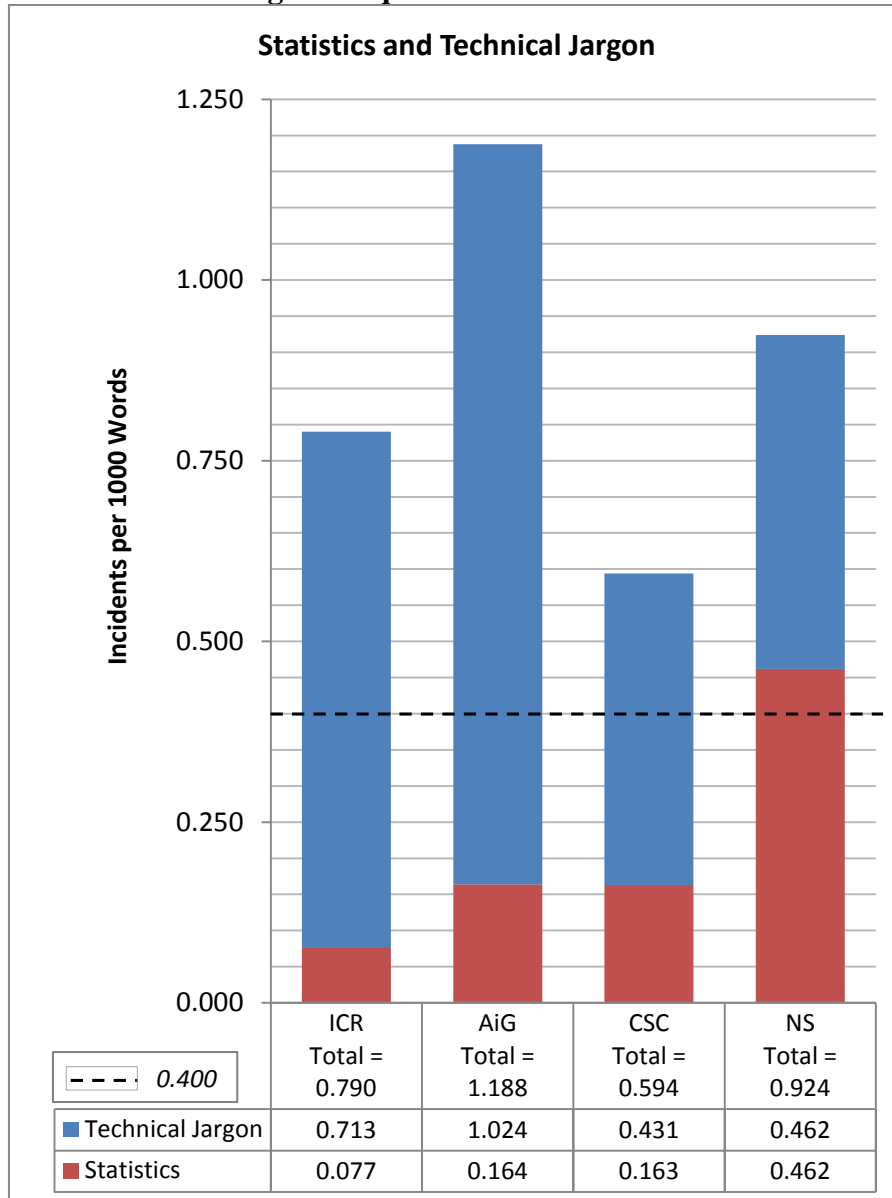
7.6 Statistics and Technical Jargon in EW Propaganda

In addition to Asking Questions, the control group also displays a frequency value that is ≥ 0.400 for the message variable Statistics and Technical Jargon. In fact, with 0.926 occurrences per 1000 words, this persuasive element not only represents the greatest incident count and recurrence rate associated with *New Scientist*, but it actually exceeds the rates expressed in ICR and CSC materials by 0.134 and 0.330 respectively. As was previously noted, it is unsurprising that a popular science magazine would express elements of this ELM cue, though it is also apparent that unlike EW propaganda, these cases are rarely linked to one overarching contention that pervades the bulk of *New Scientist* communications. It is also noticeable that the control group exhibits an exact 1:1 ratio of statics to jargon cases, while ICR, AiG, and CSC all display an appreciably greater proportion of technical jargon incidents. The statistics displayed within the control sample are also associated only with reporting scientific observations, rather than with poll results. Predictably, *New Scientist* features no cases of theological jargon, while there is less of a focus on the biological sciences and biochemistry. This results in a correspondingly wider spread of topics, and a greater variety of the actual types of field-specific technical jargon found in the control sample.

Statistics and Technical Jargon influence audiences to consider the expertise and qualifications of a communicator. In this sense, statistics or jargon are indicators of technical authority in an area, and can enhance the perceived Messenger Credibility of a communication. However, the persuasive effectiveness of this message variable is reduced if the messenger's credentials are not assessed to be impressive enough by an audience. As a result, this persuasive element serves as a marker of authority and a

catalyst for Messenger Credibility; though it is not truly a direct claim of expertise in and of itself.

FIGURE 7.6
Statistics and Technical Jargon Frequencies



Also, the persuasive influence of Statistics and Technical Jargon is complementarily dependent upon the qualifications listed for the message's communicator. Due to this contingency, it is apparent that the message variable would most likely exhibit reduced persuasive efficacy in control group materials, since *News and Views* articles do not demonstrate a pronounced frequency rate of Source Cues. The control sample exhibits

only one occurrence of Source Cues for every 3.857 incidents of Statistics and Technical Jargon. Therefore, without claims of credibility to supplement it, the peripheral persuasiveness of Statistics and Technical Jargon would be diminished.

This persuasive cue assists in reality maintenance therapy because it is a sign of expertise, while it is also effectively a platform for the therapeutic activity of Source Cues. Unlike the control group, within ICR materials the prevalence of Messenger Credibility cases ensures that incidents of Statistics and Technical Jargon are most often accompanied by some reference to the scientific and/or theological standing of its communicator. *Acts&Facts* actually manifests 4.312 occurrences of Source Cues for each appearance of jargon or statistics. This trend is exhibited within articles containing Vardiman's complex, jargon-saturated charts, which persistently include some reference to his educational qualifications and current research responsibilities. As a result, ICR's incidents of scientific jargon perform a type of therapy by linking intricate descriptions of physiology, geology, and physics to the Messenger Credibility of ICR's contributors. Likewise, the Institute for Creation Research's use of statistics to discredit evolutionist claims regarding human-chimp genetic similarities direct attention to the therapy-generating accreditation of *Acts&Facts* writers. In relation to other statistical information, data appearing in poll results also invoke the innumeracy of audiences. This causes individuals who are unfamiliar with the mathematical concepts and methods employed in developing survey statistics to rely upon the therapeutic credibility of their authors. Furthermore, because the use of statistics in ICR materials coincides with Social Consensus incidents, it is apparent that Statistics and Technical Jargon also signals the therapeutic action associated with this persuasive element.

The reality maintenance activities of Statistics and Technical Jargon are also expressed throughout Answers in Genesis materials, which display the greatest

frequency rate of this ELM cue. As with ICR propaganda, *Answers* contains a greater proportion of credibility-promoting statements to complement the peripheral activity of jargon and statistics. In fact, 2.998 occurrences of Source Cues are exhibited for every single case of Statistics and Technical Jargon. Complex scientific language associated with the biological sciences, the earth and atmospheric sciences, mathematics, physics, as well as astronomy, point readers to the therapy action of AiG's credibility-fostering language. The therapy activity mustered by the religious expertise and trustworthiness of AiG's contributors is also reinforced through theological jargon in the form of ancient Hebrew and Koine Greek, which are displayed more regularly in *Answers* than in either ICR or CSC materials. Credibility is further suggested in the prevalent use of statistics in discussions of human-chimp genetics, global warming, physiology, astrophysics, and poll results used to reiterate the how Christians have detrimentally failed to uphold YEC and morals. This numerical data therapeutically suggests statistical expertise, and directs audiences to the Source Cue therapy.

CSC propaganda exhibits 1.746 Source Cue incidents for every case of Statistics and Technical Jargon. This demonstrates that even though the ratio between these two complementary message variables is more uniform than ICR or AiG proportions, *News and Views* articles still contain a greater number of credibility-engendering remarks to accompany scientific jargon and statistics. Accordingly, CSC's incidents of rather complicated biochemical vocabulary, and statistics associated with human-chimp genetics, evolutionary junk-DNA hypotheses, and pro-ID poll results, indicate advanced knowledge and therapeutically direct audiences to the reliable competencies of ID proponents.

The agenda-setting elements of Statistics and Technical Jargon are linked with EW propaganda's credibility motif, as each appearance of this message variable

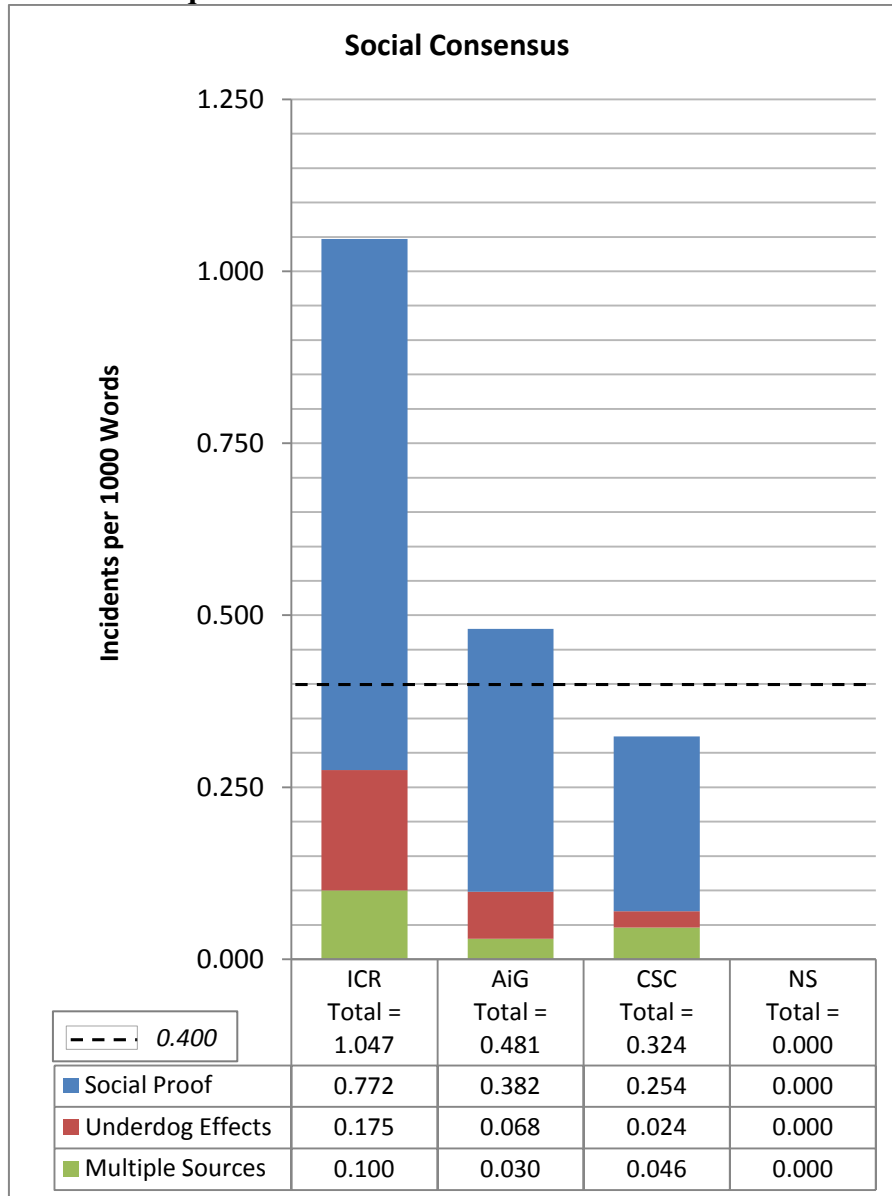
reiterates, and fortifies antievolutionism's scientific/religious reliability. These occurrences augment extant Source Cues, and demonstrate to audiences that statistics, and complicated field-specific language, are an important component of antievolutionism to think about. In terms of cumulative exposure and cultivation effects, such incidents would likely build assumptions about the existence and value of scientific or statistical support for antievolutionary ideas. Essentially, repeated exposure to jargon would imply that incomprehensible complexities of scientific or theological depths, as well as the credibility of messenger articulating them, all support Darwin-scepticism. Likewise, frequent appearances of statistics may develop the perception that numerical information tends to support antievolutionism, and that the mathematical complexities formulating such figures denote its credibility. Conceivably, mental schemas associated with statistical data, such as ideas about accuracy, precision, as well as the objectivity of numbers and the impartiality of mathematics, could also be triggered and linked with Darwin-scepticism's validity. The same would be true of jargon, depending upon the field that such language it is related to. For example, sophisticated scientific idioms and complicated diagrams expressing the chemical composition of intracellular biomechanical systems may invoke schema-linked conceptions of laboratory work, the periodic table of elements, or the explanatory power of chemistry. Therefore, cognitive frameworks that order ideas about complex numbers, science, and theology would consequently affect perceptions of antievolutionism, its credibility, and the academic integrity of its proponents.

7.7 EW Propaganda and Social Consensus

Social Consensus represents one of nine message variables which exhibit absolutely no incidents throughout the control group sample. With this in mind, it is apparent that even though CSC materials express a frequency rate that is <0.400 , *News*

and *Views* still contains facets of this persuasive element while *New Scientist* articles simply do not.

FIGURE 7.7
Social Consensus Frequencies



Consequently, persuasion affiliated with Multiple Sources, Social Proof, and Underdog Effects is another characteristic of Evolution Wars propaganda that distinguishes it from the popular science writings it often approximates. These three subcategories also function as machinery for reality maintenance, especially within ICR and AiG material, which express the most ample Social Consensus rates of recurrence. In particular, both

Social Proof and Multiple Sources operate as therapeutic devices. By telling audiences that the majority of individuals support a reality, or by implying this same idea via an ensemble of voices, individuals are reassured that they are citizens of the most socially accepted symbolic universe. Moreover, these statements may also rouse social pressures for potential emigrants, convincing audiences that leaving a particular reality coincides with denying the majority opinion. In addition to therapy, Underdog Effects also incorporate aspects of nihilation for reality support. Therapy occurs through underdog characterizations of a gallant minority, or a correct but unjustly rejected concept, while nihilation takes place when an erroneous majority is discredited.

Conspicuously, Institute for Creation Research materials demonstrate a Social Consensus frequency rate that is more than two times what is exhibited by Answers in Genesis propaganda. Despite this variance, *Acts&Facts* and *Answers* express similar reality maintenance attributes. For instance, Social Proof and Multiple Sources cases in both groups' materials often come in the form of audience testimonials. These dispatches originate from around the globe, and they therapeutically communicate that there are truly vast numbers of YEC supporters who hail from every inhabited continent on the planet. Furthermore, it is explained by ICR and AiG contributors that as the creationist message keeps spreading, YEC's international population continues to grow. Plus, the majority of American citizenry are therapeutically identified as being pro-YEC, while it is further explained that Darwin-scepticism's burgeoning community includes scores of accredited scientists. At the same time, the creationist scientists mentioned by ICR and AiG writers also embody an underdog assembly of well-educated, unrelenting researchers, who are boldly defying academia's evolutionary consensus. Furthermore, *Acts&Facts* and *Answers* depict Christians, and creationists specifically, as religious underdogs within an increasingly religiously intolerant,

secularly focused society. Such messages reinforce Young Earth Creationism's reality in light of a largely proevolutionist scientific community, and brace creationists who may feel threatened in a non-Christian world.

The communicative agenda set by ICR and AiG Social Consensus establishes noteworthy themes for audiences to consider and reconsider. Cases of Social Proof and Multiple Sources institute popular support as an essential topic, relating to audiences that the opinions held by an international community of individuals are an important part of the EW. In a sense, audiences are repeatedly encouraged to reflect upon what the masses accept and not necessarily what scientists are endorsing. This is especially pronounced in underdog excerpts, which often pitch the popular "commonsense" opinions of non-specialists against ideas vaunted by a corrupt, ideologically-driven cabal of Darwinists. Therefore, audiences are informed that the popular vote on evolution is incredibly valuable, and should be more heavily weighted than the conclusions championed by a faction of pro-evolutionists. In terms of cumulative exposure and cultivation, these same messages could conceivably foster the media-activated perception that not only is there a preponderance of creationists located around the globe, but that a great segment of the population which is exposed to YEC end up accepting it. Also, it may generate the impression that an impressive crowd of creationist researchers is actively defying Darwinism, irrespective of the fact that the existence of hundreds or even thousands of pro-YEC scientists would still represent a miniscule segment of the world's scientific community. Furthermore, Social Proof and Multiple Sources occurrences may prompt common mental frameworks associated with anxieties about contradicting popular opinion, finding safety-in-numbers, or even thoughts linked with respected ideals about majority rule and the will of the people. Alternatively, underdog commentaries may prime cognitive schemas associated with

valiant heroes rebelling against a perfidious oppressor. Moreover, underdog characterizations would tend to cause audiences to positively associate their own personal underdog experiences, and underdog schemas, with creationism. This is because people are inclined to mentally relate with underdogs, due to the perceived ‘underdog aspects of their own lives.’⁹⁵⁸

7.8 EW Propaganda and the Scarcity Principle

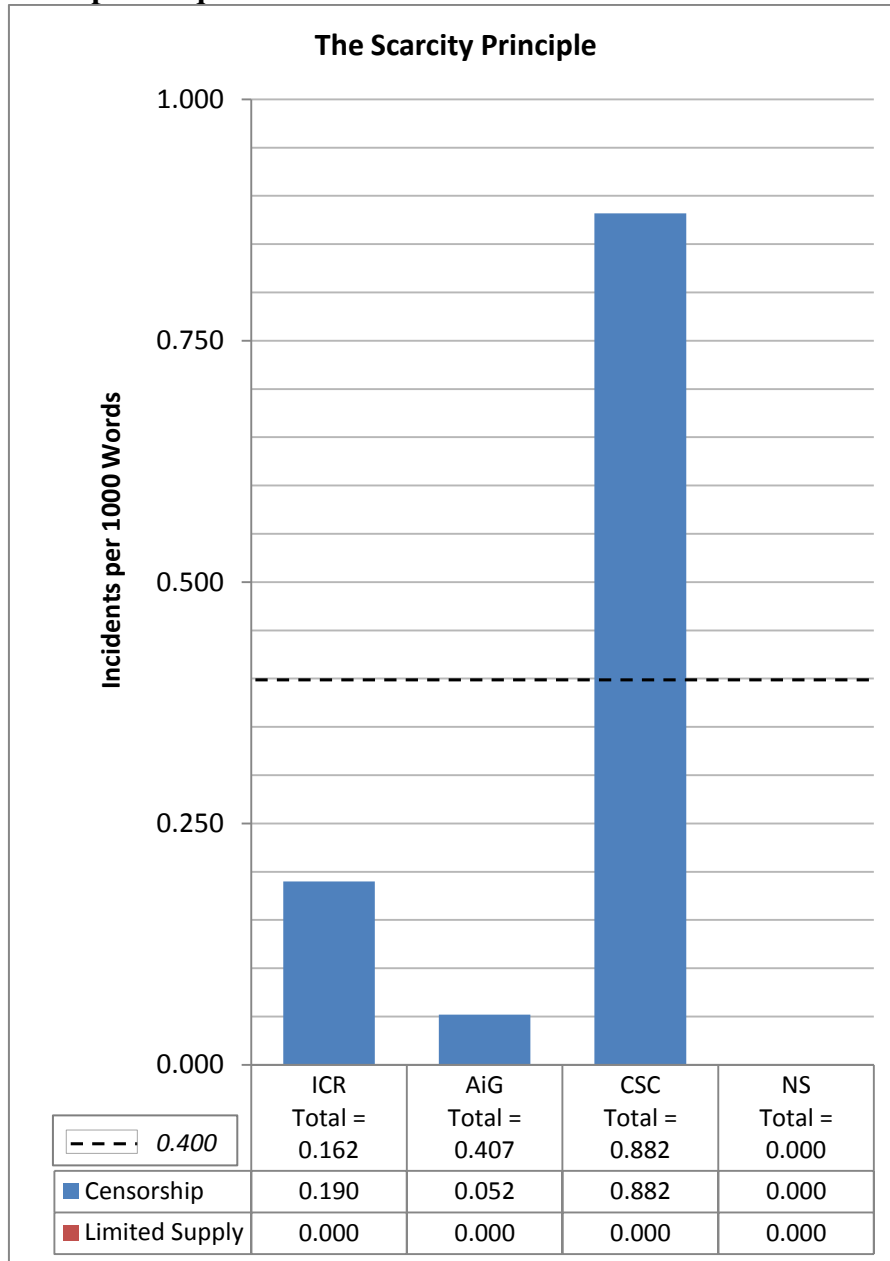
The Scarcity Principle is a yet another message variable that is entirely absent from the control group. The Center for Science and Culture is the lone organization to exhibit a frequency value that is ≥ 0.400 resulting from 368 incidents, which all relate to assertions of censorship rather than claims that an endorsed commodity is in short supply. Broadcasted descriptions of censorship function as nihilation devices, plainly depicting the censor as an unjust suppressor of factual information. This communicates that the messenger’s opponent is not only wrong, but is also a persecutor and an informational tyrant. At the same time, these articulations of the Scarcity Principle also perform reality maintenance therapy. The malicious nature of the censorial adversary is contrasted with the scrupulous communicator, who is being unfairly silenced for simply challenging authoritative decrees or trying to communicate the truth. This therapy strengthens the image of the censored party, while simply associating scarcity with the communication also persuasively enhances its perceived value and desirability. Consequently, allegations of censorship operate with a binary therapy-nihilation action.

The Scarcity Principle’s dual activity is evident within CSC claims that scientists are repressing empirical data, that antievolutionists are facing employment discrimination, and that the evil outcomes of evolution-fuelled ideologies are being concealed. In each of these expressions of censorship Darwinists are presented as

⁹⁵⁸ Pahlia et al., "The Underdog," 777.

dishonest truth repressors, while CSC is commended as a vanguard of science, and its Intelligent Design message is concurrently endowed with the appearance of scarceness.

FIGURE 7.8
Scarcity Principle Frequencies



The topical recurrence of such themes sets a communicative agenda in which audiences are informed that the existence of pro-evolutionist censorship is a vital issue to consider.

With its numerous Scarcity Principle occurrences, ICR materials attempt to compel audiences to repeatedly ask: What does it say of Darwinists' moral integrity that they

would engage in such activity? How does this activity delegitimize evolution's evidential basis? What is going on behind the closed doors of materialistic science? In addition to motivating audiences to consider why such censorial activity is happening, these incidents also foster a motif of scarcity that associates implicit desirability with the ID movement and its Darwin-sceptic message. Consequently, with cumulative exposure and media cultivation, it would be expected that not only would audiences eventually develop the perception that ID is being unjustly subjugated by evolutionists, but that there is genuine value in ID's apparent scarceness. These ideas can be thought to occur within what some have called 'the value heuristic,' or the cognitive schema through which people quickly judge the worth of an idea or product.⁹⁵⁹ Just as marketing campaigns trigger this particular schema, CSC claims of censorship may also stimulate ideas linking desirability with scarcity

7.9 EW Propaganda and Message Repetition

Message Repetition is rarely exhibited in ICR or CSC materials, and as figure 7.9 illustrates, the control group demonstrates absolutely no occurrences of this ELM cue. It is, however, a distinctive feature of Answers in Genesis propaganda. Like the message variable Asking Questions, this persuasive element can influence reality maintenance through either therapy or nihilation. The therapy-nihilation qualities of this ELM cue depend upon the context in which the variable occurs, and whether the repeated message is discrediting an adversary or reinforcing a promoted universe. 89.3% of AiG's Messenger Repetition cases are of the positive variety, which explain that the natural world provides clear proof of supernatural design, reiterate various theological lessons, and also address the creationist concept of biblical kinds.

⁹⁵⁹ Xianchi Dai, Klaus Wertenbroch, and C. Miguel Brendl, "The Value Heuristic in Judgments of Relative Frequency," *Psychological Science* 19, no. 1 (2008).

FIGURE 7.9
Messenger Repetition Frequencies



By repeating statements associated with these particular subjects, AiG articles therapeutically fortify pro-YEC notions again and again. *Answers'* less common negative repetition incidents operate as tools for nihilation, and they are associated with contestations of geology's uniformitarianism, allegations that noncreationist Christians are compromising, and criticisms of evolutionary theory and its proponents.

It is apparent, then, that throughout *Answers* Message Repetition most commonly operates as a reality maintenance therapy device, though some incidents of

nihilation also occur. With regard to media influences, it also seems that this particular cue might catalyze audience exposure to specific messages, and therefore, potentially augment indirect effects. For instance, an individual may be exposed to twelve AiG articles which each include the following type of assertion: “The concept of baramins are completely substantiated by empirical data.” As a result, this sort of remark would be communicated to the reader twelve individual times. However, if only four of those AiG pieces contain the three-fold repetition of this same statement, then the individual would actually be exposed to the message twice as many times within the same number of articles. In this sense, the persuasive element is itself an agenda-setting mechanism, which increases exposure to comments associated with various topics. Message Repetition has also been shown to aid in message recall and stimulate thinking about specific topics. Consequently, its presence would help to affirm the particular subject matter audiences are intended to consider by the messenger’s communicative agenda.

Persistent exposure to *Answers* articles containing Message Repetition would also assist in cultivating perceptions about the topics addressed within recurring statements. The notion that discernible supernatural design exists, for instance, would be generated not only through exposure to articles discussing this topic, but also by the numerous repetitions located within the individual pieces themselves. Accordingly, exposure to a certain message is increased by its echoed presence. In relation to this, the cognitive schemas primed by cases of this ELM cue would largely be affiliated with the topics repetitively considered. So, repeated comments concerning nature’s clear design could actuate schemas associated with propose in the natural world, complexity, engineering, etc. With this in mind, it is important to note that studies of repetition in advertising reveal that this persuasive cue enhances message comprehension by assisting schema-based learning. As Dardis explains, research has shown ‘repeated

exposure to a message intensified associative learning via schema-driven processes,' which ultimately resulted in more positive evaluations of brands.⁹⁶⁰ Thus, Message Repetition's schema-triggering characteristics would increase audience comprehension of AiG's premises, while also potentially improving opinions of YEC and AiG's branding efforts. It is to such Evolution Wars branding that this examination will now turn, which takes into account the cumulative messages delivered through the therapy and nihilation characteristics of ELM cues.

7.10 The Meta-Cue: EW Branding

As section 3.4.1 of this project has delineated, brands are representations of all the persuasive elements used to support a product; where the product can be a commodity, an individual, or an ideology. Because brands are cumulative aggregates of the total message variables used to gain product acceptance, they are essentially meta-cues of persuasion. These meta-cues rapidly express the constructed reality built around the commodity or idea being promoted, and in the context of the SoK, branding incorporates developing and maintaining the product's brand reality via therapy and/or nihilation efforts. Throughout EW propaganda this involves the interconnected branding of antievolutionism as a persuasive concept, Darwin-sceptic organizations, and the periodicals which they produce.

The first factor of this EW branding concerns associating the broad categories of "creationism" or "intelligent design" with the main persuasive themes manifested in ELM cues. This involves conceptually branding the very ideas of YEC or ID, so that these particular idioms become meta-cues in and of themselves. Such elemental branding occurs because ICR, AiG, and CSC materials do not simply describe young



⁹⁶⁰ Frank E. Dardis, "Attenuating the Negative Effects of Perceived Incongruence in Sponsorship: How Message Repetition Can Enhance Evaluations of an "Incongruent" Sponsor," *Journal of Promotion Management* 15, no. 1-2 (2009): 43.

earth creationism or intelligent design to audiences, but instead actively connect these principal concepts with specific persuasive elements and motifs, including scientific credibility or social validation. As a result, all of these persuasive constituents, and their therapy-nihilation attributes, become expressed within the very terms Young Earth Creationism or ID, which also embody Darwin-sceptic realities. In the same way that the branded letters BMW might be automatically associated with luxury, status, and the innovation of German engineering, the phrases creationism and intelligent design are coupled by EW propaganda with certain persuasive ideas. The branding of antievolutionism as a concept is then subsumed within the branding of the EW organizations, as well as the brand logo and name associated with the each group's foremost publication. This three-fold activity often occurs simultaneously so that the expressions YEC or ID are associated with persuasive cues, and concurrently allied with the branding of an EW organization and its chief mass media publication. Therefore, the appellations YEC/ID, the organization's name/logo, and the periodical's name/logo, all become integrated with one another by means of the persuasive therapy-nihilation constituents located throughout propaganda. This develops a sort of branded synonymy or intra-referentiality between all three components, such that the persuasiveness of Darwin-scepticism is equated directly with organizational/periodical brands, and vice versa.

The tripartite nature of Evolution Wars branding is represented throughout *Acts&Facts*, which often associates the conceptually branded notion of creationism with the Institute for Creation Research's organizational and publication branding. For instance, the therapeutic operation of ELM cues fortifying YEC's constructed reality will often synchronously validate the work of ICR and its brand, while also championing *Acts&Facts* as an important communication within creationism's symbolic

universe. Table 7.2 helps to characterize ICR's three-part brand meta-cue by presenting its conceptual, organizational, and publication branding. This table also relists the most ubiquitous message variables found in *Acts&Facts*, and catalogues whether these persuasive elements function as therapy, nihilation, or both. When therapy and nihilation are mutually expressed by a single variable this table further indicates the comparative distributions of therapy-nihilation occurrences as being *less than*, *greater than*, or *equal to* each other under the column 'Dist. [$<$, $=$, $>$].'

TABLE 7.2
ICR Branding

Branded Concept:	Young Earth Creationism				
Organizational Brand:					
Publication Brand:					
	Message Variable	Frequency Rate	Therapy	Dist. [$<$,$=$,$>$]	Nihilation
	1. Sources Cues	3.408	<input checked="" type="checkbox"/>		<input type="checkbox"/>
	2. Asking Questions	1.958	<input checked="" type="checkbox"/>	$<$	<input checked="" type="checkbox"/>
	3. The Contrast Principle and Negativity Effect	1.902	<input checked="" type="checkbox"/>	$=$	<input checked="" type="checkbox"/>
	4. Social Consensus	1.047	<input checked="" type="checkbox"/>	$>$	<input checked="" type="checkbox"/>
	5. Statistics and Technical Jargon	0.793	<input checked="" type="checkbox"/>		<input type="checkbox"/>

This chapter's discourse on therapy-nihilation reality maintenance provides insight regarding the composite EW brand image being constructed through Institute for Creation Research propaganda. At the outset, it can be noted that all five of ICR's most

prevalent message variables act as therapeutic devices, while only three simultaneously function with some aspect of nihilation. Of ICR's three dual-acting persuasive elements, only Asking Questions displays a greater rate of nihilation incidents. Alternatively, the Contrast Principle and Negativity effect manifests equal therapy-nihilation processes, and Social Consensus generates a larger proportion of therapy constituents. Consequently, all of ICR's major ELM cues persuasively act in concert to formulate a more pronounced emphasis on therapy, accompanied by an important, though less pervasive nihilation factor. Its central and most articulated theme is the therapeutic representation of Young Earth Creationism, ICR, and *Acts&Facts*, which is reinforced by the nihilation, or censure, of noncreationism. ICR's product reality construction can, therefore, be effectively described as therapy-based, nihilation-assisted branding.

The Institute for Creation Research's therapy-based and nihilation-assisted branding establishes a unique antievolutionist meta-cue, even while displaying extensive likenesses with AiG and CSC brands. As a result, ICR's particular tripartite conceptual/organization/publication branded representations, henceforth referred to as the *ICR-B*, is differentiated from other EW groups and communications. The resultant meta-cue swiftly conveys the following essentialized core premises, which are interconnected and often mutually dependent. These are listed according to their prevalence in the overall brand message, and the chief ELM cues engaged in their formation are catalogued within ensuing square brackets:

1. *ICR-B = Scientific-Academic Credibility + Religious*

Legitimacy/Common Values. First and foremost, the ICR-B denotes scientific-academic credibility, usually in the form of educational accreditations, empirical evidence, research initiatives, correct



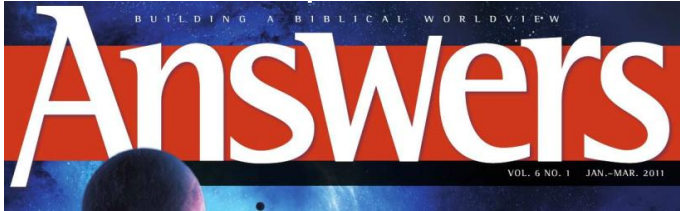
interpretations of data, and support from scientific leaders. It also expresses religious authorization, and to an extent, the ICR-B further signifies alignment with Evangelical Christian beliefs and principles, as well as American cultural values. [Source Cues; Statistics and Technical Jargon]

2. *ICR-B = A Comparatively Superior Choice.* The ICR-B is set apart from a wide variety of noncreationist perspectives through rhetorical questions that cast doubt upon the sincerity of noncreationist faith, pro-evolutionist scientific evidence, and the moral integrity of noncreationists. Similar questions clearly lend support to YEC, and whenever noncreationists are juxtaposed alongside the ICR-B, the latter's superiority is made clear. This is because all alternatives demonstrate abortive religious faith, a lack of empirical evidence, as well as conspicuous associations with Satan and horrendous evils. [Asking Questions; The Contrast Principle and Negativity Effect]
3. *ICR-B = Social Validation + The Underdog.* YEC adherents from around the world, including underdog scientists and victimized Christians, back the Institute for Creation Research's efforts. Also, the organization's international communications are positively impacting people on a regular basis. [Social Consensus; Statistics and Technical Jargon]

Answers in Genesis' therapy-nihilation reality maintenance also culminates in threefold EW branding, expressed here as *AiG-B*. The elements of this meta-cue are illustrated in table 7.3, which provides examples of the organization's unique '1:1' logo.

This image is displayed throughout AiG communications and it adorns Creation Museum employee uniforms.

TABLE 7.3
AiG Branding

Branded Concept:	Young Earth Creationism			
Organizational Brand:				
Publication Brand:				
Message Variable	Frequency Rate	Therapy	Dist. [$<$, $=$, $>$]	Nihilation
1. Sources Cues	3.562	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Asking Questions	2.866	<input checked="" type="checkbox"/>	$<$	<input checked="" type="checkbox"/>
3. The Contrast Principle and Negativity Effect	1.431	<input checked="" type="checkbox"/>	$=$	<input checked="" type="checkbox"/>
4. Statistics and Technical Jargon	1.188	<input checked="" type="checkbox"/>	$>$	<input checked="" type="checkbox"/>
5. Social Consensus	0.481	<input checked="" type="checkbox"/>		<input type="checkbox"/>
6. Message Repetition	0.407	<input checked="" type="checkbox"/>	$>$	<input checked="" type="checkbox"/>

The emblem distinctly refers to the opening chapter and verse of Genesis, emphasizing AiG's explicit commitment to the 'message of our Creator and Savior from the very first verse of His Word.'⁹⁶¹ Similar to ICR, each of AiG's six most ubiquitous message variables operate in reality maintenance therapy in one way or another, while four ELM cues also include some degree of nihilation. Of these four, Asking Questions is the only variable that displays a greater proportion of nihilation incidents. This demonstrates

⁹⁶¹ "Answersingenesis.Org: New Logo, New Look, New Features!," Answers in Genesis, <http://www.answersingenesis.org/articles/2007/06/14/new-site-design>.

AiG's prominent emphasis on legitimating YEC, the organization, as well as *Answers*, whereas nihilation proves to be a lesser focus due to relatively low frequency rates associated with negative rhetorical questions and negative contrast.

Consequently, AiG-B can also be described as therapy-based, nihilation-assisted branding. The similarities and differentiations existing between AiG-B and other EW brands are demonstrated in three predominant assertions that are jointly expressed within this meta-cue:

1. *AiG-B = Religious Credibility + Scientific-Academic*


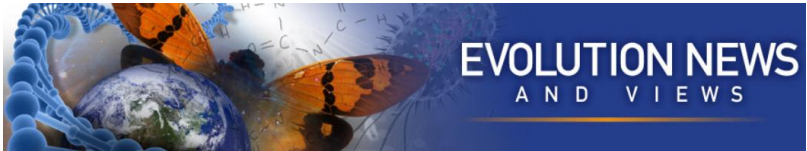
Legitimacy/Common Values-Attraction. Without question, the AiG-B cardinally expresses sacred authority; corroborated by God's personal testimony/trustworthiness, the association of Young Earth Creationism with Jesus and the biblical authors, the incontestability supernatural design in nature, and inclusions of religious instruction. Scientific-academic authority is further represented in the form of accreditations and claims of expertise, while the AiG-B articulates common values and celebrity attraction to a greater extent than any other EW group. [Source Cues; Statistics and Technical Jargon; Message Repetition]

2. *AiG-B = A Comparatively Superior Choice.* The advantage of the AiG-B over other alternatives is expressed via prominent questions that expose the religious/evidential deficiencies of non-YEC perspectives, and identify Darwin-scepticism/AiG's God-honouring, scientific characteristics. Every comparison of creationism with noncreationism uncovers the AiG-B's unmistakable superiority, highlighted in its biblical basis, divine sanction, theological dependability, scientific support, and

moral excellence. [Asking Questions; The Contrast Principle and Negativity Effect; Message Repetition]

3. *AiG-B = Social Validation + The Underdog*. The AiG-B is connected with a vast global population of creationists, including a myriad of scientists, who are eagerly participating in the organization's efforts and readily consuming/disseminating its materials. In retaliation, noncreationists have repeatedly attacked YEC, AiG, and its communications, signalling AiG-B's intrepid underdog nature. [Source Cues; Statistics and Technical Jargon]

TABLE 7.4
CSC Branding

Branded Concept:	Intelligent Design				
Organizational Brand:					
Publication Brand:					
	Message Variable	Frequency Rate	Therapy	Dist. [$<$, $=$, $>$]	Nihilation
	1. The Contrast Principle and Negativity Effect	2.770	<input checked="" type="checkbox"/>	=	<input checked="" type="checkbox"/>
	2. Asking Questions	2.030	<input checked="" type="checkbox"/>	$<$	<input checked="" type="checkbox"/>
	3. Source Cues	1.038	<input checked="" type="checkbox"/>		<input type="checkbox"/>
	4. The Scarcity Principle	0.882	<input checked="" type="checkbox"/>	=	<input checked="" type="checkbox"/>
	5. Statistics and Technical Jargon	0.592	<input checked="" type="checkbox"/>	$>$	<input checked="" type="checkbox"/>

Predictably, the Center for Science and Culture's threefold branding effort, or *CSC-B*, advances the most distinctive meta-cue in relation to EW propaganda. This is partly exemplified in CSC's particular message variable frequency rates, and the resulting distributions of therapy and nihilation illustrated in table 7.4. Though ICR and Answers in Genesis reality maintenance is led by Source Cue therapy, CSC materials first exhibit the Contrast Principle and Negativity Effect's therapy-nihilation dual action. Subsequently, in order of depreciating rates of recurrence, Asking Questions displays a larger proportion of negative therapy, Source Cues maintain a completely therapeutic focus, the Scarcity Principle expresses joint therapy-nihilation, and Statistics and Technical Jargon's incidents are predominantly therapeutic. What results is a fairly even distribution of both therapy and nihilation reality maintenance components. For this reason, the *CSC-B* is not primarily therapy-based and nihilation-assisted, but can instead be described as almost uniformly established upon *both* therapy and nihilation efforts.

The aggregate of the *CSC-B*'s relatively commensurate therapy-nihilation branding conveys the following two imbricating brand messages:

1. *CSC-B = A Comparatively Superior Choice.* The central notion collectively transmitted by the *CSC-B* is that Intelligent Design, CSC, as well as *News and Views*, symbolize unmatched options within the Evolution Wars. Unlike Darwinism, the *CSC-B* is representative of scientific evidence, academic freedom, as well as non-ideological and open-minded approaches to data. This superiority defies evolutionist lies and misrepresentations of ID, and differentiates the *CSC-B* from Darwinism's evil-inducing tendencies. In addition to the stark contrast between *CSC-B* and its main competitors, rhetorical questions and their

obvious answers expose Darwinism's evidential flaws and the moral shortcomings of evolutionists. These moral failings include active censorship, which increases the CSC-B's value by decreasing its perceived availability. [The Contrast Principle and Negativity Effect; Asking Questions; The Scarcity Principle]

2. *CSC-B = Scientific-Academic Credibility & CSC-B ≠*

Creationism/Religion. Connected with the CSC-B's leading premise is the notion that ID is genuinely credible. This credibility is delineated by academic credentials, a swath of peer-reviewed work, active research projects, and the validation of America's founding fathers. Additionally, numerous scientists, philosophers, and theologians of the past are described as pro-ID and affiliated with the *CSC-B*. Correspondingly, *CSC-B*'s credibility also starkly distinguishes it as a noncreationist, and a nonreligious concept. [Source Cues; The Contrast Principle and Negativity Effect; Statistics and Technical Jargon]

TABLE 7.5
EW Brand Messages

ICR-B Therapy-Based, Nihilation-Assisted	AiG-B Therapy-Based, Nihilation-Assisted	CSC-B Therapy ≈ Nihilation Attributes
ICR-B = Scientific-Academic Credibility + Religious Legitimacy/Common Values	AiG-B = Religious Credibility + Scientific-Academic Legitimacy/Common Values-Attraction	CSC-B = A Comparatively Superior Choice
ICR-B = A Comparatively Superior Choice	AiG-B = A Comparatively Superior Choice	CSC-B = Scientific-Academic Credibility & CSC-B ≠ Creationism/Religion
ICR-B = Social Validation + The Underdog	AiG-B = Social Validation + The Underdog	

The similarities and differences existing between the CSC-B and other EW branding efforts are further illustrated in table 7.5. This table elucidates the overarching meta-cues transmitted by each group's communications, and the nuances of ICR, AiG,

and the Center for Science and Culture's differentiated brands. In a sense, these branding premises formulate gestalt persuasive elements, articulated when the most widespread propaganda message variables work in concert. Furthermore, they denote the consummate persuasive realities that are being constructed and maintained by each group; subsuming such notions as scientific/religious authority, competitive advantage, and social validation within the assemblages of antievolutionism. These brands represent the engineered realities that EW propaganda is supporting, and the fundamental principles that ELM cues collectively manufacture throughout such media. Hence, the persuasive elements found in each organization's materials are not only serving to convince audiences of discrete antievolutionist ideas, but they are summatively helping to delineate and maintain what audiences accept as subjectively *real* in the EW. For instance, a comprehensive message delivered by all three groups is that Darwin-scepticism is the most scientifically/religiously validated perspective, and as a result, it is the most real or authentic viewpoint. Evolution, on the other hand, is not. These are the EW realities being swiftly expressed to audiences via each group's brand identities.

7.11 Therapy, Nihilation, and The Project's Hypotheses

The implications of EW reality maintenance and branding will be further advanced within the Chapter Eight. For the time being, however, it is important to note that the current discourse reveals numerous prospective layers of persuasion manifested within such EW communications. First and foremost, it is apparent that there are individual ELM cues which can each elicit audience persuasion in response to a communication. Secondly, occurrences of such ELM cues in Evolution Wars mass communications may also help to generate indirect media effects, such as agenda-setting, cumulative exposure, cultivation, and the priming of cognitive schemas.

Thirdly, there are comprehensive premises expressed by the total therapy-nihilation actions of these persuasive elements, which influence EW branding and present a reality delineating meta-cue to audiences. These insights lead back to the project's central hypotheses, which involve seeking to decipher the role of propaganda in the Evolution Wars, theorizing that such media contains important persuasive properties, and suggesting that propaganda can be considered a key ingredient of the EW's international growth. It is to these hypotheses that this project will again turn.

CHAPTER EIGHT

The Biggest Stick Wins: Assessing the Hypotheses and Project Implications

Obviously, propaganda does not exist by itself. But without it, nothing would happen. It really starts the engine. And once the movement is underway, propaganda keeps it going, directs it, and ensures its success.

Jacques Ellul⁹⁶²

Undoubtedly, few social scientists today think that the mass media have the power to sway huge audiences to the extent once believed likely. Nevertheless, the technological advances of the last century—from the first primitive radio broadcasts to today's high-speed mobile Internet devices—have made it possible for individual communicators to have access to unprecedented numbers of potential message recipients.

Richard E. Petty, Joseph R. Priester, and Pablo Briñol⁹⁶³

8.1 Assessing the Hypotheses

In 1949, when the magic bullet effects of communications were still widely accepted and the propaganda campaigns of WWII remained fresh in people's minds, Dorwin Cartwright reasoned: 'It is conceivable that one persuasive person could, through the use of mass media, bend the world's population to his will.'⁹⁶⁴ Though such claims are no longer wholly accepted, it is evident that media are still able to influence audiences in various, somewhat oblique ways. Furthermore, mass communications now saturate modern societies to the point that individuals generally fail notice their own immersion in mass communications, while new forms of media

⁹⁶² Ellul, *Propaganda*, 290.

⁹⁶³ Petty, Priester, and Brinol, "Mass Media," 155.

⁹⁶⁴ Dorwin Cartwright, "Some Principles of Mass Persuasion: Selected Findings of Research on the Sale of United States War Bonds," *Human Relations* 2, no. 3 (1949): 253.

have also become ever more accessible to a wider range of broadcasters.⁹⁶⁵ This inundation of media transmissions can impact spectators through mental shortcuts, because audiences are effectively ‘cognitive misers,’ who are unable to fully assimilate the vast quantities of persuasive information bombarding them on a daily basis.⁹⁶⁶ In combination with indirect effects, mass communications can therefore act in subtle ways, rather than through the repudiated hypodermic syringe model of media control. Accordingly, Dill notes that while people often ‘have an Orwellian view of manipulation’ individuals are actually ‘vulnerable to the more subtle forms of mass media manipulation that are more likely to take our money and change our minds.’⁹⁶⁷ With regard to this, the present study will consider its findings and assess its three hypotheses.

This study’s central hypothesis contends that propaganda represents an essential constituent of the EW. Its importance stems from the communicative persuasiveness of such media rather than simply its arguments’ veracity. In order to appraise H1, the project’s second and third hypotheses will first be examined. H2 suggests that EW propaganda contains noteworthy quantities of persuasive attributes that can trigger persuasion responses from audiences in certain situations. Relating to this, the content analysis observations reported here have demonstrated that ICR, AiG, and CSC materials do in fact contain several persuasive elements that appear at rates ≥ 0.400 occurrences per 1000 words. Each of these variables has been shown to influence audiences exhibiting low-to-medium elaboration likelihood within the context of the Elaboration Likelihood Model’s dual-process account of persuasion. What’s more, these ELM cues exhibit significantly greater frequency rates throughout EW

⁹⁶⁵ Dill, *How Fantasy*, 6.

⁹⁶⁶ Shelley E. Taylor, "The Interface of Cognitive and Social Psychology," in *Cognition, Social Behavior, and the Environment*, ed. John H. Harvey (New Jersey: Lawrence Erlbaum Associates, 1981), 194-95.

⁹⁶⁷ Dill, *How Fantasy*, 39.

propaganda than in the *New Scientist* control sample. Therefore, it can be concluded that Evolution Wars propaganda does contain persuasive attributes in sizeable quantities, which have the ability to conceivably influence audiences in a peripheral manner.

The third hypothesis maintains that message variable incident rates exhibited by EW propaganda demonstrate the main persuasion foci of Darwin-sceptic materials, and reveal the potential ways that these media communications may be persuasively influencing audiences. To be sure, the content analysis of EW propaganda materials indicates which ELM cues occur in such communications, as well as the relative concentrations of these persuasive elements. The distributions and articulations of recurrent message variables have been detailed throughout Chapters Four to Six, while Chapter Seven has provided analyses of the indirect media effects which may be fostered via these persuasive cue appearances. Additionally, conceptualizations of the therapy-nihilation roles associated with each ELM cue further display the overarching persuasion themes constituting EW branding. It is evident from this examination that all three organizations precipitate distinctive branding motifs, which emphasize Darwin-sceptic credibility and the consummate superiority of antievolutionism. Additionally, ICR and Answers in Genesis also link these themes with important social consensus messages. What results is a broad sketch of EW propaganda and its persuasive qualities that are expressed by individual cues, plausible media influences, and the construction of antievolutionist brand realities.

This brief appraisal of H2 and H3 provides important insights regarding the plausibility of H1. At the outset, the following statements can be suitably advanced:

1. Evolution Wars propaganda is animated by a variety of message variables that have been demonstrated to affect communications

recipients in peripheral ways, and to influence audiences expressing low-to-medium elaboration likelihood.

2. The concentration of such persuasive cues is far greater in EW propaganda than in the popular science writing which these materials often resemble.
3. The occurrence rates and distributions of various ELM cues demonstrate prospective media effects, as well as the composition and persuasive foci of EW branding.

Additionally, the leading antievolutionist groups examined here have openly made disseminating such Darwin-sceptic materials organizational priorities. Thus, ICR, AiG, and CSC have not only established mass media as a fundamental EW initiative, ensuring that the antievolutionist ‘message continues its march around the world,’ but these same broadcasts are discernibly infused with sizeable quantities of persuasive elements.⁹⁶⁸ For that reason, when the content analysis data reported here are evaluated within the context of this study’s premises, H1 can be established as a logical and substantive conjecture.⁹⁶⁹

8.2 Considering the Implications

Confirming the validity of H1-3 educes a number of important insights regarding the EW and its analysis. To begin with, it modifies how antievolutionist contentions should be perceived; relocating the importance of such assertions not only in the merits/deficits of Darwin-sceptic claims, but also in the actual persuasiveness of these arguments as EW mass communications. For example, other researchers have

⁹⁶⁸ "Next Stop," 16.

⁹⁶⁹ Further social psychological testing using these specific materials, as well as additional social scientific analyses, would assist in corroborating H1. Social psychology may provide direct empirical data regarding the persuasiveness of EW propaganda, while sociological surveys and directed interviews could provide supplementary insight concerning the reported influence of such communications within Darwin-sceptic communities.

already identified, often quite minimally, a number of rhetorical tactics employed by antievolutionists. Many of these strategies can be affiliated with the ELM cues discussed and enumerated here, including: assertions about the scientific certainty of Darwin-scepticism, as well as the abundance of scientists who apparently support it; associating evolution with social evils and Satan; declarations that antievolutionism is being victimized and censored; characterizing evolution as empirically unsubstantiated, not authentic science, and based upon nonfactual assumptions; affiliating the acceptance of evolution with the rejection of intrinsic human worth as well as the dismissal of traditional moral values; the employment of opinion poll statistics; and, the use of cartoons.⁹⁷⁰ In almost every case where these antievolutionist tactics are described, however, the intent has been to polemically deconstruct such arguments and outline their flaws. While these analyses are essential for modern science-religion discourse, in some ways they are missing the point. This is because, in terms of propaganda and the growth of the Evolution Wars, the crux of the matter is not necessarily whether these communications are philosophically/scientifically/theologically valid, *but whether they are persuasive*. As Stempien and Coleman conjectured in 1985, ‘some of the apparent

⁹⁷⁰ Joel Cracraft, "The Scientific Response to Creationism," *Science, Technology, & Human Values* 7, no. 40 (1982): 79; Ronald L. Numbers, "Creationism in 20th-Century America," *Science* 218, no. 4572 (1982): 538-39; Provenzo, *Religious Fundamentalism*, 54-64; Robert Wesson, *Beyond Natural Selection* (Cambridge: The MIT Press, 1993), 21; Toumey, *God's Own*, 23, 48-50, 52-53, 56-58, 67-82, 90-100, 257-60, 62-64; Kenneth R. Miller, *Finding Darwin's God: A Scientist's Search for Common Ground between God and Evolution* (New York: HarperCollins, 1999), 179-84; Pennock, *Tower of*, xvii, 309-11, 13-16; Janet Radcliffe Richards, *Human Nature after Darwin: A Philosophical Introduction* (London: Routledge, 2000), 25-26; Matthew J. Brauer and Daniel R. Brumbaugh, "Biology Remystified: The Scientific Claims of the New Creationists," in *Intelligent Design Creationism and Its Critics: Philosophical, Theological and Scientific Perspectives*, ed. Robert T. Pennock (Cambridge: The MIT Press, 2001); Forrest, "The Wedge," 17-19, 23-24, 30, 36-43; Forrest and Gross, *Creationism's Trojan*, 16, 36-47, 77-84, 87-88, 111, 14-15, 80-82, 84-86, 202-05, 15-16; Niall Shanks, *God, the Devil, and Darwin a Critique of Intelligent Design Theory* (Oxford: Oxford University Press, 2004), 8; Michael Ruse, *The Evolution-Creation Struggle* (London: Harvard University Press, 2005), 278-81; Numbers, *The Creationists*, 55-56, 61, 137-60, 268-85, 301-11; Scott and Branch, eds., *Not In*, 2-3; Bowler, *Monkey Trials*, 1-2, 10, 12-13; Stephen J. Pope, *Human Evolution and Christian Ethics* (Cambridge: Cambridge University Press, 2007), 79-81, 134, 88-96, 206-13; Sarkar, *Doubting Darwin*, 156-60; Giberson, *Saving Darwin*, 20-21, 81-84, 140-41, 47-48, 73, 93-94; Miller, *Only a*, 88-89, 137-38; Ruse, *The Evolution*, 79-80; Scott, *Evolution vs.*, xxiii, 212-13; Constance Areson Clark, "'You Are Here': Missing Links, Chains of Being, and the Language of Cartoons," *Isis* 100(2009).

success of the creationists in influencing public opinion is a result of differences in the form, rather than content, of the arguments.⁹⁷¹

By considering the Elaboration Likelihood Model, communications effects, and the construction of brand realities, this study has demonstrated that there are in fact several persuasive strata of EW propaganda. This is especially relevant for vast audiences expressing low-to-medium elaboration likelihood. Such message recipients seek to exert minimal cerebral effort in processing communications, and may simply not be equipped with the ready ability to scrupulously dissect each and every Darwin-sceptic statement incorporating the complexities of biology, geology, physics, astronomy, or theology. For that reason, the question of why Darwin-sceptic propaganda could be effective in the EW is not merely answered by whether it contains veracious assertions, but instead if such media exhibit persuasive characteristics. Hence, we must ask how the average EW propaganda message recipient would be influenced by claims that antievolutionists have doctorates from Cambridge and Harvard, that Darwin-scepticism is statistically proven to be accepted by a majority of citizens, and that there exists a strong global contingent of underdog antievolutionist scientists. Accordingly, the following proposition is contended:

P1: Message recipients that have not yet acquired a comprehensive education in the philosophical, scientific, and theological points demanded to thoroughly scrutinize antievolutionist mass media – such as the average church member to whom the majority of EW propaganda is cast – would likely be persuaded by these communications.

That is, in terms of cognitive mental shortcuts and peripheral influence, Evolution Wars propaganda *is* persuasive. Furthermore, these persuasive attributes are likely to influence audiences, regardless of whether researchers have unanimously concluded that

⁹⁷¹ Stempien and Coleman, "Processes of," 169.

there should be no intrinsic evolution-religion conflict, or if scholars have argued that such Darwin-sceptic communications are fallacious.

This project also supplies much needed observations associated with ideas previously hinted at by other researchers. For instance, at least in part, a handful of studies identifying various antievolutionist rhetorical techniques have suggested that such persuasive tactics are influential in the EW because they are included in broadcasts intentionally aimed at non-experts. However, these analyses do not quantify the occurrence rates of such techniques, nor do they consider persuasion theory, media effects, and how such communications could actually be influential. In illustration of this, while some investigators have pointed out that Darwin-sceptics employ moral themes and values-discourse, we are not told how often such arguments actually appear in EW materials, and there is very little discussion regarding if and how such contentions may be persuasive. Through this project's analysis, such tentative insights are now given analytical life.

Finally, integrating the SoK within this study offers an important perspective on the EW and its propaganda, as well as an apposite conceptual framework for examining antievolutionist branding efforts. This sociological outlook illustrates how ELM cues collectively operate as therapy-nihilation apparatus for the articulation of EW brands. Within the context of the SoK, these brand meta-cues are engineered product realities, which quickly delineate to audiences what is subjectively real concerning evolutionary theory and Darwin-scepticism. Therefore, EW propaganda can be interpreted as not only being a vehicle for persuasive elements, but also as the means used to generate brand realities that wreathe the very concepts of YEC/ID, antievolutionist organizations, and their media materials, with persuasive motifs.

In relation to this, the persistence of the Evolution Wars attest to the robust nature of antievolutionist subjective realities, and their ability to endure in the face of overwhelming scientific opposition. Thus, while an almost unanimous majority of scientists endorse evolutionary theory as constituting ‘reality-as-it-is,’ Darwin-scepticism’s ‘reality-as-it-is-perceived-to-be’ has proven to be a tenacious notion.⁹⁷² One of the reasons that these antievolutionist realities carry on is certainly due to their association with other significant symbolic universes, including non-naturalistic, teleological, and theistic worldviews. Additionally, the successful legitimation of these realities via propaganda must also be distinguished as an important constituent of antievolutionist reality maintenance, since any socially accepted reality is ‘*not a phenomenon that exists in its own right but one that is produced and communicated.*’⁹⁷³ If a reality cannot be adequately defended and passed on it will struggle to last. In the case of antievolutionism, it is plain that every effort is being made to convey Darwin-sceptic realities to global audiences through propaganda, and that these media are infused with persuasive attributes that include brand meta-cues.

What is particularly important in this discussion of the sociology of knowledge is its acknowledgment that what is considered to be “real” by a populace may openly conflict with ‘the empirical variety of “knowledge” in human societies.’⁹⁷⁴ Hence, while the academy has generally criticized Darwin-scepticism, accruing an extensive corpus of pro-evolutionist data and arguments, antievolutionism may still ‘be socially established as “reality.”’⁹⁷⁵ This is because ‘what people “know” as “reality” in their everyday, non- or pre-theoretical lives’ may be influenced by a number of factors that do not necessarily include scholastic claims about empirical science or complex

⁹⁷² Cowan, "Bearing False", 5.

⁹⁷³ McCarthy, *Knowledge as*, 18. (her italics)

⁹⁷⁴ Berger and Luckmann, *The Social*, 15.

⁹⁷⁵ Ibid.

philosophical discourse.⁹⁷⁶ These factors often consist of various maintenance apparatus employed by a symbolic universe's authorities, or 'intelligentsia,' who endeavour to preserve and proliferate constructed realities.⁹⁷⁷ 'If a worldview is to successfully provide the stable structures enabling people to order their experience for any extended period of time,' explains McCarthy, 'mechanisms to overcome these obstacles must exist.'⁹⁷⁸

Such conceptual machinery is especially important when a constructed reality encounters competition from interfering *Weltanschauungen*. The success of these apparatus within inter-universe conflicts depends upon how they are used, as well as the influence of those who wield them. Berger and Luckmann note:

The confrontation of alternative symbolic universes implies a problem of power - which of the conflicting definitions of reality will be "made to stick" in the society. Two societies confronting each other with conflicting universes will both develop conceptual machineries designed to maintain their respective universes. From the point of view of intrinsic plausibility the two forms of conceptualization may seem to the outside observer to offer little choice.⁹⁷⁹

Regarding this, the cogency of arguments and empirical support are not necessarily determinants of which realities experience societal ascendancy. In fact, throughout history various subjective universes have predominated because they were nourished 'by those who wielded the better weapons rather than those who had the better arguments.'⁹⁸⁰ Thus, as Berger and Luckmann maintain, 'He who has the bigger stick has the better chance of imposing his definitions of reality.'⁹⁸¹

⁹⁷⁶ Ibid., 27.

⁹⁷⁷ Ibid., 105; Karl Mannheim, *Ideology and Utopia: An Introduction to the Sociology of Knowledge*, trans. Louis Wirth and Edward Shils (New York: Harcourt, Brace & Co., 1954 [1929]), 9-10.

⁹⁷⁸ T.C. Kline, III., "Sheltering under the Sacred Canopy: Peter Berger and Xunzi," *The Journal of Religious Ethics* 29, no. 2 (2001): 267.

⁹⁷⁹ Berger and Luckmann, *The Social*, 126.

⁹⁸⁰ Ibid., 127.

⁹⁸¹ Ibid.

In a sense, an important ‘stick’ of the modern world has included persuasive communications, for as some theorists have noted, throughout the 20th century mass media increasingly affected the development and maintenance of social realities. ‘Never before were people’s experiences and knowledges so directly linked to mass techniques and technologies,’ explains McCarthy. ‘Never before were ideas capable of being instantly communicated across nations, classes, continents’ that could subsequently influence reality constructions.⁹⁸² With respect to the EW, it is evident that the world’s leading antievolutionist organizations have made every effort to utilize the “big stick” of mass media in the form of propaganda. In fact, when one compares the relatively diminutive population of Darwin-sceptic leaders to the sizeable numbers of proevolutionist academics, and then acknowledges the sheer quantity of antievolutionist media, it seems that YEC/ID proponents have much more decisively employed the “weapon” of mass communications. Therefore, while evolution is both empirically and theoretically ensconced within the academic world, antievolutionists may be more persuasively sustaining their realities within the EW via propaganda. Bearing this in mind, the following proposition is advanced:

P2: Not only is antievolutionist propaganda persuasive, but in contrast with proevolutionists, ICR, AiG, and CSC are more effectively using such mass media in the EW to successfully establish and maintain Darwin-sceptic realities.

P2’s importance is apparent when it is considered alongside an iconic statement expressed by William I. Thomas and Dorothy S. Thomas, which is central to the SoK: ‘If men define situations as real, they are real in their consequences.’⁹⁸³ Robert K. Merton described this social constructionist notion as ‘probably the single most consequential sentence ever put in print by an American sociologist,’ and it implies that

⁹⁸² McCarthy, *Knowledge as*, 10.

⁹⁸³ William I. Thomas and Dorothy S. Thomas, *The Child in America: Behavior Problems and Programs* (New York: Alfred A. Knopf, 1928), 572.

actions are influenced by subjective perceptions of circumstances.⁹⁸⁴ With regard to the EW, it also indicates that if audiences are convinced of antievolutionist subjective realities, then their beliefs and activity within the EW will be guided by those Darwin-sceptic perceptions of what is real. Therefore, when it is associated with P1 and P2, this vital concept provides the basis for this study's final proposition:

P3: The empirical/theoretical veracity of evolution as a scientific premise is not necessarily as important an EW influence as the propaganda used to critique or defend it.

Evolution may be thought of as an objective reality to a multitude of scientists and other academic researchers. However, if it is not accepted as genuine science by a preponderance of nonexperts, it will fail to become a socially approved reality and the EW will be prolonged. Propaganda and mass persuasion, which are essential components of modern reality maintenance, are in many ways more significant in the EW than the existence of proevolutionist scientific data. If the biggest stick wins, and Darwin-sceptics are utilizing a disproportionate amount of propaganda to persuade considerable audiences and foster antievolutionist subjective realities, then the Evolution Wars are here to stay.

⁹⁸⁴ Robert K. Merton, *Sociological Ambivalence & Other Essays* (New York: The Free Press, 1976).

APPENDIX ONE
STANDARD PROPAGANDA ANALYSIS RESEARCH STEPS

ANALYTICAL STEPS	DESCRIPTION OF ANALYZED DATA
1. Identify Propaganda Source	<ul style="list-style-type: none"> • History of the propaganda source. • Hierarchy of associated organizations and leadership. • Ideological motivations and specific goals. • Organizational membership and demographics.
2. Examine Propaganda Context	<ul style="list-style-type: none"> • Historical and contemporary socio-political contexts, with an emphasis on the conflict/competition milieu.
3. Review Media Utilization	<ul style="list-style-type: none"> • Historical and contemporary media use. • Media distribution and allocation strategies. • Financial patronage for media distribution.
4. Investigate Persuasion Elements	<ul style="list-style-type: none"> • Specific persuasion techniques and overall strategies. • Categorize propaganda according to the persuasion methods, aims, and contexts.
5. Consider Propaganda Effects	<ul style="list-style-type: none"> • The propaganda's detectable impact upon society, if available, including changes in government policy, or the appropriation of propaganda slogans and messages by news agencies and other media sources. • Interpretation of the success/failure of propaganda campaigns. • Membership growth related to propaganda activities. • Counterpropaganda.

APPENDIX TWO
AN INVENTORY OF PROPAGANDA TECHNIQUES

1. DATA DELIVERY OPTIONS	
i. Data Censorship	<ul style="list-style-type: none"> ● <i>Suppression</i>: Wilfully neglecting and/or repressing information that does not support the propaganda cause.⁹⁸⁵ ● <i>Concealment of Motive</i>: Obscuring the true intent behind propaganda communications.⁹⁸⁶
ii. Data Redaction and Supplementation	<ul style="list-style-type: none"> ● <i>Distortion, Doublespeak, and Card Stacking</i>: Intentionally ‘twisting, rearranging, or otherwise “fixing up” of what finally reaches us—deliberately and for a purpose.’⁹⁸⁷ This can involve employing ‘language that is strategically chosen to distort or obscure reality,’ as well as the ‘selection and use of facts or falsehoods...in order to give the best or worst possible case for an idea, program, person, or product.’⁹⁸⁸ ● <i>Diversion</i>: Preoccupying audiences with ‘<i>different matters</i>’ that distract from potentially unfavourable information.⁹⁸⁹ ● <i>Fabrication</i>: The ‘opposite of suppression,’ which entails the creative manufacture of data.⁹⁹⁰ ● <i>A Kernel of Truth</i>: The purposeful incorporation of accurate data,⁹⁹¹ because a ‘deliberate lie is not likely to command credence for long.’⁹⁹²

⁹⁸⁵ Lumley, *The Propaganda*, 117.

⁹⁸⁶ Mackenzie, *Propaganda Boom*, 64.

⁹⁸⁷ Lumley, *The Propaganda*, 122.

⁹⁸⁸ Katherine N. Kinnick, "Doublespeak," in *Encyclopedia of Public Relations*, ed. Robert L. Heath (Thousand Oaks: Sage, 2005), 260; Lee and Lee, *The Fine*, 24.

⁹⁸⁹ Lumley, *The Propaganda*, 128.

⁹⁹⁰ *Ibid.*, 130.

	<ul style="list-style-type: none"> • <i>Consistency</i>: The message's information is persistently framed in similar ways.⁹⁹³ • <i>Simplicity</i>: Complex issues are abridged to basic representations 'of the problem and the proposed resolution.'⁹⁹⁴
iii. Data Emphasis	<ul style="list-style-type: none"> • <i>Repetition</i>: Continually reiterating the message.⁹⁹⁵ • <i>Sloganeering</i>: Messages are 'built round a slogan' that catches the audience's attention, expresses central notions clearly, and which is easily repeatable.⁹⁹⁶ • <i>Timing</i>: Communications are transmitted during the most effective window of opportunity that would best suit message reception.⁹⁹⁷ • <i>Monopolization</i>: As many communication channels as possible are controlled for message delivery.⁹⁹⁸ • <i>Exaggerations</i>: Using hyperbole for effect.⁹⁹⁹
2. OFFENCE-DEFENCE	
i. Defamation of Enemies,	<ul style="list-style-type: none"> • <i>Name Calling, Colour, and Language Use</i>: Conferring a 'bad label' to a cause or group.¹⁰⁰⁰ Mackenzie uses the word <i>Colour</i> to describe

⁹⁹¹ Mackenzie, *Propaganda Boom*, 56.

⁹⁹² Frederick T. Wood, *Training in Thought and Expression* (London: MacMillan, 1940), 38.

⁹⁹³ Cowan, "Contested Spaces," 259.

⁹⁹⁴ Ibid.

⁹⁹⁵ Mackenzie, *Propaganda Boom*, 50.

⁹⁹⁶ Ibid., 61.

⁹⁹⁷ Ibid., 68. Others, such as Ellul, have also emphasized the importance of timing in Propaganda. Ellul, *Propaganda*, 43-44.

⁹⁹⁸ Paul Lazarsfeld and Robert Merton, "Mass Communication, Popular Taste and Organized Social Action," in *Communication of Ideas*, ed. Lyman Bryson (New York: Harper and Brothers, 1948), 113; Garth S. Jowett and Victoria O'Donnell, *Propaganda and Persuasion*, 4th ed. (Thousand Oaks and London: Sage, 2006), 282.

⁹⁹⁹ Charles A. Siepmann, *Radio, Television, and Society* (New York: Oxford University Press, 1950), 182.

¹⁰⁰⁰ Alfred M. Lee, "The Analysis of Propaganda: A Clinical Summary," *The American Journal of Sociology* 51, no. 2 (1945): 134.

Competing Ideas, and Actions	<p>‘reports that arouse sympathy for his own cause or antagonism towards his opponents,’¹⁰⁰¹ and Jowett and O’Donnell similarly employ the term <i>Language Use</i> to express communications that “deify a cause and satanize opponents.” For instance, “Metaphors of hunting down animals or exterminating vermin were common in the rhetoric of both sides during World War II.”¹⁰⁰²</p> <ul style="list-style-type: none"> • <i>Reward and Punishment</i>: Symbolic and authentic threats or rewards are used to motivate individuals into adhering to propaganda messages.¹⁰⁰³
ii. Championing Groups, Ideas, and Actions	<ul style="list-style-type: none"> • <i>Glittering Generalities, Colour, and Language Use</i>: Using the same principles as Name Calling, <i>Glittering Generalities</i> attempts to garner respect and allegiance by associating a cause with “virtue words,” or idioms that have positive and authoritative meanings.¹⁰⁰⁴ For instance, abstractions such as “civilization, Christianity, good, proper, right, democracy, patriotism, motherhood, fatherhood, science, medicine, health, and love,”¹⁰⁰⁵ are used to imply “shining ideals,” and are affiliated with the propagandist’s goals.¹⁰⁰⁶ See <i>Colour and Language Use</i> above. • <i>Reward and Punishment</i>: See above.
iii. Source Factors	<ul style="list-style-type: none"> • <i>Transfer and Source Credibility</i>: The propagandist “carries the

¹⁰⁰¹ Mackenzie, *Propaganda Boom*, 52.

¹⁰⁰² Jowett and O’Donnell, *Propaganda and*, 283.

¹⁰⁰³ *Ibid.*, 282.

¹⁰⁰⁴ Lee and Lee, *The Fine*, 47.

¹⁰⁰⁵ *Ibid.*

¹⁰⁰⁶ Clyde R. Miller, "How to Detect Propaganda," *Bulletin of the American Association of University Professors* 24, no. 1 (1938): 51.

	<p>authority, sanction, and prestige of something respected and revered over to something else in order to make the latter acceptable.”¹⁰⁰⁷ As Jowett and O’Donnell have explained, the propaganda message appeals to a source that maintains at least an image of credibility by the target audience. The apparent legitimacy of that source then validates the propaganda message.¹⁰⁰⁸</p> <ul style="list-style-type: none"> • <i>Visual Symbols of Power</i>: The incorporation of cultural symbols of power that invoke “a larger-than-life feeling and creates a sense of potency.”¹⁰⁰⁹ Such symbols can include massive images of leaders, flags, and representations of military, political, and/or religious strength.
<h3>3. SOCIAL LEVERS</h3>	
<p>i. Appealing to Authority Figures/Symbols</p>	<ul style="list-style-type: none"> • <i>Testimonials</i>: Similar to <i>Transfer</i> (above), this involves appealing to a well known person for an endorsement of the propaganda message to supply proof of its validity.¹⁰¹⁰ • <i>Opinion Leaders</i>: Comparable to <i>Transfer</i> and <i>Source Credibility</i> (above), individuals who have “credibility in a community,” such as people who most often sway group opinions, are solicited and regarded for the purposes of message transmission.¹⁰¹¹ • <i>Visual Symbols of Power</i>: See above.

¹⁰⁰⁷ Lee and Lee, *The Fine*, 70.

¹⁰⁰⁸ Jowett and O’Donnell, *Propaganda and*, 280.

¹⁰⁰⁹ *Ibid.*, 282.

¹⁰¹⁰ Lee and Lee, *The Fine*, 74.

¹⁰¹¹ Jowett and O’Donnell, *Propaganda and*, 280.

<p>ii. Social Corroboration</p>	<ul style="list-style-type: none"> • <i>Plain Folks</i>: Through this technique, which has also been labelled the “man-in-the-street” device,¹⁰¹² the propagandist attempts to “convince his audience that he and his ideas are good because they are ‘of the people,’ the ‘plain folks.’”¹⁰¹³ • <i>Band Wagon, Herd Instinct, and Group Norms</i>: The propagandist “attempts to convince us that all members of a group to which we belong are accepting his program and that we must therefore follow our crowd and ‘jump on the band wagon.’”¹⁰¹⁴ Quite simply, the “propagandist exploits people’s conforming tendencies”¹⁰¹⁵ to follow the “herd.”¹⁰¹⁶ • <i>Supplementation</i>: Personal face-to-face contact,¹⁰¹⁷ experienced through local meetings and discussions, are used to “reinforce the content” of propaganda.¹⁰¹⁸ • <i>Canalization, Affinity, and Creating Resonance</i>: Rather than attempting to simply change attitudes, the propaganda utilizes and/or fortifies extant opinions and worldviews.¹⁰¹⁹ As Jowett and O’Donnell explain, “The propagandist uses belief to create belief by linking or reinforcing audience predispositions to reinforce propagandistic
---------------------------------	--

¹⁰¹² Finch, "The Man."

¹⁰¹³ Lee and Lee, *The Fine*, 92.

¹⁰¹⁴ *Ibid.*, 105.

¹⁰¹⁵ Jowett and O’Donnell, *Propaganda and*, 281.

¹⁰¹⁶ Siepmann, *Radio, Television*, 187.

¹⁰¹⁷ Jowett and O’Donnell, *Propaganda and*, 281.

¹⁰¹⁸ Lazarsfeld and Merton, "Mass Communication," 117; Cowan, "Contested Spaces," 259.

¹⁰¹⁹ See: Fraser, *Propaganda*, 11, 192-93, 95-96; Ellul, *Propaganda*, 38-43; Cowan, "Contested Spaces," 259; Welch, *The Third*, 5.

	ideology or in some cases, to create new attitudes and/or behaviours.” ¹⁰²⁰
--	--

** Note: Almost every propaganda researcher mentions provoking audience emotions. This strategy is linked with numerous techniques listed here, and is, therefore, not catalogued independently because it is considered by many theorists to be a general by-product/goal of propaganda efforts.*

¹⁰²⁰ Jowett and O'Donnell, *Propaganda and*, 279.

References

- "10 Basics Every Creationist Must Know." *Answers* 5, no. 2 (2010): 85.
- "10 Basics Every Creationist Must Know: To Boldly Proclaim a Biblical Worldview." *Answers* 5, no. 2 (2010): 48.
- "About Answers Magazine." AiG, <http://www.answersingenesis.org/articles/am/about/>.
- Abraham, Magid M., and Leonard M. Lodish. "Getting the Most out of Advertising and Promotion." *Harvard Business Review* 68, no. 3 (1990): 50-60.
- Abraham, Nathaniel. "Programmed Cell Death: Death by Design." *Answers* 6, no. 2 (2011): 66-69.
- Ahluwalia, Rohini, and Robert E. Burnkrant. "Answering Questions About Questions: A Persuasion Knowledge Perspective for Understanding the Effects of Rhetorical Questions." *The Journal of Consumer Research* 31, no. 1 (2004): 26-42.
- Albig, William. *Public Opinion*. New York: McGraw-Hill, 1939.
- Alexander, Denis. *Evolution or Creation: Do We Have to Choose?* Oxford: Monarch Books, 2008.
- "All Staged." *Answers* 4, no. 2 (2009): 12.
- "'Alternative Universe' Wins the Gold." *Answers* 5, no. 1 (2010): 16.
- "Amazing Adventures with Buddy Davis." *Answers* 6, no. 4 (2011): 19.
- Anastasio, Phyllis A., Karen C. Rose, and Judith Chapman. "Can the Media Create Public Opinion? A Social-Identity Approach." *Current Directions in Psychological Science* 8, no. 5 (1999): 152-55.
- Anholt, Simon. *Brand New Justice: The Upside of Global Branding*. Oxford: Butterworth-Heinemann, 2003.
- "Answers in Genesis." AiG, <http://www.charitynavigator.org/index.cfm?bay=search.summary&orgid=5214>.
- "Answersingenesis.Org." Compete <http://siteanalytics.compete.com/answersingenesis.org/>.
- "Answersingenesis.Org: New Logo, New Look, New Features!". Answers in Genesis, <http://www.answersingenesis.org/articles/2007/06/14/new-site-design>.
- "The Antivaccination Propaganda." *The British Medical Journal* 2, no. 1960 (1898): 246-47.
- Aronson, Anthony R. Pratkanis and Elliot. *Age of Propaganda: Everyday Use and Abuse of Persuasion*. New York: W.H. Freeman and Company, 2001.
- "Attacks from Within." *Answers* 6, no. 1 (2011): 12-13.
- Attermann, Eve. "Atheist Subway Ads: Ny Coalition of Atheist Groups Launches Subway Advertising Campaign." Huffington Post, http://www.huffingtonpost.com/2009/10/20/atheist-subway-ads-ny-coa_n_327613.html.
- Attridge, Harold W. *The Science and Religion Debate: Why Does It Continue?* New Haven: Yale University Press, 2009.
- Austin, Steven A. "The Scientific and Scriptural Impact of Amos' Earthquake." *Acts&Facts* 39, no. 2 (2010): 8-9.
- Axe, Douglas. "The Science of Denial." Center for Science and Culture, http://www.evolutionnews.org/2009/10/the_science_of_denial026381.html.
- Axelrod, Alan. *Selling the Great War: The Making of American Propaganda*. New York: Palgrave Macmillan, 2009.

- Axson, Danny, Shelly Chaiken, and Suzanne Yates. "Audience Response as a Heuristic Cue in Persuasion." *Journal of Personality and Social Psychology* 53, no. 1 (1987): 30-40.
- Babbie, Earl. *The Practice of Social Research*. 11th ed. Belmont: Thomson Wadsworth, 2007.
- Bankole, Akinrinola, German Rodriguez, and Charles Westoff. "Mass Media Messages and Reproductive Behavior in Nigeria." *Journal of Biosocial Science* 28, no. 2 (1996): 227-39.
- Barber, Jennifer S., and William G. Axinn. "New Ideas and Fertility Limitation: The Role of Mass Media." *Journal of Marriage and Family* 66, no. 5 (2004): 1180-200.
- Barigozzi, Francesca, and Martin Peitz. "Comparative Advertising and Competition Policy." *Alma Mater Digital Library, Universita di Bologna* (2004), <http://amsacta.cib.unibo.it/1563/1/524.pdf>.
- Barry, Rick. "Ready-Made Instincts." *Answers* 6, no. 3 (2011): 30-33.
- Bartle, John. "The Advertising Contribution." In *Excellence in Advertising: The I.P.A. Guide to Best Practices*, edited by Leslie Butterfield, 25-42. Oxford: Elsevier Butterworth-Heinemann, 2003.
- Bauchman, Voddie, Jr. "Life's Toughest Questions." *Answers* 4, no. 2 (2009): 58-65.
- Bauer, Noel. "Letters: Bill Doesn't Exclude Evolution, Warming." Knoxnews.com, <http://www.knoxnews.com/news/2011/may/26/letters-bill-doesnt-exclude-evolution-warming/>.
- Beard, Chris. "Why Ida Fossil is Not the Missing Link." *New Scientist*, <http://www.newscientist.com/article/dn17173-why-ida-fossil-is-not-the-missing-link.html>.
- "Beetle Mania." *Answers* 6, no. 3 (2011): 13.
- Behe, Michael. "Richard Lenski, "Evolvability," and Tortuous Darwinian Pathways." Center for Science and Culture, http://www.evolutionnews.org/2011/04/richard_lenski_evolvability_an045921.html.
- Berchtold, William E. "The World Propaganda War." *The North American Review* 238, no. 5 (1934): 421-30.
- Berg, Bruce L. *Qualitative Research Methods for the Social Sciences*. 4th ed. Boston: Allyn and Bacon, 2001.
- Berger, Peter L. *The Sacred Canopy: Elements of a Sociological Theory of Religion*. New York: Anchor Books, 1990 [1967].
- Berger, Peter L., and Thomas Luckmann. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. New York: Anchor Books, 1966.
- Bergman, Jerry. "Benjamin Carson: The Pediatric Neurosurgeon with Gifted Hands." *Acts&Facts* 38, no. 1 (2009): 10-11.
- . "Louis Agassiz: Anti-Darwinist Harvard Paleontology Professor." *Acts&Facts* 40, no. 3 (2011): 12-14.
- . "Sir Ambrose Fleming: Father of Modern Electronics." *Acts&Facts* 38, no. 11 (2009): 12-14.
- Bernays, Edward L. *Propaganda*. Brooklyn: Ig Publishing, 2005 [1928].
- "Biblical Truths across Continents: Just What the Doctors Ordered." *Answers* 4, no. 3 (2009): 17.
- "Biologos—Obscuring the Truth." *Answers* 6, no. 4 (2011): 85.
- "Biology and Mathematics." Center for Science and Culture, http://www.evolutionnews.org/2011/05/biology_and_mathematics046671.html.

- Bizer, George Y., and Richard E. Petty. "How We Conceptualize Our Attitudes Matters: The Effects of Valence Framing on the Resistance of Political Attitudes." *Political Psychology* 26, no. 4 (2005): 553-68.
- Black, Jay. "The Ethics of Propaganda and the Propaganda of Ethics." In *The Handbook of Mass Media Ethics*, edited by Lee Wilkins and Clifford G. Christians, 130-48. New York: Routledge, 2009.
- . "Semantics and Ethics of Propaganda." *Journal of Mass Media Ethics* 16, no. 2/3 (2001): 121-37.
- Blackett, Tom. "What is a Brand?" In *Brands and Branding*, edited by Rita Clifton and John Simmons, 13-25. London: Profile Books, 2003.
- Blumler, J. G., and J. M. McLeod. "Communication and Voter Turnout in Britain." In *Sociological Theory and Survey Research: Institutional Change and Social Policy in Great Britain* edited by Timothy W. Leggart, 265-312. London: Sage, 1974.
- Boush, David M., Marian Friestad, and Peter Wright. *Deception in the Marketplace: The Psychology of Deceptive Persuasion and Consumer Self Protection*. New York: Routledge, 2009.
- Bowler, Peter J. *Monkey Trials and Gorilla Sermons: Evolution and Christianity from Darwin to Intelligent Design*. London: Harvard University Press, 2007.
- Bowman, Kristi L. "Seeing Government Purpose through the Objective Observer's Eyes: The Evolution-Intelligent Design Debates." *Harvard Journal of Law & Public Policy* 29, no. 2: 417-90.
- Brady, Anne-Marie. *Marketing Dictatorship: Propaganda and Thought Work in Contemporary China*. Lanham: Rowman & Littlefield, 2007.
- Bramsted, Ernest K. *Goebbels and National Socialist Propaganda, 1925-1945*. East Lansing: Michigan State University Press, 1965.
- Branch, Glenn, Eugenie C. Scott, and Joshua Rosenau. "Dispatches from the Evolution Wars: Shifting Tactics and Expanding Battlefields." *Annual Review of Genomics and Human Genetics* 11 (2010): 317-38.
- BrandZ. "Brandz Top 100 Most Valuable Global Brands 2011 " Millward Brown, <http://www.millwardbrown.com/BrandZ/Default/Categories.aspx>.
- Brannan, Tom. *A Practical Guide to Integrated Marketing Communications: Planning and Developing a Strategy*. 2nd ed. London: Kogan Page, 1998.
- Brauer, Matthew J., and Daniel R. Brumbaugh. "Biology Remystified: The Scientific Claims of the New Creationists." In *Intelligent Design Creationism and Its Critics: Philosophical, Theological and Scientific Perspectives*, edited by Robert T. Pennock, 289-334. Cambridge: The MIT Press, 2001.
- Breeding, Dan. "Thorny Pigs." *Answers* 4, no. 3 (2009): 20-22.
- Brinson, Heather M. "Heart: Constantly Beating Death." *Answers* 4, no. 4 (2009): 50-53.
- . "The Human Body—Wired for Extremes." *Answers* 4, no. 4 (2009): 36-41.
- Brooks, Tim. *British Propaganda to France, 1940-1944: Machinery, Method and Message*. Edited by Philip M. Taylor, International Communications. Edinburgh: Edinburgh University Press, 2007.
- Bryan, William Jennings. *The Menace of Darwinism*. New York: Fleming H. Revell, 1922.
- Burger, Jerry M., Nicole Messian, Shebani Patel, Alicia del Prado, and Carmen Anderson. "What a Coincidence! The Effects of Incidental Similarity on Compliance." *Personality and Social Psychology Bulletin* 30, no. 1 (2004): 35-43.

- Burnkrant, Robert E., and Daniel J. Howard. "Effects of the Use of Introductory Rhetorical Questions Versus Statements on Information Processing." *Journal of Personality and Social Psychology* 47, no. 6 (1984): 1218-30.
- Burnkrant, Robert E., and H. Rao Unnava. "Effects of Self-Referencing on Persuasion." *The Journal of Consumer Research* 22, no. 1 (1995): 17-26.
- Cacioppo, John T., and Richard E. Petty. "Effects of Message Repetition on Argument Processing, Recall, and Persuasion." *Basic and Applied Social Psychology* 10, no. 1 (1989): 3-13.
- "California Science Center Pays \$110,000 to Settle Intelligent Design Discrimination Lawsuit." Center for Science and Culture, http://www.evolutionnews.org/2011/08/california_science_center_pays050081.html.
- Cameron, Kirk. "The Incredible, Evangelistic Egg." *Answers* 6, no. 3 (2011): 104.
- Cantril, Hadley, Hazel Gaudet, and Herta Herzog. *The Invasion from Mars: A Study in the Psychology of Panic*. Princeton: Princeton University Press, 1940.
- "A Canvas for Creation." *Answers* 5, no. 2 (2010): 15.
- Carden, Ann R. "Persuasion Theory." In *Encyclopedia of Public Relations*, edited by Robert L. Heath, 614-16. Thousand Oaks: Sage, 2005.
- Carey, C. "Propaganda and Competition in Athenian Oratory." In *The Manipulative Mode: Political Propaganda in Antiquity a Collection of Case Studies*, edited by Karl A. E. Enekel and Ilja Leonard Pfeijffer, 65-100. Leiden and Boston: Brill, 2005.
- "Carlson with the Creator." *Answers* 6, no. 4 (2011): 12.
- Cartwright, Dorwin. "Some Principles of Mass Persuasion: Selected Findings of Research on the Sale of United States War Bonds." *Human Relations* 2, no. 3 (1949): 253-67.
- "The Center for Science and Culture." Discovery Institute, <http://www.discovery.org/csc/aboutCSC.php>.
- Centerwall, Brandon S. "Television and Violence: The Scale of the Problem and Where to Go from Here." *The Journal of the American Medical Association* 267, no. 22 (1992): 3059-63.
- Chaiken, Shelly. "Communicator Physical Attractiveness and Persuasion." *Journal of Personality and Social Psychology* 37, no. 8 (1979): 1387-97.
- Chaiken, Shelly, and Alice H. Eagly. "Communication Modality as a Determinant of Persuasion: The Role of Communicator Salience." *Journal of Personality and Social Psychology* 45, no. 2 (1983): 241-56.
- Chaiken, Shelly, Akiva Liberman, and Alice H. Eagly. "Heuristic and Systematic Information Processing within and Beyond the Persuasion Contexts." In *Unintended Thought*, edited by James S. Uleman and John A. Bargh, 212-52. New York: Guilford Press, 1989.
- "Changing Lives in Latin America." *Answers* 4, no. 1 (2009): 17.
- Chen, Serena, and Shelly Chaiken. "The Heuristic-Systematic Model in Its Broader Context." In *Dual-Process Theories in Social Psychology*, edited by Shelly Chaiken and Yaacov Trope, 73-96. London: Guilford, 1999.
- Chernatony, Leslie de. *From Brand Vision to Brand Evaluation: The Strategic Process of Growing and Strengthening Brands*. 2nd ed. Oxford: Elsevier Butterworth-Heinemann, 2006.
- Chernatony, Leslie de, and Malcolm McDonald. *Creating Powerful Brands: In Consumer, Service and Industrial Markets*. 3rd ed. Oxford: Elsevier Butterworth-Heinemann, 2003.

- Cialdini, Robert B. *Influence: Science and Practice*. 5th ed. Boston: Pearson Education, 2009.
- Clark, Constance Areson. "'You Are Here': Missing Links, Chains of Being, and the Language of Cartoons." *Isis* 100 (2009): 571-89.
- Coleman, Simon, and Leslie Carlin, eds. *The Cultures of Creationism: Anti-Evolutionism in English Speaking Countries*. Aldershot: Ashgate, 2004.
- . "The Cultures of Creationism: Shifting Boundaries of Belief, Knowledge and Nationhood." In *The Cultures of Creationism: Anti-Evolutionism in English-Speaking Countries*, edited by Simon Coleman and Leslie Carlin, 1-28. Hants: Aldershot, 2004.
- Collins, Francis S. *The Language of God: A Scientist Presents Evidence for Belief*. London: Free Press, 2006.
- Combs, James E., and Dan Nimmo. *The New Propaganda: The Dictatorship of Palaver in Contemporary Politics*. New York and London: Longman, 1993.
- "Concise Answers on Video." *Answers* 4, no. 4 (2009): 18.
- Conway, Mike, Maria Elizabeth Grabe, and Kevin Grieves. "Villains, Victims, and the Virtuous in Bill O'Reilly's 'No-Spin Zone: Revisiting World War Propaganda Techniques.'" *Journalism Studies* 8, no. 2 (2007): 197-223.
- Cooper, Joel, Elizabeth A. Bennett, and Holly L. Sukel. "Complex Scientific Testimony: How Do Jurors Make Decisions?" *Law and Human Behavior* 20, no. 4 (1996): 379-94.
- Corner, John. "Mediated Politics, Promotional Culture and the Idea of 'Propaganda'." *Media Culture Society* 29, no. 4 (2007): 669-77.
- Cowan, Douglas E. "'Bearing False Witness': Propaganda, Reality Maintenance, and Christian Anticult Apologetics." University of Calgary, 1999.
- . "Contested Spaces: Movement, Countermovement, and E-Space Propaganda." In *Religion Online: Finding Faith on the Internet*, edited by Lorne L. Dawson and Douglas E. Cowan, 255-71. New York: Routledge, 2004.
- Cracraft, Joel. "The Scientific Response to Creationism." *Science, Technology, & Human Values* 7, no. 40 (1982): 79-85
- "Creation to Christ in Twenty Minutes." *Answers* 5, no. 3 (2010): 15-16.
- "Creationists and the Courts." *Answers* 5, no. 4 (2010): 9.
- Crouse, Janice Shaw. "Human Trafficking: The West's New Slave Trade." *Answers* 5, no. 4 (2010): 50-53.
- Crowley, Ayn E., and Wayne D. Hoyer. "An Integrative Framework for Understanding Two-Sided Persuasion." *The Journal of Consumer Research* 20, no. 4 (1994): 561-74.
- Crowther, Robert. "Aaup Responds on Academic Freedom." Center for Science and Culture, http://www.evolutionnews.org/2009/04/aaup_responds_on_academic_free019881.html.
- . "Academic Elites Don't Appreciate Uppity Scientists Who Buck the Consensus." Center for Science and Culture, http://www.evolutionnews.org/2010/09/here_come_more_threats_to037901.html.
- . "Big Win in Texas as State Now Leads Nation in Requiring Critical Analysis of Evolution in High School Science Classes." Center for Science and Culture, http://www.evolutionnews.org/2009/03/big_win_in_texas_as_state_now018781.html.

- . "Can DNA Prove the Existence of an Intelligent Designer? An Interview with Stephen Meyer." Center for Science and Culture, http://www.evolutionnews.org/2010/07/can_dna_prove_the_existence_of036451.html.
- . "European Scientists Working in Conjunction with Biologic Institute." Center for Science and Culture, http://www.evolutionnews.org/2009/08/eropian_scientists_working_in023781.html.
- . "Following the Evidence vs. Framing Science: Stephen Meyer and Chris Mooney, Monday on Medved." Center for Science and Culture, http://www.evolutionnews.org/2009/11/framing_science_vs_following_t028271.html.
- . "Forbes.Com Balances Darwin and Evolution Coverage with Wide Range of Thinkers on Both Sides." Center for Science and Culture, http://www.evolutionnews.org/2009/02/forbescom_balances_darwin_and016751.html.
- . "How Nasa's Jet Propulsion Laboratory Punished David Coppedge for His Views on Intelligent Design." Center for Science and Culture, http://www.evolutionnews.org/2010/04/how_nasas_jet_propulsion_labor033931.html.
- . "In Oklahoma, Darwinist Choir Sings the Praises of Suppression and Censorship." Center for Science and Culture, http://www.evolutionnews.org/2009/09/its_funny_how_a_little025351.html.
- . "Los Angeles Times Reporting on Lawsuit against California Science Center for Cancelling Intelligent Design Film." Center for Science and Culture, http://www.evolutionnews.org/2009/12/los_angeles_times_reporting_on030391.html.
- . "Uk Education Ministry and Smu Prof Want Kids to Sit Down & Shut up About Flaws with Darwinism." Center for Science and Culture, http://www.evolutionnews.org/2010/09/i_was_treated_to_a038651.html.
- . "What Darwin Got Wrong: Intelligent Design Proponents Welcome Fodor and Piattelli-Palmarini to the Growing Ranks of Darwin's Critics." Center for Science and Culture, http://www.evolutionnews.org/2010/02/what_darwin_got_wrong_intellig031681.html.
- "Cultivating a Vision." *Answers* 6, no. 2 (2011): 16.
- Cunningham, Stanley B. *The Idea of Propaganda: A Reconstruction*. Westport: Praeger, 2002.
- . "Smoke and Mirrors: A Confirmation of Jacques Ellul's Theory of Information Use in Propaganda." In *Propaganda: A Pluralistic Perspective*, edited by Ted J. Smith, III, 151-63. New York: Praeger, 1989.
- D.S. "Letters to the Editor." *Acts&Facts* 38, no. 8 (2009): 20.
- D.T. "Letters to the Editor." *Acts&Facts* 39, no. 3 (2010): 20.
- Dai, Xianchi, Klaus Wertenbroch, and C. Miguel Brendl. "The Value Heuristic in Judgments of Relative Frequency." *Psychological Science* 19, no. 1 (2008): 18-19.
- Dall, W. H. "A Mussulman Propaganda." *Science* 4, no. 93 (1884): 457-59.
- Dame, University of Notre. "Inscrutabili Divinae." University of Notre Dame Archives, <http://classic.archives.nd.edu/bull.htm>.

- Dao, Christine. "Charles Darwin: The Man Behind the Monkey." *Acts&Facts* 38, no. 2 (2009): 12.
- . "Dr. Brad Forlow, Associate Science Editor." *Acts&Facts* 40, no. 11 (2011): 19.
- . "Dr. Rhonda Forlow: ICR's New Education Specialist." *Acts&Facts* 40, no. 3 (2011): 19.
- . "ICR Offers New Biblical Apologetics Degree." *Acts & Facts* 38, no. 8 (2009): 9.
- . "Larry Vardiman " *Acts&Facts* 39, no. 8 (2010): 15.
- . "Man of Science, Man of God: Henry M. Morris." *Acts&Facts* 38, no. 2 (2009): 20-21.
- . "New ICR Director of Events: Charles Morse." *Acts&Facts* 39, no. 3 (2010): 6.
- . "New ICR Research Associate: Nathaniel T. Jeanson, Ph.D." *Acts&Facts* 38, no. 9 (2009): 9.
- . "Texas Schools Seek Science Supplements." *Acts&Facts* 40, no. 2 (2011): 19.
- Dardis, Frank E. "Attenuating the Negative Effects of Perceived Incongruence in Sponsorship: How Message Repetition Can Enhance Evaluations of an "Incongruent" Sponsor." *Journal of Promotion Management* 15, no. 1-2 (2009): 36-56.
- Davis, Barbara Price, and Eric S. Knowles. "A Disrupt-Then-Reframe Technique of Social Influence." *Journal of Personality and Social Psychology* 76, no. 2 (1999): 192-99.
- Davis, Buddy. "Dinosaurs on the Ark." *Answers* 5, no. 2 (2010): 57.
- Davis, Edward B. "Fundamentalist Cartoons, Modernist Pamphlets, and the Religious Image of Science in the Scopes Era." In *Religion and the Culture of Print in Modern America*, edited by Charles L. Cohen and Paul S. Boyer, 175-98. Madison: University of Wisconsin Press, 2008.
- . "Science and Religious Fundamentalism in the 1920s." *American Scientist* 93, no. 5 (2005): 253-60.
- Davis, Jud. "'Let There Be Light'." *Answers* 6, no. 3 (2011): 42-43.
- Dearing, James W., and Everett M. Rogers. *Agenda-Setting*. Thousand Oaks: Sage, 1996.
- Debevec, Kathleen, and Jean B. Romeo. "Self-Referent Processing in Perceptions of Verbal and Visual Commercial Information." *Journal of Consumer Psychology* 1, no. 1 (1992): 83-102.
- Dembski, William A., and Michael Ruse, eds. *Debating Design: From Darwin to DNA*. Cambridge: Cambridge University Press, 2004.
- "The Descent of Man." *Answers* 5, no. 3 (2010): 85.
- DeYoung, Don. "Desert Rhubarb: Three-Foot Oasis." *Answers* 6, no. 3 (2011): 40-41.
- . "Flying Fish—Aquatic Flight Instructors." *Answers* 6, no. 4 (2011): 36.
- . "Water Striders—Walking on Water." *Answers* 6, no. 3 (2011): 166-67.
- "Dial-a-Tour." *Answers* 5, no. 4 (2010): 76.
- Digby, Kenelm E. "The Antivivisectionist Propaganda." *The British Medical Journal* 2, no. 1974 (1898): 1375.
- Dill, Karen E. *How Fantasy Becomes Reality: Seeing through Media Influence*. New York: Oxford University Press, 2009.
- "Dinosaur Doubts Down Under." *Answers* 6, no. 1 (2011): 12.
- Dixon, Thomas. *Science and Religion: A Very Short Introduction*. New York: Oxford University Press, 2008.

- Dobrzynska, Agnieszka, André Blais, and Richard Nadeau. "Do the Media Have a Direct Impact on the Vote?: The Case of the 1997 Canadian Election." *International Journal of Public Opinion Research* 15, no. 1 (2003): 27-43.
- Doob, Leonard W. "Propaganda." In *International Encyclopaedia of Communications*, edited by Erik Barnouw, 374-78. Oxford: Oxford University Press, 1989.
- . *Propaganda: Its Psychology and Technique*. New York: H. Holt and Company, 1935.
- . *Public Opinion and Propaganda*. Hamden: Archon Books, 1966.
- Doob, Leonard W., and Edward S. Robinson. "Psychology and Propaganda." *Annals of the American Academy of Political and Social Science* 179 (1935): 88-95.
- Douglas, Kate. "10 Mysteries of You: Altruism." *New Scientist*, <http://www.newscientist.com/article/mg20327201.200-10-mysteries-of-you-altruism.html>.
- Douglas, Mary. "In Defence of Shopping." In *The Shopping Experience*, edited by Pasi Falk and Colin Campbell, 15-30. London: Sage, 1997.
- Doyle, Peter. "Building Successful Brands." In *Excellence in Advertising: The Ipa Guide to Best Practices*, edited by Leslie Butterfield, 3-21. Oxford: Elsevier Butterworth-Heinemann, 2003.
- Draper, John William. *History of the Conflict between Religion and Science*. Cambridge: Cambridge University Press, 2009 [1875].
- Dunwoody, Sharon. "Scientists, Journalists, and the Meaning of Uncertainty." In *Communicating Uncertainty: Media Coverage of New and Controversial Science*, edited by Sharon M. Friedman, Sharon Dunwoody and Carol L. Rogers, 59-79. Mahwah: Lawrence Erlbaum Associates, 1999.
- Eaton, Howard, Jr. "Agenda-Setting with Bi-Weekly Content Data for Three National Media." *Journalism Quarterly* 66 (1989): 942-48.
- Edelstein, Alex S. *Total Propaganda: From Mass Culture to Popular Culture*. New Jersey: Lawrence Erlbaum, 1997.
- Egnor, Michael. "'Consensus Science' is to Science as Money-Laundering is to Finance." Center for Science and Culture, http://www.evolutionnews.org/2009/11/monckton_on_ricoscience028621.html.
- . "Darwinist Steven Novella Endorses Darwin's Discredited 'Tree of Life'." Center for Science and Culture, <http://www.evolutionnews.org/2009/02/novella016831.html>.
- . "Dr. Jeffery Shallit on Eugenic Morality: 'Why, Exactly, Would the World Be Better Off with More Down's Syndrome Children?'" Center for Science and Culture, http://www.evolutionnews.org/2009/05/dr_jeffery_shallit_why_is_euge020261.html.
- . "Happy Atheist Day." Center for Science and Culture, http://www.evolutionnews.org/2009/02/darwinist_steven_novella_endor016811.html.
- . "Jerry Coyne: '...Adherence to ID... Should Be Absolute Grounds for Not Hiring a Science Professor.'" Center for Science and Culture, http://www.evolutionnews.org/2011/03/jerry_coyne045001.html.
- . "My Reply to Jerry Coyne: Why Darwinism is False." Center for Science and Culture, http://www.evolutionnews.org/2009/02/my_reply_to_jerry_coyne_why_da017681.html.

- . "A Neurosurgeon, Not a Darwinist." Center for Science and Culture, http://www.forbes.com/2009/02/06/neurosurgeon-intelligent-design-opinions-darwin09_0205_michael_egnor.html.
- . "Ontology Recapitulates Philology." Center for Science and Culture, http://www.evolutionnews.org/2009/08/ontology_recapitulates_philolo023851.html.
- . "Oops. They Dumped the Original Data. You'll Just Have to Take Their Word for It." Center for Science and Culture, http://www.evolutionnews.org/2009/12/oops_they_dumped_the_original028781.html.
- . "An Open Letter to the Society for Integrative and Comparative Biology." Center for Science and Culture, http://www.evolutionnews.org/2009/03/an_open_letter_to_the_society_2017821.html.
- . "P.Z. Myers: Americans Who Fund Scientific Research Are an "Ignorant Mob"." Center for Science and Culture, http://www.evolutionnews.org/2009/03/pz_myers_americans_are_an_igno017961.html.
- . "Reviewing Jerry Coyne." Center for Science and Culture, http://www.evolutionnews.org/2009/01/reviewing_jerry_coyne016301.html.
- . "Steven Novella on Michelle Bachmann and Teaching Evolution." Center for Science and Culture, http://www.evolutionnews.org/2011/06/steven_novella_bachmann_promot047551.html.
- . "Why Doesn't the NCSE Have an Atheism Project?" Center for Science and Culture, http://www.evolutionnews.org/2010/12/why_doesnt_the_ncse_reach_out_041191.html.
- . "Why Is Censorship of Scrutiny So Much a Part of Evolutionary Science?" Center for Science and Culture, http://www.evolutionnews.org/2009/04/why_is_censorship_of_scrutiny019511.html.
- Ellul, Jacques. *Propaganda: The Formation of Men's Attitudes*. Translated by Konrad Kellen and Jean Lerner. New York: Alfred A. Knopf, 1972 [1962].
- Emery, Edwin. "Changing Role of the Mass Media in American Politics." *Annals of the American Academy of Political and Social Science* 427 (1976): 84-94.
- "Encountering Opposition." *Answers* 6, no. 2 (2011): 12.
- Enekel, Karl A. E., and Ilja Leonard Pfeijffer. "Introduction." In *The Manipulative Mode: Political Propaganda in Antiquity a Collection of Case Studies*, edited by Karl A. E. Enekel and Ilja Leonard Pfeijffer, 1-42. Leiden and Boston: Brill, 2005.
- Erdem, Tülin, and Joffre Swait. "Brand Credibility, Brand Consideration, and Choice." *Journal of Consumer Research* 31, no. 3 (2004): 191-98.
- Escalas, Jennifer Edson. "Self-Referencing and Persuasion: Narrative Transportation Versus Analytical Elaboration." *The Journal of Consumer Research* 33, no. 4 (2007): 421-29.
- Eveleigh, Henry R. "Allons-Y... Canadiens!: Campagne De Propagande De Guerre " Library and Archives Canada, http://collectionsCanada.gc.ca/pam_archives/index.php?fuseaction=genitem.displayItem&lang=eng&rec_nbr=2897160&back_url=%28%29.

- "Evidences for a Global Flood—Grand Canyon." *Answers* 6, no. 2 (2011): 85.
- "Evolution News and Views." Center for Science and Culture,
<http://www.evolutionnews.org/>.
- "Evolution Wars." *Time* 166, no. 7 (2005).
evolutionnews.org. Compete, 2012.
- Ewert, Donald L. "Adaptive Immunity: Darwinism in Miniature or High-Tech Tinkering with Stasis?" Center for Science and Culture,
http://www.evolutionnews.org/2010/11/adaptive_immunity_darwinism_in040561.html.
- "Fallible Research." *Answers* 4, no. 4 (2009): 13.
- Falter, Marcel. "Pour Le Suprême Effort." Royal Alberta Museum,
<http://www.royalalbertamuseum.ca/vexhibit/warpost/english/post10.htm>.
- Farris, Michael. "Showing Children the Way." *Answers* 6, no. 4 (2011): 78.
- Faulkner, Danny. "Blue Stars—Unexpected Brilliance." *Answers* 6, no. 1 (2011): 50-53.
———. "Galaxies—Unexplained Spirals." *Answers* 6, no. 1 (2011): 54-56.
- Fellows, Erwin W. "'Propaganda:' History of a Word." *American Speech* 34, no. 3 (1959): 182-89.
- Felson, Richard B. "Mass Media Effects on Violent Behavior." *Annual Review of Sociology* 22 (1996): 103-28.
- Fennis, Bob M., Enny H. H. J. Das, and Ad Th. H. Pruyn. "If You Can't Dazzle Them with Brilliance, Baffle Them with Nonsense': Extending the Impact of the Disrupt-Then-Reframe Technique of Social Influence." *Journal of Consumer Psychology* 14, no. 9 (2003): 280-90.
- Finch, Lynette. "The Man in the Street and Second World War Propaganda." *Journal of Australian Studies* 23, no. 60 (1999): 96-105.
- Fisher, B. Aubrey. *Perspectives on Human Communication*. New York: Macmillan, 1978.
- Fiske, John. *Reading the Popular*. 2nd ed. London: Routledge, 2011.
———. *Television Culture*. 2nd ed. London: Routledge, 2010.
———. *Understanding Popular Culture*. 2nd ed. London: Routledge, 2010.
- Flannery, Michael. "Alfred Russel Wallace, Co-Discoverer of Evolution by Natural Selection -- and "Creationist"." Center for Science and Culture,
http://www.evolutionnews.org/2010/08/alfred_russel_wallace_co-disco037401.html.
- . "Smu Religious Studies Professor Mark A. Chancey Attempts to Discredit Intelligent Design with Bad History." Center for Science and Culture,
http://www.evolutionnews.org/2010/10/smu_religious_studies_professo039081.html.
- Fleitas, Daniel W. "Bandwagon and Underdog Effects in Minimal-Information Elections." *The American Political Science Review* 65, no. 2 (1971): 434-38.
- Ford, Lawrence E. "2008: Laying the Groundwork for Growth." *Acts&Facts* 38, no. 1 (2009): 4-7.
———. "As a Matter of Fact." *Acts&Facts* 40, no. 7 (2011): 3.
———. "Celebrating 400 Years of Influence." *Acts&Facts* 40, no. 4 (2011): 10.
———. "Celebrating with Gusto and Gratitude." *Acts&Facts* 39, no. 7 (2010): 3.
———. "Christianity on the Public Stage: Dr. Francis Collins and the Dangerous Doctrines of Biologos." *Acts&Facts* 38, no. 9 (2009): 4-5.
———. "Civil Conversation or Dangerous Discourse?" *Acts&Facts* 39, no. 9 (2010): 3.
———. "Communicating Like the Old Masters." *Acts & Facts* 40, no. 6 (2011): 3.

- . "Communicating the Message of the Creator." *Acts&Facts* 39, no. 2 (2010): 4-6.
- . "Concrete Adversity." *Acts&Facts* 38, no. 9 (2009): 3.
- . "Confronting Evolutionary Ideas." *Acts&Facts* 40, no. 1 (2011): 4-5.
- . "Counting Our Blessings: A Year in Review, a Legacy in Perspective." *Acts&Facts* 39, no. 1 (2010): 4-7.
- . "New Voices in Evolution Activism: From Madalyn Murray O'Hair to Eugenie Scott." *Acts&Facts* 38, no. 7 (2009): 4-5.
- . "Pioneering a Global Movement." *Acts&Facts* 39, no. 10 (2010): 3.
- . "Science Education Roundup." *Acts&Facts* 38, no. 7 (2009): 3.
- . "Stand Up! Stand up for Jesus!" *Acts&Facts* 39, no. 12 (2010): 3.
- . "Taking God at His Word." *Acts&Facts* 38, no. 4 (2009): 3.
- . "Taking God Seriously." *Acts&Facts* 39, no. 6 (2010): 3.
- . "Unmasking Darwin's Deception." *Acts&Facts* 40, no. 5 (2011): 3.
- . "Werner Arber: An Honest Evolutionist?" *Acts & Facts* 38, no. 6 (2009): 6.
- . "A Year in Review, a Legacy in Perspective." *Acts&Facts* 39, no. 1 (2010): 4-7.
- Forlow, Brad. "Genesis under the Microscope." *Acts&Facts* 40, no. 10 (2011): 4-5.
- Forrest, Barbara. "Still Creationism after All These Years: Understanding and Counteracting Intelligent Design." *Integrative and Comparative Biology* 48, no. 2 (2008): 189–201.
- . "The Wedge at Work: How Intelligent Design Creationism Is Wedging Its Way into the Cultural and Academic Mainstream." In *Intelligent Design Creationism and Its Critics: Philosophical, Theological, and Scientific Perspectives*, edited by Robert T. Pennock, 5-53. Cambridge: MIT Press, 2001.
- Forrest, Barbara, and Paul R. Gross. *Creationism's Trojan Horse: The Wedge of Intelligent Design*. New York: Oxford University Press, 2004.
- Foulkes, A. Peter. *Literature and Propaganda*. London: Methuen, 1983.
- "Foundations." *Answers* 6, no. 3 (2011): 24.
- Fouts, David. "The Meaning of Mîn." *Answers* 4, no. 1 (2009): [Find].
- Francis, Joe. "Good Designs Gone Bad." *Answers* 4, no. 3 (2009): 32-35.
- Franz, Michael M., and Travis N. Ridout. "Does Political Advertising Persuade?" *Political Behavior* 29, no. 4 (2007): 465-91.
- Fraser, James W. *Between Church and State: Religion and Public Education in a Multicultural America*. New York: St. Martin's Press, 1999.
- Fraser, Lindley. *Propaganda*. London: Oxford University Press, 1957.
- Freelon, Deen G. "Recal: Intercoder Reliability Calculation as a Web Service." *International Journal of Internet Science* 5, no. 1 (2010): 20–33.
- . "Recal: Reliability Calculation for the Masses." <http://dfreelon.org/utills/recalfront/>.
- Fyfe, Aileen Kennedy. "Industrialised Conversion: The Religious Tract Society and Popular Science Publishing in Victorian Britain." University of Cambridge 2000.
- G.S.K. "Letters to the Editor." *Acts&Facts* 40, no. 6 (2011): 20.
- Gage, Logan. "Intelligent Design and the Artist's Soul (Part 1)." Center for Science and Culture, http://www.evolutionnews.org/2009/05/intelligent_design_and_the_art020881.html.
- Galling, A.P., Marcus Ross, and Kurt Wise. "Five Fossil Mysteries... That Evolution Can't Explain." *Answers* 5, no. 1 (2010): 38-48.

- Garner, Paul. "Do Species Change?" *Answers* 4, no. 1 (2009): 36-39.
- Gartner, Manfred. "Endogenous Bandwagon and Underdog Effects in a Rational Choice Model." *Public Choice* 25 (1976): 83-89.
- Gary, Brett. *The Nervous Liberals: Propaganda Anxieties from World War I to the Cold War*. New York: Columbia University Press, 1999.
- Gauger, Ann. "The Frailty of the Darwinian Hypothesis, Part 1." Center for Science and Culture,
http://www.evolutionnews.org/2009/07/the_frailty_of_the_darwinian_h022901.html.
- Gee, Henry, Rory Howlett, and Philip Campbell. "15 Evolutionary Gems: A Resource from Nature for Those Wishing to Spread Awareness of Evidence for Evolution by Natural Selection." *Nature*,
<http://www.nature.com/nature/newspdf/evolutiongems.pdf>.
- "Generational Gaps." *Answers* 5, no. 2 (2010): 10.
- George, Alexander L. *Propaganda Analysis: A Study of Inferences Made from Nazi Propaganda in World War 2*. Evanston: Row, Peterson, 1959.
- George, Marjorie. "And Then God Created Kansas? The Evolution/Creationism Debate in America's Public Schools." *University of Pennsylvania Law Review* 149, no. 3 (2001): 843-72.
- Gerbner, George, and Larry Gross. "Living with Television: The Violence Profile." *Journal of Communication* 26, no. 2 (1976): 173-99.
- Gerbner, George, Larry Gross, Michael Morgan, Nancy Signorielli, and James Shanahan. "Growing up with Television: Cultivation Processes." In *Media Effects: Advances in Theory and Research*, edited by Jennings Bryant and Dolf Zillmann, 43-67. Mahwah: Lawrence Erlbaum, 2002.
- "Getting Closer to Down Under." *Answers* 5, no. 1 (2010): 10.
- Giberson, Karl W. *Saving Darwin: How to Be a Christian and Believe in Evolution*. New York: Harper Collins, 2008.
- Giberson, Karl W., and Mariano Artigas. *Oracles of Science: Celebrity Scientist Versus God and Religion*. New York: Oxford University Press, 2007.
- Gitlin, Todd. "Media Sociology: The Dominant Paradigm." *Theory and Society* 6, no. 2 (1978): 205-53.
- Glander, Timothy Richard. *Origins of Mass Communications Research During the American Cold War: Educational Effects and Contemporary Implications*. Mahwah: Lawrence Erlbaum Associates, 2000.
- "God and Evolution at Biola University." Center for Science and Culture,
http://www.evolutionnews.org/2010/10/god_and_evolution_at_biola_uni038871.html.
- "God's Word is True in Everything It Says." *Answers* 4, no. 2 (2009): 92.
- Goldberg, Steven. *Culture Clash: Law and Science in America*. New York: University Press, 1994.
- Gouldner, Alvin W. "The Norm of Reciprocity: A Preliminary Statement." *American Sociological Review* 25, no. 2 (1960): 161-78.
- "The Grand Designer." *Answers* 6, no. 1 (2011): 11.
- Grohe, Glenn. "He's Watching You." The National Archives,
http://www.archives.gov/exhibits/powers_of_persuasion/hes_watching_you/images_html/hes_watching_you.html.
- Guliuza, Randy J. "All-or-Nothing Unity." *Acts&Facts* 39, no. 9 (2010): 10-11.
- . "The Completed 'Rest' of the Lord." *Acts&Facts* 38, no. 3 (2009): 12.

- . "Consensus Science: The Rise of a Scientific Elite." *Acts&Facts* 38, no. 5 (2009): 4-6.
- . "Darwin's Sacred Imposter: How Natural Selection Is Given Credit for Design in Nature." *Acts&Facts* 40, no. 7 (2011): 12-15.
- . "Darwin's Sacred Imposter: Natural Selection's Idolatrous Trap." *Acts&Facts* 40, no. 11 (2011): 12-15.
- . "Darwin's Sacred Imposter: Recognizing Missed Warning Signs." *Acts&Facts* 40, no. 5 (2011): 12-15.
- . "Darwin's Sacred Imposter: The Illusion That Natural Selection Operates on Organisms." *Acts&Facts* 40, no. 9 (2011): 12-15.
- . "Darwinian Medicine: A Prescription for Failure." *Acts&Facts* 38, no. 2 (2009): 32-33.
- . "Evaluating Real vs. Apparent Design." *Acts&Facts* 40, no. 1 (2011): 10-11.
- . "Life's Indispensable Microscopic Machines." *Acts&Facts* 39, no. 8 (2010): 10-11.
- . "Made in His Image: Human Reproduction." *Acts&Facts* 38, no. 1 (2009): 14.
- . "Natural Selection Is Not 'Nature's Intelligence'." *Acts&Facts* 39, no. 5 (2010): 10-11.
- . "Similar Features Demonstrate Common Design." *Acts&Facts* 39, no. 11 (2010): 10-11.
- Gupta, Neeru, Charles Katende, and Ruth Bessinger. "Associations of Mass Media Exposure with Family Planning Attitudes and Practices in Uganda." *Studies in Family Planning* 34, no. 1 (2003): 19-31.
- H.M.C. "Letters to the Editor." *Acts&Facts* 39, no. 7 (2010): 20.
- Hafer, Carolyn L., Kelly L. Reynolds, and Monika A. Obertynski. "Message Comprehensibility and Persuasion: Effects of Complex Language in Counterattitudinal Appeals to Laypeople." *Social Cognition* 14, no. 4 (1996): 317-37.
- Ham, Ken. "Counterfeit Christian College." *Answers* 6, no. 3 (2011): 54-57.
- . "Does the Gospel Depend on a Young Earth?" *Answers* 6, no. 1 (2011): 38-40.
- . "Evolving Tactics." *Answers* 4, no. 1 (2009): 82-84.
- . "Global Warming—Normal in an Abnormal World." *Answers* 5, no. 3 (2010): 59-60.
- . "Going, Going...Gone: Why Are Young People Walking Away from Our Churches?" *Answers* 6, no. 3 (2011): 122-25.
- . "The History of AiG through July 2012."
<http://www.answersingenesis.org/about/history>.
- . "Maturing the Message: Creationism and Biblical Authority in the Church." *Answers* 5, no. 1 (2010): 60-63.
- . "The Most Horrific Graveyard in the World." *Answers* 4, no. 3 (2009): 58-61.
- . "Not Ashamed of a Biblical Starting Point." *Answers* 5, no. 2 (2010): 44-47.
- . "One Nation Under...?" *Answers* 5, no. 4 (2010): 38-40.
- . "Problematic Apologetics." *Answers* 4, no. 2 (2009): 70-73.
- . "Top 1% on the Web!" AiG,
<http://www.answersingenesis.org/articles/2000/12/13/top-of-the-web>.
- Ham, Steve. "Unity . . . At What Cost?" *Answers* 6, no. 3 (2011): 58-61.
- Harkins, Stephen G., and Richard E. Petty. "The Effects of Source Magnification Cognitive Effort on Attitudes: An Information Processing View." *Journal of Personality and Social Psychology* 40, no. 3 (1981): 401-13.

- Hartshorne, Edward Yarnall. "Reactions to the Nazi Threat: A Study of Propaganda and Culture Conflict." *The Public Opinion Quarterly* 5, no. 4 (1941): 625-39.
- Hayden, Dan. "Who's Number One in the Universe?" *Answers* 4, no. 4 (2009): 80-81.
- Hayes, Andrew F., and Klaus Krippendorff. "Answering the Call for a Standard Reliability Measure for Coding Data." *Communication Methods and Measures* 1, no. 1 (2007): 77-89.
- Healey, Matthew. *What is Branding?* Mies: RotoVision, 2008.
- Heath, Linda, Linda B. Bresolin, and Robert C. Rinaldi. "Effects of Media Violence on Children: A Review of the Literature." *Archives of General Psychiatry* 46, no. 4 (1989): 376-79.
- "Help Support Discovery Institute in 2010." CSC, http://www.evolutionnews.org/2010/12/help_support_discovery_institu042051.html.
- Henderson, Edgar H. "Toward a Definition of Propaganda." *The Journal of Social Psychology* 18 (1943): 71-87.
- Hennigan, Tom, Georgia Purdom, and Todd Charles Wood. "Creation's Hidden Potential." *Answers* 4, no. 1 (2009): 70-75.
- Herf, Jeffrey. "The 'Jewish War': Goebbels and the Antisemitic Campaigns of the Nazi Propaganda Ministry." *Holocaust Genocide Studies* 19, no. 1 (2005): 51-80.
- Herzstein, Robert Edwin. *The War That Hitler Won: The Most Infamous Propaganda Campaign in History*. New York: Putnam, 1978.
- Highfield, Roger. "View a Colossal Telescopic Eye into the Cosmic Past." *New Scientist*, <http://www.newscientist.com/article/mg21228390.100-view-a-colossal-telescopic-eye-into-the-cosmic-past.html>.
- Hirschfelder-Ascher, Barbara. *Revitalizing Political Psychology: The Legacy of Harold D. Lasswell*. Mahwah: Lawrence Erlbaum Associates, 2005.
- Hitler, Adolf. *Mein Kampf*. Munchen: Eher-Verlag, 1943 [1925, 1927].
- . "Wer Ist Adolf Hitler?" Calvin College, <http://www.calvin.edu/academic/cas/gpa/posters/1927.jpg>.
- Hobson, Art. "Unintelligent Design." *Interactions* 37, no. 1 (2007): 23-24.
- Hodge, Bodie. "Global Flood." *Answers* 6, no. 3 (2011): 156.
- Hodge, Bodie, and Buddy Davis. "Two Fighting Dinosaurs?: Buried in Sand!" *Answers* 6, no. 3 (2011): 66-68.
- Hoffer, Charles R. "A Sociological Analysis of Propaganda." *Social Forces* 20, no. 4 (1942): 445-48.
- Hollander, Barry A. "Newspaper Graphics and Inadvertent Persuasion." *Visual Communication Quarterly* 1, no. 1 (1994): 8-9.
- Holsti, Ole R. *Content Analysis for the Social Sciences and Humanities*. London: Addison-Wesley, 1969.
- Holtz, Shel. *Public Relations on the Net: Winning Strategies to Inform and Influence the Media, the Investment Community, the Government, the Public, and More!* 2nd ed. New York: Amacon, 2002.
- Homer, Pamela M., and Lynn R. Kahle. "Source Expertise, Time of Source Identification, and Involvement in Persuasion: An Elaborative Processing Perspective." *Journal of Advertising* 19, no. 1 (1990): 30-39.
- "Honesty is the Best Policy for Climate Scientists." *New Scientist*, <http://www.newscientist.com/article/mg20527492.500-honesty-is-the-best-policy-for-climate-scientists.html>.
- Hornik, Robert C., ed. *Public Health Communication: Evidence for Behavior Change*. Mahwah: Lawrence Erlbaum, 2002.

- Hsieh, Hsiu-Fang, and Sarah E. Shannon. "Three Approaches to Qualitative Content Analysis." *Qualitative Health Research* 15, no. 9 (2005): 1277-88.
- Huber, Gregory A., and Kevin Arceneaux. "Identifying the Persuasive Effects of Presidential Advertising." *American Journal of Political Science* 51, no. 4 (2007): 957-77.
- Huddy, Leonie, and Anna H. Gunthorsdottir. "The Persuasive Effects of Emotive Visual Imagery: Superficial Manipulation or the Product of Passionate Reason?" *Political Psychology* 21, no. 4 (2000): 745-78.
- Huesmann, L. Rowell, Jessica Moise-Titus, Cheryl-Lynn Podolski, and Leonard D. Eron. "Longitudinal Relations between Children's Exposure to TV Violence and Their Aggressive and Violent Behavior in Young Adulthood: 1977-1992." *Developmental Psychology* 39, no. 2 (2003): 201-21.
- Huesmann, L. Rowell, and Laramie D. Taylor. "The Role of Media Violence in Violent Behavior." *Annual Review of Public Health* 27 (2006): 393-415.
- Hummel, Rand. "Is My Love for the Lord Real?" *Answers* 6, no. 3 (2011): 175.
- Hunter, Cornelius. "Back to School: Do You Know What Your Child Is Learning?" Center for Science and Culture, http://www.evolutionnews.org/2010/07/back_to_school_do_you_know_wha036971.html.
- ICR. "Celebrating Our Freedom, Honoring Our Creator." *Acts&Facts* 30, no. 7 (2010). "icr.org." Compete, <http://siteanalytics.compete.com/icr.org/>.
- "Id'ed for a Imperfect Argument." *Answers* 5, no. 4 (2010): 11.
- "If You Can't Stop Smoking, Cancer Will." Smoking Adverts, <http://www.smokingadverts.com/2011/09/8-anti-smoking-ads.html>.
- III, Henry Morris. "Fighting the Dragon." *Acts&Facts* 39, no. 9 (2010): 4-5.
- . "An Inconvenient Truth." *Acts&Facts* 39, no. 10 (2010): 21-23.
- "The Impact of Dinosaur Extinction." *Answers* 5, no. 4 (2010): 12.
- Inc., Apple. "I'm a Mac, I'm a PC." apple.com, <http://upload.wikimedia.org/wikipedia/en/a/ab/Imamacimapc.jpg>.
- "Institute for Creation Research." Charity Navigator, <http://www.charitynavigator.org/index.cfm?bay=search.summary&orgid=7485>.
- IV, Henry Morris. "40 Years of Blessing." *Acts&Facts* 39, no. 10 (2010): 19.
- . "All Your Need, Version 2009." *Acts&Facts* 38, no. 1 (2009): 17.
- . "The Breadth and Depth of ICR Ministries." *Acts&Facts* 39, no. 12 (2010): 21.
- . "Christian Heritage of Liberty." *Acts&Facts* 39, no. 7 (2010): 21.
- . "Christmas Gratitude." *Acts&Facts* 40, no. 12 (2011): 21.
- . "Commitment to a Timeless Message." *Acts&Facts* 40, no. 2 (2011): 21.
- . "Gift Legacy." *Acts&Facts* 38, no. 8 (2009): 21.
- . "The Silent Multitude." *Acts&Facts* 39, no. 1 (2010): 21.
- . "The Stewardship of Talents." *Acts & Facts* 38, no. 7 (2009): 21.
- . "Willful Ignorance." *Acts&Facts* 38, no. 2 (2009): 39.
- J., and N.H. "Letters to the Editor." *Acts&Facts* 39, no. 7 (2010): 20.
- J.C. "Letters to the Editor." *Acts&Facts* 39, no. 11 (2010): 20.
- J.F. "Letters to the Editor." *Acts&Facts* 39, no. 5 (2010): 20.
- Jack, Bill. "'Pass the Salt, Please'." *Answers* 6, no. 4 (2011): 79.
- James, Karen E., and Paul J. Hensel. "Negative Advertising: The Malicious Strain of Comparative Advertising." *Journal of Advertising* 20, no. 2 (1991): 53-69.
- Jeanson, Nathaniel T. "Common Ancestry and the Bible--Discerning Where to Draw the Line." *Acts&Facts* 39, no. 6 (2010): 6.

- . "Life Sciences Research: Year One in Review." *Acts&Facts* 40, no. 4 (2011): 6.
- . "Molecular Equidistance: The Echo of Discontinuity?" *Acts&Facts* 40, no. 2 (2011): 6.
- . "New Frontiers in Animal Classification." *Acts&Facts* 39, no. 5 (2010): 6.
- Jewkes, Yvonne. *Media and Crime*. London: Sage, 2004.
- Johnson, Donald E. *Probability's Nature and Nature's Probability : A Call to Scientific Integrity*. Charleston: BookSurge, 2009.
- Johnson, James J. S. "Biblical Devastation in the Wake of a 'Tranquil Flood'." *Acts&Facts* 40, no. 9 (2011): 8-10.
- . "Buyer Beware! Don't Swallow Evolutionist Sophistry." *Acts&Facts* 40, no. 1 (2011): 8-9.
- . "Culpable Passivity: The Failure of Going with the Flow." *Acts&Facts* 40, no. 7 (2011): 8-10.
- . "The Failed Apologetic of the Wedge Strategy: How the Intelligent Design Movement Treats the Bible as Irrelevant." *Acts&Facts* 40, no. 8 (2011): 10-11.
- . "Genesis Is History, Not Poetry: Exposing Hidden Assumptions About What Hebrew Poetry Is and Is Not." *Acts&Facts* 40, no. 6 (2011): 8-9.
- . "The Graffiti of Judgment." *Acts&Facts* 38, no. 4 (2009): 4.
- . "Human Suffering: Why This Isn't the 'Best of All Possible Worlds'." *Acts&Facts* 40, no. 11 (2011): 8-10.
- . "The Intelligent Designer Movement." *Acts&Facts* 39, no. 2 (2010): 19.
- . "Just Say No to Trojan Horses: Worldview Corruption Is Lying in Wait." *Acts&Facts* 40, no. 2 (2011): 17-18.
- . "Our Day in Court: ICR Graduate School V. Thecb Et Al." *Acts&Facts* 39, no. 6 (2010): 22.
- . "Quintillions of Creation Witnesses: Blood Service Agents Testify for Creation." *Acts&Facts* 40, no. 5 (2011): 8-9.
- . "Slow Death for a Tarantula: A Lesson in Arachnid Apologetics." *Acts&Facts* 40, no. 10 (2011): 10-11.
- . "Survival of the Fitted: God's Providential Programming." *Acts&Facts* 39, no. 10 (2010): 17-18.
- . "Tackling Charges of Biblical Inconsistency: Putting the Pieces Together to Form the Big Picture." *Acts&Facts* 39, no. 7 (2010): 8-9.
- . "What a Difference a Day Makes." *Acts&Facts* 38, no. 3 (2009): 13.
- Johnson, James J. S., Jeffrey Tomkins, and Brian Thomas. "Dinosaur DNA Research: Is the Tale Wagging the Evidence?" *Acts&Facts* 38, no. 10 (2009): 4-6.
- Joint Chiefs of Staff. *Department of Defense Dictionary of Military and Associated Terms*, Joint Publication 1-02. Washington: Department of Defense, 2007.
- Jones, Jonathan W. "Our Index Finger—Pointing to the Creator." *Answers* 5, no. 4 (2010): 70-73.
- Jowett, Garth S. "Propaganda and Communication: The Re-Emergence of a Research Tradition." *Journal of Communication* 37, no. 1 (1987): 97-114.
- Jowett, Garth S., and Robert L. Heath. "Propaganda." In *Encyclopedia of Public Relations*, edited by Robert L. Heath, 652-56. Thousand Oaks: Sage, 2005.
- Jowett, Garth S., and Victoria O'Donnell. *Propaganda and Persuasion*. 5th ed. London: Sage, 2012.
- . *Propaganda and Persuasion*. 4th ed. Thousand Oaks and London: Sage, 2006.
- Jr., Voddie Baucham. "Life's Toughest Questions." *Answers* 4, no. 2 (2009): 58-65.

- Jung, Jae Min, and James J. Kellaris. "Cross-National Differences in Proneness to Scarcity Effects: The Moderating Roles of Familiarity, Uncertainty Avoidance, and Need for Cognitive Closure." *Psychology & Marketing* 21, no. 9 (2004): 739–53.
- Kallis, Aristotle A. *Nazi Propaganda and the Second World War*. New York: Palgrave MacMillan, 2005.
- Kardes, Frank R. "The Psychology of Advertising." In *Persuasion: Psychological Insights and Perspectives*, edited by Timothy C. Brock and Melanie C. Green, 281-303. London: Sage, 2005.
- Karmarkar, Uma R., and Zakary L. Tormala. "Believe Me, I Have No Idea What I'm Talking About: The Effects of Source Certainty on Consumer Involvement and Persuasion." *The Journal of Consumer Research* 36, no. 6 (2010): 1033-49.
- Katz, Elihu, Jay G. Blumler, and Michael Gurevitch. "Uses and Gratifications Research." *The Public Opinion Quarterly* 37, no. 4 (1973-1974): 509-23.
- Katz, Elihu, and Paul F. Lazarsfeld. *Personal Influence: the Part Played by People in the Flow of Mass Communications*. New Brunswick: Transaction Publishers 2005 [1955].
- Kaufman, Douglas Q., Mark F. Stasson, and Jason W. Hart. "Are the Tabloids Always Wrong or Is That Just What We Think? Need for Cognition and Perceptions of Articles in Print Media." *Journal of Applied Social Psychology* 29, no. 9 (1999): 1984–2000.
- Kennedy, David M. *Over Here: The First World War and American Society*. New York: Oxford University Press, 2004.
- Kennedy, Donald. "Twilight for the Enlightenment?" *Science* 308, no. 5719 (2005): 165.
- Kinnick, Katherine N. "Doublespeak." In *Encyclopedia of Public Relations*, edited by Robert L. Heath, 260-61. Thousand Oaks: Sage, 2005.
- Klapper, Joseph T. *The Effects of Mass Communication*. New York: Free Press, 1960.
- Kline, T.C., III. "Sheltering under the Sacred Canopy: Peter Berger and Xunzi." *The Journal of Religious Ethics* 29, no. 2 (2001): 261-82.
- Klinghoffer, David. "Against Surrender: Richard M. Weaver's "Metaphysical Dream". Center for Science and Culture, http://www.evolutionnews.org/2010/05/against_surrender_richard_m_we034931.html.
- . "At Bloggingheads, Fleeing the Ritual Contamination of "Creationism". Center for Science and Culture, http://www.evolutionnews.org/2009/09/the_contamination_of_creationi024741.html.
- . "Dear Lauri Lebo, Please Help Me Understand Your Conspiracy Theory." Center for Science and Culture, http://www.evolutionnews.org/2010/08/dear_lauri_lebo_please_help_me037211.html.
- . "Fond Dreams of Biologos." Center for Science and Culture, http://www.evolutionnews.org/2009/05/fond_dreams_of_biologos020471.html.
- . "A Good Question from Michael Denton About the Fixity of Animal Body Plans." Center for Science and Culture, http://www.evolutionnews.org/2011/09/post_30050611.html.
- . "A "Heretic" in Jewish Terms? Someone Who Denies Intelligent Design." Center for Science and Culture,

- http://www.evolutionnews.org/2009/08/a_heretic_in_jewish_terms_some024191.html.
- . "How Evolution's Co-Discoverer Discovered Intelligent Design, Part II." Center for Science and Culture, http://www.evolutionnews.org/2009/06/how_evolutions_codiscoverer_di_1021741.html.
- . "How Microscopy Hastened the Demise of Darwinism." Center for Science and Culture, http://www.evolutionnews.org/2011/02/how_microscopy_hastened_the_de043551.html.
- . "Just a Coincidence?" Center for Science and Culture, http://www.evolutionnews.org/2010/01/just_a_coincidence031161.html#more.
- . "Martin Gaskell and the Argument from Scientific "Consensus"." Center for Science and Culture, http://www.evolutionnews.org/2010/12/martin_gaskell_and_the_argumen041781.html.
- . "My Son the Expert! Part II: More on the Texas Evolution Debate." Center for Science and Culture, http://www.evolutionnews.org/2009/04/my_son_the_expert_part_ii018991.html.
- . "My Son the Expert! Part Iii: A Challenge to Texas Darwinists." Center for Science and Culture, http://www.evolutionnews.org/2009/04/my_son_the_expert_part_iii_a_c019021.html.
- . "*New Scientist* and Jerry Coyne's Responses to ID Advocate Thomas Jefferson: Cases of Necromancy and Alzheimer's." Center for Science and Culture, http://www.evolutionnews.org/2009/07/jerry_coyne_and_new_scientists023071.html.
- . "No Peer-Reviewed I.D. Research. Just Ask Lauri Lebo!" Center for Science and Culture, http://www.evolutionnews.org/2011/03/no_peer-reviewed_id_research_j044851.html.
- . "Pickpocketed by the Smithsonian Institution." Center for Science and Culture, http://www.evolutionnews.org/2010/11/pickpocketed_by_the_smithsonia040041.html.
- . "Putting a Contemporary Face on Darwin-Inspired Eugenics." Center for Science and Culture, http://www.evolutionnews.org/2011/12/putting_a_contem054041.html.
- . "Robert Wright's Bloggingheads.Tv Censors Intelligent Design Interview." Center for Science and Culture, http://www.evolutionnews.org/2009/08/robert_wrights_bloggingheadstv024581.html.
- . "Slouching toward Columbine: Darwin's Tree of Death." Beliefnet, <http://blog.beliefnet.com/kingdomofpriests/2009/04/slouching-toward-columbine-charles-darwins-poisonous-legacy.html>.
- . "The Strange Case of Little Green Footballs II." Center for Science and Culture, http://www.evolutionnews.org/2009/02/the_strange_case_of_little_gre_1016671.html.
- . "The Universe is Haunted: Reflections on the "Nature of Nature"." Center for Science and Culture,

- http://www.evolutionnews.org/2011/03/the_universe_is_haunted_reflec044781.html.
- . "Whitewashing Darwinism's Ongoing Moral Legacy." Center for Science and Culture, http://www.evolutionnews.org/2009/06/is_it_somewhat_petty_offensive021371.html.
- . "Who Is James Le Fanu? Part II: The Book to Buy for Your Darwin-Devoted Friends." Center for Science and Culture, http://www.evolutionnews.org/2009/04/who_is_james_le_fanu_part_ii_t019671.html.
- . "Who Is James Le Fanu?: Part I: Darwin Doubter Signals Paradigm Shift in Evolution Debate." Center for Science and Culture, http://www.evolutionnews.org/2009/04/who_is_james_le_fanu_i019451.html.
- . "Wikipedia and the Myth of Falsifiability." Center for Science and Culture, http://www.evolutionnews.org/2010/01/wikipedia_and_the_myth_of_fals030561.html.
- Knutson, Bonnie J. "Marketing." In *Encyclopedia of Public Relations*, edited by Robert L. Heath, 506-10. Thousand Oaks: Sage, 2005.
- Kolbe, Richard H., and Melissa S. Burnett. "Content-Analysis Research: An Examination of Applications with Directives for Improving Research Reliability and Objectivity." *The Journal of Consumer Research* 18, no. 2 (1991): 243-50.
- "Koreans for Creation." *Answers* 4, no. 1 (2009): 16-17.
- Krippendorff, Klaus. "Computing Krippendorff's Alpha Reliability." *Departmental Papers (ASC)* (2011), http://repository.upenn.edu/asc_papers/43/.
- . *Content Analysis: An Introduction to Its Methodology*. 2nd ed. Thousand Oaks: Sage, 2004.
- L.T. "Letters to the Editor." *Acts&Facts* 38, no. 11 (2009): 20.
- Landis, Don. "2. Claims of Divine Authorship." *Answers* 6, no. 2 (2011): 56-57.
- . "Science in the Balance." *Answers* 5, no. 3 (2010): 80-81.
- Lanham, Richard A. *A Handlist of Rhetorical Terms*. 2nd ed. London: University of California Press, 1991.
- Larson, Edward J. *Trial and Error*. 3rd ed. Oxford: Oxford University Press, 2003.
- Lasswell, Harold D. *Democracy through Public Opinion*. Chicago: George Banta, 1941.
- . "The Person: Subject and Object of Propaganda." *Annals of the American Academy of Political and Social Science* 179 (1935): 187-93.
- . *Propaganda Techniques in the World War*. New York: Alfred A. Knopf, 1927.
- . "The Structure and Function of Communication in Society." In *The Communication of Ideas: A Series of Addresses*, edited by Lyman Bryson, 37-51. London: Institute for Religious and Social Studies, 1948.
- . "The Study and Practice of Propaganda." In *Propaganda and Promotional Activities: An Annotated Bibliography*, edited by Harold D. Lasswell, Ralph D. Casey and Bruce Lannes Smith, 1-27. Minneapolis: University of Minnesota Press, 1935.
- Lasswell, Harold D., and Dorothy Blumenstock. *World Revolutionary Propaganda: A Chicago Study*. New York and London: Alfred A. Knopf, 1939.
- Lasswell, Harold D., and Abraham Kaplan. *Power and Society: A Framework for Political Inquiry*. New Haven: Yale University Press, 1950.
- Laughey, Dan. *Key Themes in Media Theory*. Maidenhead: Open University Press, 2007.

- Lawton, Graham. "Templeton Prizewinner: We Need Science Plus Morality " *New Scientist*, <http://www.newscientist.com/article/mg20627546.800-templeton-prizewinner-we-need-science-plus-morality.html>.
- Lazarsfeld, Paul F., Bernard Berelson, and Hazel Gaudet. *The People's Choice: How the Voter Makes up His Mind in a Presidential Campaign* 3rd ed. London: Columbia University Press, 1968 [1944].
- Lazarsfeld, Paul, and Robert Merton. "Mass Communication, Popular Taste and Organized Social Action." In *Communication of Ideas*, edited by Lyman Bryson, 95-118. New York: Harper and Brothers, 1948.
- "Leading Advocate of Intelligent Design Challenges Criticism of Science Exam in Britain." Center for Science and Culture, http://www.evolutionnews.org/2009/07/leading_advocate_of_intelligen022601.html.
- "Leaflet and Money Drop." National Museum of the US Air Force, <http://www.nationalmuseum.af.mil/factsheets/factsheet.asp?id=1322>.
- Lee, Alfred M. "The Analysis of Propaganda: A Clinical Summary." *The American Journal of Sociology* 51, no. 2 (1945): 126-35.
- Lee, Alfred M., and Elizabeth B. Lee. *The Fine Art of Propaganda: A Study of Father Coughlin's Speeches*. New York: Harcourt Brace and Company, 1939.
- "Letters to the Editor." *Acts&Facts* 38, no. 3 (2009): 18.
- "Letters to the Editor." *Acts&Facts* 40, no. 12 (2011): 20.
- Levine, David K., and Thomas R. Palfrey. "The Paradox of Voter Participation? A Laboratory Study." *The American Political Science Review* 101, no. 1 (2007): 143-58.
- Levine, Robert. *The Power of Persuasion: How We're Bought and Sold*. New Jersey: John Wiley & Sons, 2003.
- Lietha, Dan. "All Other Planets." *Answers* 6, no. 1 (2011): 13.
- . "Are You Prepared for the Real Global Warming?" *Answers* 5, no. 3 (2010): 11.
- . "Christian College Compromise." *Answers* 5, no. 3 (2011): 16.
- . "Creationists Focus on the Differences." *Answers* 4, no. 4 (2009): 12.
- . "Evolution Sunday 2009." *Answers* 4, no. 1 (2009): 12.
- . "Fabricating Ardi." *Answers* 5, no. 1 (2010): 12.
- . "Jesus Loves the Little Children of the World." *Answers* 5, no. 4 (2010): 13.
- . "Man's Opinion." *Answers* 6, no. 2 (2011): 10.
- Lincoln, Yvonna S., and Egon G. Guba. *Naturalistic Inquiry*. Newbury Park: Sage, 1985.
- Lippmann, Walter. *Public Opinion* New York: Free Press, 1997 [1922].
- Lisle, Jason. "The Big Bang: God's Chosen Method of Creation?" *Answers* 6, no. 3 (2011): 82-86.
- . "Darwin—Unwittingly a "Creationist"?" *Answers* 4, no. 1 (2009): 86-87.
- . "Distant Starlight." *Answers* 5, no. 2 (2010): 53.
- . "Distant Starlight: The Anisotropic Synchrony Convention." *Answers* 6, no. 1 (2011): 68-71.
- . "Exoplanets—Unpredictable Patterns." *Answers* 6, no. 1 (2011): 44-46.
- . "Foolproof Apologetics." *Answers* 4, no. 1 (2009): 66-69.
- . "Global Warming's Solar Connection." *Answers* 5, no. 3 (2010): 52-55.
- Lloyd, Jenny. "Positively Negative: The Impact of Negativity Upon the Political Consumer." *International Journal of Nonprofit and Voluntary Sector Marketing* 13 (2008): 301-14.

- Lodish, Leonard M., Magid Abraham, Stuart Kalmenson, Jeanne Livelsberger, Beth Lubetkin, Bruce Richardson, and Mary Ellen Stevens. "How T.V. Advertising Works: A Meta-Analysis of 389 Real World Split Cable T.V. Advertising Experiments." *Journal of Marketing Research* 32, no. 2 (1995): 125-39.
- "Logic for Dummies." *Answers* 5, no. 4 (2010): 20.
- Lombard, Matthew, Jennifer Snyder-Duch, and Cheryl Campanella Bracken. "Content Analysis in Mass Communication: Assessment and Reporting of Intercoder Reliability." *Human Communication Research* 28, no. 4 (2002): 587-604.
- "Lord of the Ringmasters." *Answers* 5, no. 1 (2010): 13.
- "Luckies Are Less Irritating." *The New York Times*, http://www.nytimes.com/slideshow/2008/10/06/business/media/20081006_CigaretteAd_Slideshow_ready_index.html.
- Luhmann, Niklas. *The Reality of Mass Media*. Translated by Kathleen Cross. Cambridge: Polity, 2000.
- Lumley, Frederick E. *The Propaganda Menace*. New York: Century, 1933.
- Lun, Janetta, Stacey Sinclair, Erin R. Whitchurch, and Catherine Glenn. "(Why) Do I Think What You Think? Epistemic Social Tuning and Implicit Prejudice." *Journal of Personality and Social Psychology* 93, no. 6 (2007): 957-72.
- Lurquin, Paul F., and Linda Stone. *Evolution and Religious Creation Myths: How Scientists Respond*. Oxford: Oxford University Press, 2007.
- Luskin, Casey. "Access Research Network Publishes Top Intelligent Design Stories for 2009." Center for Science and Culture, http://www.evolutionnews.org/2010/01/access_research_network_publis030881.html.
- . "Back to School with the Nsf: Targeting "Young Children" to Believe in Evolution." Center for Science and Culture, http://www.evolutionnews.org/2010/09/back_to_school_with_the_nsf_ta038071.html.
- . "Barbara Forrest Exposes Her Intolerance, Misrepresents Darwin-Doubting Scientist." Center for Science and Culture, http://www.evolutionnews.org/2009/10/barbara_forrest_exposes_her_int026261.html.
- . "Bio-Complexity Paper Shows Many Multi-Mutation Features Unlikely to Evolve in History of the Earth." Center for Science and Culture, http://www.evolutionnews.org/2011/01/bio-complexity_paper_shows_man042611.html.
- . "Butterfly Mimicry: A "Huge" Problem for Evolutionary Biology." Center for Science and Culture, http://www.evolutionnews.org/2011/02/butterfly_mimicry_a_huge_probl044101.html.
- . "Circumventing the Post-Dover Media Blackout." CSC, http://www.evolutionnews.org/2011/12/circumventing_t054541.html.
- . "Condescension, Sneers, and Outright Misrepresentations of Intelligent Design Pass for Scholarship in Synthese." Center for Science and Culture, http://www.evolutionnews.org/2011/01/condescension_sneers_and_outri042641.html.
- . "Contradictions, Irony, and Appeals to Authority Permeate the Language of Science and Faith." Center for Science and Culture, http://www.evolutionnews.org/2011/05/contradictions_irony_and_appea046961.html.

- . "Critically Analyzing the Argument from Human/Chimpanzee Genetic Similarity." Center for Science and Culture, http://www.evolutionnews.org/2011/09/critically_analyzing_the_argum051321.html.
- . "Critics in the Journal of Eukaryotic Microbiology Take the Easy Way out in Attacking Intelligent Design." Center for Science and Culture, http://www.evolutionnews.org/2010/01/critics_in_the_journal_of_euka030941.html.
- . "Darwinian Dogmatism Permeates Recent Biology Textbooks." Center for Science and Culture, http://www.evolutionnews.org/2011/10/darwinian_dogmatism_permeates051731.html.
- . "Darwinist Opposition to Academic Freedom Bills Demonstrates the Need for Legislation to Protect Academic Freedom." Center for Science and Culture, http://www.evolutionnews.org/2009/02/darwinist_opposition_to_academ017651.html.
- . "Do Amphibian-Like Fish Necessarily Confirm Darwinian Evolution? Not at All." Center for Science and Culture, http://www.evolutionnews.org/2011/12/do_amphibian-li054191.html.
- . "Documents Reveal Intolerance Towards Intelligent Design at the California Science Center." Center for Science and Culture, http://www.evolutionnews.org/2010/08/documents_reveal_intolerance_t037441.html.
- . "Eugenie Scott Claims Evolution Is Threatening to Certain Christian Traditions." Center for Science and Culture, http://www.evolutionnews.org/2009/06/eugenie_scott_claims_evolution022041.html.
- . "Eugenie Scott Misrepresents the Law on Evolution Education." Center for Science and Culture, http://www.evolutionnews.org/2011/07/eugenie_scott_misrepresents_th048621.html.
- . "Evaluating Nature's 2009 "15 Evolutionary Gems" Darwin-Evangelism Kit." Center for Science and Culture, http://www.evolutionnews.org/2010/07/evaluating_natures_2009_15_evo036991.html.
- . "'Expelled Exposed' Is Wrong: Materialists Allowed to Challenge Neo-Darwinian Orthodoxy, Intelligent Design Proponents Are Not." Center for Science and Culture, http://www.evolutionnews.org/2009/07/expelled_exposed_is_wrong_mate022511.html.
- . "The False Dichotomy between Intelligent Design and Natural Causes." Center for Science and Culture, http://www.evolutionnews.org/2011/09/the_false_dichotomy_between_in050701.html.
- . "The First Law of Darwin Lobbying and the Second Law of Thermodynamics." Center for Science and Culture, http://www.evolutionnews.org/2011/06/the_first_law_of_darwin_lobbyi044561.html.
- . "A Fishy Story About Antifreeze Gene Evolution." Center for Science and Culture,

- http://www.evolutionnews.org/2011/01/a_fishy_story_about_antifreeze043141.html.
- . "Gotcha! Checking Stephen Meyer's Spelling and Other Weighty Criticisms of Signature in the Cell." Center for Science and Culture, http://www.evolutionnews.org/2010/05/gotcha_on_checking_stephen_mey035051.html.
- . "How the Science Teachers' Lobby Keeps Its Constituents in the Dark on Evolution." Center for Science and Culture, http://www.evolutionnews.org/2011/03/how_the_science_teachers_lobby044471.html.
- . "How to Play the Gene Evolution Game." Center for Science and Culture, http://www.evolutionnews.org/2010/02/how_to_play_the_gene_evolution032141.html.
- . "James Carville Wrongly Frames the Evolution Debate as a Democrat vs. Republican Issue." Center for Science and Culture, http://www.evolutionnews.org/2009/07/james_carville flaunts_his_int023141.html.
- . "Judge Jones's Misguided NCSE-Scripted Kitzmiller Ruling and the Origin of New Functional Genetic Information." Center for Science and Culture, http://www.evolutionnews.org/2010/02/judge_jones_misguided_ncsescr031891.html#fn4.
- . "Lobbyists Resort to Myth Information Campaign on Academic Freedom Legislation." Center for Science and Culture, http://www.evolutionnews.org/2011/02/lobbyists_resort_to_myth-infor044241.html.
- . "Louisiana Preserves Science Education Act That Encourages Academic Freedom to Discuss Criticisms of Darwinism." Center for Science and Culture, http://www.evolutionnews.org/2011/05/science_law_and_economics_come046871.html.
- . "Marsupials Embryos Develop Differently from "Virtually Every Other Vertebrate"." Center for Science and Culture, http://www.evolutionnews.org/2011/01/marsupials_embryos_develop_dif042271.html.
- . "Muscling Past Homology Problems in Nature's Vertebrate Skeleton "Evolutionary Gem"." Center for Science and Culture, http://www.evolutionnews.org/2010/08/muscling_past_homology_problem037201.html.
- . "Nature's "Gems": Microevolution Meets Microevolution." Center for Science and Culture, http://www.evolutionnews.org/2010/08/nature_gems_microevolution_mee037171.html.
- . "Nature's Microevolutionary Gems Part 2: Bird-Sized Evolutionary Change." Center for Science and Culture, http://www.evolutionnews.org/2010/07/natures_microevolutionary_gems_1037051.html.
- . "Ncse's Steve Newton and the "Creationism" Gambit." Center for Science and Culture, http://www.evolutionnews.org/2011/04/ncses_steve_newton_and_the_cre045721.html.

- . "NCSE Theologian Parrots Dawkins: ID "Practitioners" Are "Ignorant of Science or Seriously Deluded or Fundamentally Dishonest"." Center for Science and Culture,
http://www.evolutionnews.org/2009/11/ncse_theologian_parrots_dawkin028151.html.
- . "New Book, *Probability's Nature and Nature's Probability*, Provides Accessible Introduction to Technical Aspects of Intelligent Design." Center for Science and Culture,
http://www.evolutionnews.org/2009/05/new_book_probability_nature_an020781.html.
- . "New Law Review Article: The Constitutionality and Pedagogical Benefits of Teaching Evolution Scientifically." Center for Science and Culture,
http://www.evolutionnews.org/2010/05/new_law_review_article_the_con034601.html.
- . "The "Newspeak" of Evolutionary Biology Hopes to Banish the Term "Design," by Design." Center for Science and Culture,
http://www.evolutionnews.org/2011/04/the_newspeak_of_evolutionary_b045551.html.
- . "NPR Interview on Texas Evolution Decision Reveals Media Bias." Center for Science and Culture,
http://www.evolutionnews.org/2009/04/npr_interview_on_texas_evoluti019301.html.
- . "A Partisan Affair (Part 6): False Claims About Science Education Policy in Edward Humes' Pseudo-History of Kitzmiller, "Monkey Girl"." Center for Science and Culture,
http://www.evolutionnews.org/2009/01/a_partisan_affair_part_6_false015161.html.
- . "Peer-Reviewed Pro-Intelligent Design Article Endorses Irreducible Complexity." Center for Science and Culture,
http://www.evolutionnews.org/2011/01/peer-reviewed_pro-intelligent042261.html.
- . "Peer-Reviewed Pro-Intelligent Design Paper Suggests "Agents" and "Choice Contingency" Needed to Explain Life's Programming." Center for Science and Culture, http://www.evolutionnews.org/2011/01/peer-reviewed_pro-intelligent_042251.html.
- . "Peer-Reviewed Research Paper on Plant Biology Favorably Cites Intelligent Design and Challenges Darwinian Evolution." Center for Science and Culture,
http://www.evolutionnews.org/2010/12/peer-reviewed_research_paper_o042191.html.
- . "Recent Genetic Research Shows Chimps More Distant from Humans, Neanderthals Closer." Center for Science and Culture,
http://www.evolutionnews.org/2010/04/recent_genetic_research_shows034291.html.
- . "Scientists Say Intelligent Designer Needed for Origin of Life Chemistry." Center for Science and Culture,
http://www.evolutionnews.org/2009/07/scientists_say_intelligent_des022621.html.
- . "Sea Monkey Hypotheses Refute the Ncse's Biogeography Objections to Explore Evolution." Center for Science and Culture,

- http://www.evolutionnews.org/2010/03/sea_monkey_hypotheses_refute_t032451.html.
- . "Swine Flu, Viruses, and the Edge of Evolution." Center for Science and Culture, http://www.evolutionnews.org/2009/05/swine_flu_viruses_and_the_edge020071.html.
- . "Texas Evolution Lobby Making Power Grabs to Promote Their Censorship Agenda." Center for Science and Culture, http://www.evolutionnews.org/2009/05/texas_evolution_lobby_making_p020811.html.
- . "Truth or Dare with Dr. Ken Miller: A Lecture Guide to the Anti-Intelligent Design Claims by Dr. Kenneth Miller." Center for Science and Culture, http://www.evolutionnews.org/2009/11/truth_or_dare_with_dr_ken_mill027891.html.
- . "Uncensoring and Simplifying the Scientific Case for Intelligent Design." Center for Science and Culture, http://www.evolutionnews.org/2010/06/uncensoring_and_simplifying_th035971.html.
- . "When Evolutionary Psychology Collides with Moralities." Center for Science and Culture, http://www.evolutionnews.org/2010/08/when_evolutionary_psychology_c037691.html.
- . "Why Can't Intelligent Design Critics in Synthese Accurately Represent Their Opponents?" Center for Science and Culture, http://www.evolutionnews.org/2011/01/why_cant_intelligent_design_cr042651.html.
- . "Why Phillip Johnson Matters: A Biography." Center for Science and Culture, http://www.evolutionnews.org/2011/11/the_significance_of_phillip_jo053071.html.
- Lynn, Michael. "Scarcity Effects on Value: A Quantitative Review of the Commodity Theory Literature." *Psychology & Marketing* 8, no. 1 (1991): 43-57.
- Lynn, Michael, and Paulette Bogert. "The Effect of Scarcity on Anticipated Price Appreciation." *1978-1984* 26, no. 22 (1996).
- M., Jonathan. "Beyond the Genome: A Non-Reductionist Perspective on Development." Center for Science and Culture, http://www.evolutionnews.org/2011/06/beyond_the_genome_a_non-reduct047021.html.
- . "Does Life Use a Non-Random Set of Amino Acids?" Center for Science and Culture, http://www.evolutionnews.org/2011/04/does_life_use_a_non-random_set045661.html.
- . "Engineering at its Finest: Bacterial Chemotaxis and Signal Transduction." Center for Science and Culture, http://www.evolutionnews.org/2011/09/engineering_at_its_finetest_bact050911.html.
- . "The 'Junk DNA' Paradigm Continues to Collapse as New Functions Are Discovered for Retrotransposons." Center for Science and Culture, http://www.evolutionnews.org/2010/07/the_junk_dna_paradigm_continue036461.html.
- . "Michael Behe Hasn't Been Refuted on the Flagellum." Center for Science and Culture,

- http://www.evolutionnews.org/2011/03/michael_behe_hasnt_been_refute044801.html.
- . "The Recapitulation Myth." Center for Science and Culture, http://www.evolutionnews.org/2010/06/the_recapitulation_myth_still036011.html.
- . "The Year in Review: Intelligent Design in the Uk." Center for Science and Culture, http://www.evolutionnews.org/2011/12/the_year_in_rev054561.html.
- M.F. "Letters to the Editor." *Acts&Facts* 40, no. 4 (2011): 20.
- M.K.S. "Letters to the Editor." *Acts&Facts* 39, no. 6 (2010): 20.
- MacArthur, John. "The Source of All Wisdom." *Answers* 4, no. 2 (2009): 86-87.
- Mackenzie, A. J. *Propaganda Boom*. London: The Right Book Club, 1938.
- Macrury, Iain. *Advertising*. Abingdon: Routledge, 2009.
- Mahaney, Darlene C. "Propaganda Posters." *OAH Magazine of History* 16, no. 3 (2002): 41-46.
- "Making Science Fun." *Answers* 4, no. 4 (2009): 74.
- Mannheim, Karl. *Ideologie Und Utopie*. Frankfurt am Main: Vittorio Klostermann, 1995 [1929].
- . *Ideology and Utopia: An Introduction to the Sociology of Knowledge*. Translated by Louis Wirth and Edward Shils. New York: Harcourt, Brace & Co., 1954 [1929].
- "Many Christian Colleges Receive a Failing Grade." *Answers* 6, no. 3 (2011): 19-20.
- Marlin, Randal. *Propaganda and the Ethics of Persuasion*. Peterborough: Broadview Press, 2002.
- Martin, L. John. "Recent Theory on Mass Media Potential in Political Campaigns." *Annals of the American Academy of Political and Social Science* 427 (1976): 125-33.
- Mason, Dale, and Ken Ham. "Year of Opportunity." *Answers* 4, no. 1 (2009): 6.
- Mason, Dale T. "Be an "Aunt Lois". " *Answers* 5, no. 3 (2010): 6.
- . "The First Five Years: A Brief Report." *Answers* 6, no. 3 (2011): 8.
- Matthews, Michael. "Stumbling Stones or Stepping Stones: Fossils and Biblical Authority." *Answers* 5, no. 1 (2010): 34-37.
- Matthews, Mike. "Crib Notes for Every Believer." *Answers* 5, no. 2 (2010): 82.
- . "Free Indeed." *Answers* 5, no. 3 (2010): 82.
- . "The Humility Factor: Understanding God's Truth." *Answers* 5, no. 1 (2010): 82.
- . "Run to the Science." *Answers* 6, no. 1 (2011): 82.
- . "Simple Answers." *Answers* 5, no. 4 (2010): 82.
- . "The Ultimate Proof That the Bible Is True." *Answers* 6, no. 2 (2011): 50-53.
- . "Warring for Peace." *Answers* 6, no. 3 (2011): 178.
- Matthews, Mike, and Pam S. Sheppard. "10 Creation Vacations: Building Your Biblical Worldview... One Destination at a Time." *Answers* 4, no. 2 (2009): 24-45.
- Mayring, Philipp. "Qualitative Content Analysis." In *A Companion to Qualitative Research*, edited by Uwe Flick, Ernst von Kardorff and Ines Steinke, 266-69. London: Sage, 2004.
- McCarthy, E. Doyle. *Knowledge as Culture: The New Sociology of Knowledge*. New York: Routledge, 1996.
- McCombs, Maxwell E., and Amy Reynolds. "News Influence on Our Pictures of the World." In *Media Effects: Advances in Theory and Research*, edited by Jennings Bryant and Dolf Zillmann, 1-18. Mahwah: Lawrence Erlbaum, 2002.

- McCombs, Maxwell E., and Donald L. Shaw. "The Agenda-Setting Function of Mass Media." *Public Opinion Quarterly* 36, no. 2 (1972): 176–87.
- McCombs, Maxwell E., Donald L. Shaw, and David Weaver. *Communication and Democracy: Exploring the Intellectual Frontiers in Agenda-Setting Theory*. Mahwah: Lawrence Erlbaum, 1997.
- McDorman, Perry, and Stephanie McDorman. "Chameleons: A Bug's Worst Nightmare." *Answers* 6, no. 2 (2011): 38-42.
- McDowell, Walter, and Alan Batten. *Branding TV: Principles and Practices*. Burlington: Elsevier, 2005.
- McGuire, Timothy W. "Measuring and Testing Relative Advertising Effectiveness with Split-Cable TV Panel Data." *Journal of the American Statistical Association* 72, no. 360 (1977): 736-45.
- McLeod, Douglas M., Gerald M. Kosicki, and Jack M. McLeod. "Resurveying the Boundaries of Political Communications Effects." In *Media Effects: Advances in Theory and Research*, edited by Jennings Bryant and Dolf Zillmann. Mahwah: Lawrence Erlbaum, 2002.
- McQuail, Denis. "Sociology of Mass Communication." *Annual Review of Sociology* 11 (1985): 93-111.
- Menton, David. "Uniqueness of Man." *Answers* 5, no. 2 (2010): 54-55.
- Menton, David A. "Melanin—Umbrellas of Our Skin." *Answers* 5, no. 4 (2010): 68-70.
- . "Rubber Chicken Leg." *Answers* 5, no. 4 (2010): 41-42.
- . "Skin: Our Living Armor." *Answers* 4, no. 4 (2009): 44-48.
- Merrill, John C., and Ralph L. Lowenstein. *Media, Messages, and Men: New Perspectives in Communication*. New York: McKay, 1971.
- Merton, Robert K. *Sociological Ambivalence & Other Essays*. New York: The Free Press, 1976.
- Meyer, Stephen C. "We Hold Some Truths to Be Self Evident." Center for Science and Culture, http://www.evolutionnews.org/2010/07/we_hold_some_truths_to_be_self036411.html.
- Meyers-Levy, Joan, and Laura A. Peracchio. "Moderators of the Impact of Self-Reference on Persuasion." *The Journal of Consumer Research* 22, no. 4 (1996): 408-23.
- Miller, Clyde R. "How to Detect Propaganda." *Bulletin of the American Association of University Professors* 24, no. 1 (1938): 49-55.
- Miller, Jon D., Eugenie C. Scott, and Shinji Okamoto. "Public Acceptance of Evolution." *Science* 313, no. 5788 (2006): 765-66
- Miller, Kenneth R. *Finding Darwin's God: A Scientist's Search for Common Ground between God and Evolution*. New York: HarperCollins, 1999.
- . *Only a Theory: Evolution and the Battle for America's Soul*. New York: Viking Penguin, 2008.
- Miller, Mark C. "Introduction." In *Propaganda*, 9-33. Brooklyn: Ig Publishing, 2005 [1928].
- Miniard, Paul W., Sunil Bhatla, Kenneth R. Lord, Peter R. Dickson, and H. Rao Unnava. "Picture-Based Persuasion Processes and the Moderating Role of Involvement." *Journal of Consumer Research* 18, no. 1 (1991): 92-107.
- Miniard, Paul W., Deepak Sirdeshmukh, and Daniel E. Innis. "Peripheral Persuasion and Brand Choice." *The Journal of Consumer Research* 19, no. 2 (1992): 226-39.

- Mitchell, Tommy. "Our Suffering Savior: A Physician's Perspective." *Answers* 6, no. 3 (2011): 114-17.
- . "Suffering & Death." *Answers* 5, no. 2 (2010): 59.
- Mohler, Albert. "More Than a Revolution: Homosexuality in Biblical Perspective." *Answers* 5, no. 1 (2010): 50-54.
- Mohler, R. Albert. "Why Does the Universe Look So Old?: The Theological Costs of Old-Earth Thinking." *Acts&Facts* 39, no. 10 (2010): 4-7.
- Moloney, Kevin. *Rethinking Public Relations: Pr Propaganda and Democracy*. 2nd ed. Abingdon: Routledge, 2006.
- "Monster's Ink." *Answers* 5, no. 1 (2010): 10.
- Mooney, Chris, and Matthew C. Nisbet. "Undoing Darwin." *Columbia Journalism Review* 44, no. 3 (2005): 30-39.
- Moore, Colin. *Propaganda Prints: A History of Art in the Service of Social and Political Change*. London: A&C Black Publishers, 2010.
- Moore, James. "The Creationist Cosmos of Protestant Fundamentalism." In *Fundamentalisms and Society: Reclaiming the Sciences, the Family, and Education*, edited by Martin E. Marty and R. Scott Appleby, 42-72. London: University of Chicago Press, 1993.
- Moore, Randy, Murray Jensen, and Jay Hatch. "Twenty Questions: What Have the Courts Said About the Teaching of Evolution and Creationism in Public Schools?" *BioScience* 53, no. 8 (2003): 766-71.
- Morales, Andrea C. "Giving Firms an "E" for Effort: Consumer Responses to High-Effort Firms." *The Journal of Consumer Research* 31, no. 4 (2005): 806-12.
- Morris, Henry, III. "Achieving Accuracy." *Acts&Facts* 40, no. 5 (2011): 4-5.
- . "Balaam's Error and Today's Evangelicals." *Acts&Facts* 40, no. 8 (2011): 4-6.
- . "Communicating Certainty." *Acts & Facts* 40, no. 6 (2011): 4-5.
- . "Creation by Evolution: Understanding the Theological Hazards of Bruce Waltke, Biologos, and the New Darwinian Evangelicals." *Acts&Facts* 39, no. 6 (2010): 4-5.
- . "Discovering and Defending the Certainties of Creation." *Acts&Facts* 38, no. 6 (2009): 8.
- . "Fighting the Dragon." *Acts&Facts* 39, no. 9 (2010): 4-5.
- . "A Flood of Influence: The Impact of Henry Morris and the Genesis Flood in Modern History." *Acts&Facts* 40, no. 2 (2011): 4-5.
- . "An Inconvenient Truth." *Acts&Facts* 39, no. 10 (2010): 21-23.
- . "Issues among Evangelicals." *Acts&Facts* 38, no. 9 (2009): 22.
- . "Naturalizing the Supernatural: How Evolutionary Ideas Steal Glory from God." *Acts&Facts* 40, no. 3 (2011): 4-5.
- Morris, Henry M. "Biology and the Bible." *Acts&Facts* 39, no. 11 (2010 [1999]): 4-5.
- . "Creation & Resurrection." *Acts&Facts* 39, no. 4 (2010 [1984]): 13-15.
- . "Creation Is the Foundation." *Acts&Facts* 39, no. 9 (2010 [1983]): 20-22.
- . "Dangerous Turn Ahead: Traveling Down the Road to Compromise." *Acts&Facts* 38, no. 6 (2009 [1988]): 4.
- . "Defending the Faith." *Acts&Facts* 40, no. 4 (2011 [1997]): 12-14.
- . "Evolutionary Arrogance." *Acts&Facts* 38, no. 7 (2009 [2003]): 8-9.
- . "Global Flood, Global Impact: The Legacy of the Genesis Flood." *Acts&Facts* 40, no. 2 (2011 [1995]): 10-11.
- . "Old-Earth Creationism." *Acts&Facts* 38, no. 3 (2009 [1997]): 10-11.
- . "Recent Creation Is a Vital Doctrine." *Acts&Facts* 39, no. 5 (2010 [1984]): 14-16.

- . "Reflections on a Legacy: Four Decades of Creation Ministry." *Acts&Facts* 39, no. 1 (2010 [2005]): 10-13.
- . *Some Call It Science: The Religion of Evolution*: Institute For Creation Research, 2006.
- . "The Vanishing Case for Evolution." *Acts&Facts* 38, no. 2 (2009 [1986]): 17-19.
- Morris, John D. "The Biggest Problems for Evolution." *Acts&Facts* 40, no. 4 (2011): 15.
- . "A Classic Polystrate Fossil." *Acts&Facts* 38, no. 10 (2009): 15.
- . "Compromise in the Pulpit." *Acts&Facts* 38, no. 2 (2009): 5.
- . "The Creation Movement's Firm Foundation." *Acts&Facts* 40, no. 2 (2011): 8-9.
- . "The Creation Worldview and the Scopes Trial." *Acts&Facts* 40, no. 1 (2011): 15.
- . "Doubt Versus Unbelief." *Acts&Facts* 40, no. 8 (2011): 15.
- . "Galapagos: Showcase for Creation." *Acts&Facts* 38, no. 5 (2009): 8.
- . "ICR Research Advances with the Ncsf." *Acts&Facts* 38, no. 1 (2009): 8.
- . "The Language of Evolution." *Acts&Facts* 40, no. 7 (2011): 16.
- . "Modern Samaritans." *Acts&Facts* 39, no. 3 (2010): 15.
- . "Reading the Fossil Record." *Acts&Facts* 39, no. 11 (2010): 17.
- . "Selected by Nature or Designed to Fill?" *Acts&Facts* 40, no. 3 (2011): 17.
- . "A Tectonic Origin for the Kingston Peak Formation." *Acts&Facts* 38, no. 3 (2009): 6.
- . "The Vital Doctrine of a Global Flood." *Acts&Facts* 38, no. 4 (2009): 6.
- Mortenson, Terry. "Exposing a Fundamental Compromise." *Answers* 5, no. 3 (2010): 62-65.
- . "Six Literal Days." *Answers* 5, no. 2 (2010): 50.
- Motlagh, Jason. "Why the Taliban Is Winning the Propaganda War." *Time*, <http://www.time.com/time/world/article/0,8599,1895496,00.html>.
- Mullett, Michael A. *The Catholic Reformation*. London: Routledge, 1999.
- Munson, Gorham. *12 Decisive Battles of the Mind: The Story of Propaganda During the Christian Era with Abridged Versions of Texts That Have Shaped History*. New York: Greystone Press, 1942.
- Murphy, Dennis M., and James F. White. "Propaganda: Can a Word Decide a War?" *Parameters* 37, no. 3 (2007): 15-27.
- "Mutant Humans." *Answers* 4, no. 2 (2009): 10.
- Nason, Patricia L. "The Iron Grip of Darwinism on Education." *Acts&Facts* 38, no. 2 (2009): 34-35.
- Nelson, Paul. "Seeing Ghosts in the Bushes -- or How to Keep the Theory of Evolution from Breaking Your Heart and Driving You Crazy " Center for Science and Culture, http://www.evolutionnews.org/2010/01/seeing_ghosts_in_the_bushes_or030831.html.
- . "Seeing Ghosts in the Bushes (Part 2): How Is Common Descent Tested?" Center for Science and Culture, http://www.evolutionnews.org/2010/02/seeing_ghosts_in_the_bushes_pa031061.html.
- Nelson, Richard Alan. *A Chronology and Glossary of Propaganda in the United States*. Westport: Greenwood Press, 1996.
- Neuendorf, Kimberly A. *The Content Analysis Guidebook*. Thousand Oaks: Sage, 2002.

- "New Centre for Intelligent Design Opens in Uk." Center for Science and Culture, http://www.evolutionnews.org/2010/09/new_centre_for_intelligent_des038621.html.
- "Next Stop for Translations: Land of the Rising Sun." *Answers* 4, no. 2 (2009): 16-17.
- Nicholls, Henry. "Uncertainty Principle: How Evolution Hedges its Bets." *New Scientist*, <http://www.newscientist.com/article/mg20927940.100-uncertainty-principle-how-evolution-hedges-its-bets.html?full=true>.
- "No Room for Compromise." *Answers* 5, no. 4 (2010): 85.
- Norton, John Warner. "Keep These Off the U.S.A. ." The Royal Alberta Museum, <http://www.royalalbertamuseum.ca/vexhibit/warpost/english/post4.htm>.
- Nowak, Martin A., and Sébastien Roch. "Upstream Reciprocity and the Evolution of Gratitude." *Proceedings: Biological Sciences* 274, no. 1610 (2007): 605-09.
- Numbers, Ronald L. "Creationism in 20th-Century America." *Science* 218, no. 4572 (1982): 538-44.
- . *The Creationists: From Scientific Creationism to Intelligent Design*. 2nd ed. Cambridge: Harvard University Press, 2006.
- . "Scientific Creationism and Intelligent Design." In *The Cambridge Companion to Science and Religion*, edited by Peter Harrison, 127-47. Cambridge: Cambridge University Press, 2010.
- O'Donoghue, James. "Living Dinosaurs: Are We Sure Birds Are Dinos?" *New Scientist*, <http://www.newscientist.com/article/dn19849-living-dinosaurs-are-we-sure-birds-are-dinos.html>.
- O'Shaughnessy, Nicholas. "Persuasion, Myth and Propaganda." *Journal of Political Marketing* 3, no. 3 (2004): 87-103.
- . *Politics and Propaganda: Weapons of Mass Seduction*. Manchester: Manchester University Press, 2004.
- . "The Social Construction of Enmity." *Journal of Political Marketing* 1, no. 1 (2002): 217-24.
- O'Shaughnessy, John, and Nicholas O'Shaughnessy. "The Death and Life of Propaganda." *Journal of Public Affairs* 12, no. 1 (2012): 29-38.
- . *Persuasion in Advertising*. London: Routledge, 2004.
- O'Shaughnessy, Nicholas. "Selling Hitler: Propaganda and the Nazi Brand." *Journal of Public Affairs* 9 (2009): 55-76.
- Oliver, Rick. "Designed to Kill in a Fallen World: The Incredible Design of Snake Venom." *Answers* 4, no. 3 (2009): 36-39.
- Olson, Ingrid R., and Christy Marshuetz. "Facial Attractiveness Is Appraised in a Glance." *Emotion* 5, no. 4 (2005): 498-502.
- "Outraged?". *Answers* 6, no. 3 (2011): 15.
- "Overselling Ida." *New Scientist*, <http://www.newscientist.com/article/mg20227102.500-overselling-ida.html>.
- P.L. "Letters to the Editor." *Acts&Facts* 39, no. 4 (2010): 20.
- Paharia, Neeru, Anat Keinan, Jill Avery, and Juliet B. Schor. "The Underdog Effect: The Marketing of Disadvantage and Determination through Brand Biography." *Journal of Consumer Research* 37, no. 5 (2011): 775-90.
- Paik, Haejung, and George Comstock. "The Effects of Television Violence on Antisocial Behavior: A Meta-Analysis." *Communication Research* 21, no. 4 (1994): 516-46
- Park, Hee-Joo. "The Politics of Anti-Creationism: The Committees of Correspondence." *Journal of the History of Biology* 33, no. 2 (2000): 349-70.
- Patterson, Roger. "Intentional Teaching at Church." *Answers* 5, no. 2 (2010): 16-17.

- Paul, Gerhard. *Aufstand Der Bilder: Die Ns-Propaganda Vor 1933*. 2nd ed. Bonn: Verlag J.H.W. Dietz Nachf., 1992.
- Pechmann, Cornelia, and Gabriel Esteban. "Persuasion Processes Associated with Direct Comparative and Noncomparative Advertising and Implications for Advertising Effectiveness." *Journal of Consumer Psychology* 2, no. 4 (1993): 403-32.
- Pennock, Robert T. *Tower of Babel: The Evidence against the New Creationism*. Cambridge: MIT Press, 1999.
- "Perfectionist [Cp+] Wrinkle Lifting Serum." Estée Lauder, <http://www.esteelauder.com/product/2664/3581/Product-Catalog/Whats-New/Must-Haves/Skincare/Perfectionist-CP/Wrinkle-Lifting-Serum/index.tmpl>.
- Perkins, Tony. "Fighting Abortion—the Measure of a Just Society." *Answers* 5, no. 4 (2010): 44-48.
- Perry, David K. *Theory and Research in Mass Communication: Contexts and Consequences*. 2nd ed. Mahwah: Lawrence Erlbaum Associates, 2002.
- Perse, Elizabeth M. *Media Effects and Society*. Mahwah: Lawrence Erlbaum Associates, 2001.
- Petley, Julian. *Advertising*. London: Hodder Wayland, 2002.
- Petty, Faith Gleicher and Richard E. "Expectations of Reassurance Influence the Nature of Fear-Stimulated Attitude Change." *Journal of Experimental Social Psychology* 28 (1992): 86-100.
- Petty, Richard E., and John T. Cacioppo. *Communication and Persuasion: Central and Peripheral Routes to Attitude Change* New York: Springer-Verlag, 1986.
- . "The Effects of Involvement on Responses to Argument Quantity and Quality: Central and Peripheral Routes to Persuasion." *Journal of Personality and Social Psychology* 46, no. 1 (1984): 69-81.
- . "Issue Involvement Can Increase or Decrease Persuasion by Enhancing Message-Relevant Cognitive Responses." *Journal of Personality and Social Psychology* 37, no. 10 (1979): 1915-26.
- Petty, Richard E., John T. Cacioppo, and Rachel Goldman. "Personal Involvement as a Determinant of Argument-Based Persuasion." *Journal of Personality and Social Psychology* 41, no. 5 (1981): 847-55.
- Petty, Richard E., John T. Cacioppo, and Martin Heesacker. "Effects of Rhetorical Questions on Persuasion: A Cognitive Response Analysis." *Journal of Personality and Social Psychology* 40, no. 3 (1981): 432-40.
- Petty, Richard E., John T. Cacioppo, and David Schumann. "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement." *Journal of Consumer Research* 10, no. 2 (1983): 135-46.
- Petty, Richard E., Curtis P. Haugtvedt, and Stephen M. Smith. "Elaboration as a Determinant of Attitude Strength: Creating Attitudes That Are Persistent, Resistant, and Predictive of Behavior " In *Attitude Strength: Antecedents and Consequences*, edited by Richard E. Petty and Jon A. Krosnick, 93–130. Mahwah: Lawrence Erlbaum, 1995.
- Petty, Richard E., Joseph R. Priester, and Pablo Brinol. "Mass Media Attitude Change: Implications of the Elaboration Likelihood Model of Persuasion." In *Media Effects: Advances in Theory and Research*, edited by Jennings Bryant and Dolf Zillmann, 155-98. Mahwah: Lawrence Erlbaum, 2002.
- Petty, Richard E., Gary L. Wells, and Timothy C. Brock. "Distraction Can Enhance or Reduce Yielding to Propaganda: Thought Disruption Versus Effort

- Justification." *Journal of Personality and Social Psychology* 34, no. 5 (1976): 874-84.
- Phillips, W. Gary. "Lessons from the Fall: An Overview of Genesis 3." *Answers* 4, no. 3 (2009): 24-28.
- Plutzer, Eric, and Michael Berkman. "Evolution, Creationism, and the Teaching of Human Origins in Schools." *Public Opinion Quarterly* 0, no. 0 (2008): 1-14.
- Pope, Stephen J. *Human Evolution and Christian Ethics*. Cambridge: Cambridge University Press, 2007.
- "Preparing Hard Ground for Planting." *Answers* 5, no. 3 (2010): 17.
- Priester, Joseph R., and Richard E. Petty. "The Influence of Spokesperson Trustworthiness on Message Elaboration, Attitude Strength, and Advertising Effectiveness." *Journal of Consumer Psychology* 13, no. 4 (2003): 408-21.
- . "Source Attributions and Persuasion: Perceived Honesty as a Determinant of Message Scrutiny." *Personality and Social Psychology Bulletin* 21, no. 6 (1995): 637-54.
- "Proclaiming the Creator in the Land of Many Gods." *Answers* 4, no. 4 (2009): 17.
- "Propaganda." In *Black's Law Dictionary*, edited by Bryan A. Gardner, 1335. St. Paul: West, 2009.
- "The Propaganda of Health." *The British Medical Journal* 1, no. 1011 (1880): 745.
- "Propaganda, N.". In *OED Online*: Oxford University Press, 2012.
- Provenzo, Eugene, Jr. *Religious Fundamentalism and American Education: The Battle for the Public Schools*. Albany: State University of New York Press, 1990.
- Puddephatt, Antony J., and Neil McLaughlin. "The Sociology of Knowledge." In *21st Century Sociology: A Reference Handbook*, edited by Clifton D. Bryant and Dennis L. Peck, 239-48. Thousand Oaks: Sage, 2007.
- Purdom, Georgia. "Variety within Created Kinds." *Answers* 6, no. 3 (2011): 152-53.
- Qualter, Terrance H. *Propaganda and Psychological Warfare*. New York: Random House, 1962.
- R.D.S. "Letters to the Editor." *Acts&Facts* 40, no. 9 (2011): 20.
- R.F. "Letters to the Editor." *Acts&Facts* 39, no. 11 (2010): 20.
- R.F.R. "Letters to the Editor." *Acts&Facts* 40, no. 12 (2011): 20.
- R.S. "Letters to the Editor." *Acts&Facts* 40, no. 3 (2011): 20.
- "Radio Hot Talker Thom Hartmann Uses Classic Darwin Lobby Tricks to Ignore Challenges to Evolution." Center for Science and Culture, http://www.evolutionnews.org/2011/07/radio_hot_talker_thom_hartmann048451.html.
- "Raising the Banner for Creation Truth ". *Acts&Facts* 38, no. 12 (2009): 4-6.
- Ramsey, Russell. "What's the Price of a Bottle of Wine?". London: JWT, 2010.
- "Readers Respond - Apr-Jun.2010." *Answers* 5, no. 2 (2010): 7.
- "Readers Respond - Jan-Mar.2010." *Answers* 5, no. 1 (2010): 7.
- "Readers Respond - Jan-Mar.2011." *Answers* 6, no. 1 (2011): 7.
- "Readers Respond - Oct-Dec.2011." *Answers* 6, no. 4 (2011): 7.
- "Reef Belief is Challenged." *Answers* 4, no. 4 (2009): 10.
- "Regulating DNA Repair Mechanisms." Center for Science and Culture, http://www.evolutionnews.org/2010/11/regulating_dna_repair_mechanis040801.html.
- "Reviewing a Law Review: A Darwin Defending Law Professor Seeks New Ways to Censor Skeptics." Center for Science and Culture, http://www.evolutionnews.org/2011/08/reviewing_a_law_review_a_darwi049011.html.

- Richards, Janet Radcliffe. *Human Nature after Darwin: A Philosophical Introduction*. London: Routledge, 2000.
- Richards, Jay W. "Are Chimps and Humans Really All That Much Alike?" Center for Science and Culture, http://www.evolutionnews.org/2010/02/are_chimps_and_humans_really_a031631.html.
- . "Do the Jpl Supervisors Who Demoted Coppedge Know Who Appears in the Privileged Planet?" Center for Science and Culture, http://www.evolutionnews.org/2010/04/do_the_jpl_supervisors_who_dem034021.html.
- Richardson, Sheila. "Creature Teachers: At Your Local Zoo." *Answers* 5, no. 2 (2010): 38-42.
- Riffe, Daniel, Stephen Lacy, and Frederick G. Fico. *Analyzing Media Messages: Using Quantitative Content Analysis in Research*. 2nd ed. Mahwah: Lawrence Erlbaum Associates, 2005.
- Riso, Lawrence P., and Carolina McBride. "Introduction: A Return to a Focus on Cognitive Schemas." In *Cognitive Schemas and Core Beliefs in Psychological Problems*, edited by Lawrence P. Riso, Pieter L. du Toit, Dan J. Stein and Jeffrey E. Young, 2-9. Washington: American Psychological Association, 2007.
- Roberts, Michael. *Evangelicals and Science*. Westport: Greenwood, 2008.
- Rogers, Everett M. "Intermedia Processes and Powerful Media Effects." In *Media Effects: Advances in Theory and Research*, edited by Jennings Bryant and Dolf Zillmann, 199-214. Mahwah: Lawrence Erlbaum, 2002.
- . "Theoretical Diversity in Political Communication." In *Handbook of Political Communication Research*, edited by Lynda Lee Kaid, 3-16. Mahwah: Lawrence Erlbaum Associates, 2004.
- Rosenhouse, Jason, and Glenn Branch. "Media Coverage of "Intelligent Design". " *BioScience* 56, no. 3 (2006): 247-52.
- Ross, Marcus. "Least but Not Last: A Closer Look at Hypsilophodon." *Answers* 6, no. 4 (2011): 50-53.
- . "Sea Monsters: Mosasaurs Designed for Life at Sea." *Answers* 5, no. 1 (2010): 22-24.
- . "T. Rex—Fashioned to Be Fearless: A Closer Look at T-Rex." *Answers* 6, no. 4 (2011): 44-49.
- "A Royal Row." *Answers* 4, no. 1 (2009): 12.
- Rupprecht, Philipp. "Redeverbot." Calvin College, <http://www.calvin.edu/academic/cas/gpa/posters/hitlerfips.jpg>.
- Ruse, Michael. *Can a Darwinian Be a Christian?: The Relationship between Science and Religion*. Cambridge: Cambridge University Press, 2001.
- . *The Evolution-Creation Struggle*. London: Harvard University Press, 2005.
- . *The Evolution Wars: A Guide to the Debates*. Millerton: Grey House, 2008.
- S.F. "Letters to the Editor." *Acts&Facts* 40, no. 11 (2011): 20.
- S.F.S. "Letters to the Editor." *Acts&Facts* 38, no. 10 (2009): 20.
- S.M. "Letters to the Editor." *Acts&Facts* 40, no. 10 (2011): 20.
- Sanders, Roger. "Darwin's Personal Struggle with Evil." *Answers* 4, no. 1 (2009): 32-33.
- . "Finding God in Galapagos." *Answers* 4, no. 1 (2009): 40-45.
- . "The Pursuit of Darwin." *Answers* 4, no. 1 (2009): 26-32.
- Sanders, Roger W. "Orchids—a Bouquet of Adaptations." *Answers* 4, no. 1 (2009): 92-95.

- Sarkar, Sahotra. *Doubting Darwin?: Creationist Designs on Evolution*. Oxford: Blackwell, 2007.
- Schaefer, Jame. "Reporting Complexity: Science and Religion." In *Quoting God: How Media Shape Ideas About Religion and Culture*, edited by Claire Hoertz Badaracco, 211-24. Waco: Baylor University Press, 2005.
- Schmidt, Klaus, and Chris Ludlow. *Inclusive Branding: The Why and How of a Holistic Approach to Brands*. New York: Palgrave MacMillan, 2002.
- "Science Discovered It—You Can Prove It." *The New York Times*, http://www.nytimes.com/slideshow/2008/10/06/business/media/20081006_CigaretteAd_Slideshow_ready_6.html.
- Science, National Academy of. *Teaching About Evolution and the Nature of Science*. Washington: National Academies Press, 1998.
- "Scientist Gives Principles for Practical Propaganda." *The Science News-Letter* 22, no. 602 (1932): 266.
- Scott, Eugenie C. "Antievolution and Creationism in the United States." *Annual Review of Anthropology* 26 (1997): 263-89.
- . *Evolution vs. Creationism: An Introduction*. 2nd. ed. London: Greenwood Press, 2009.
- . "Not (Just) in Kansas Anymore." *Science* 288, no. 5467 (2000): 813-15.
- . "The Once and Future Intelligent Design." In *Not in Our Classrooms: Why Intelligent Design Is Wrong for Our Schools*, edited by Eugenie C. Scott and Glenn Branch, 1-27. Boston: Beacon Press, 2006.
- Scott, Eugenie C., and Glenn Branch. "Antievolutionism: Changes and Continuities." *BioScience* 53, no. 3 (2003): 282-85.
- , eds. *Not in Our Classrooms: Why Intelligent Design is Wrong for Our Schools*. Boston: Beacon Press, 2006.
- Sechrist, Gretchen B., and Charles Stangor. "When Are Intergroup Attitudes Based on Perceived Consensus Information?: The Role of Group Familiarity." *Social Influence* 2, no. 3 (2007): 211-35.
- Secker-Walker, Roger H., John K. Worden, Robert R. Holland, Brian S. Flynn, and Allan S. Detsky. "A Mass Media Programme to Prevent Smoking among Adolescents: Costs and Cost Effectiveness." *Tobacco Control* 6, no. 3 (1997): 207-12.
- "Series of Costly Case Settlements Warns Darwin's Bullies: Stop Censoring Intellectual Freedom." Center for Science and Culture, http://www.evolutionnews.org/2011/08/settlement_of_intelligent_desi050161.html.
- Shanks, Niall. *God, the Devil, and Darwin a Critique of Intelligent Design Theory*. Oxford: Oxford University Press, 2004.
- "Sharing Jesus Daily...on Facebook." *Answers* 6, no. 4 (2011): 16.
- Sheppard, Pam. "Building a Community for Discovery." *Answers* 4, no. 1 (2009): 76-81.
- Shermer, Michael B. "Science Defended, Science Defined: The Louisiana Creationism Case." *Science, Technology & Human Values* 16, no. 4 (1991): 517-39.
- Sherwin, Frank. "Cells: Sophisticated and God-Designed." *Acts&Facts* 39, no. 8 (2010): 17.
- . "Insects in Darwin's Ointment." *Acts&Facts* 40, no. 4 (2011): 16.
- . "Research That Demonstrates Design and Unearths Flood Deposition." *Acts&Facts* 39, no. 11 (2010): 18.
- . "The Wax That Taxes Darwin." *Acts&Facts* 38, no. 1 (2009): 12.

- Sherwin, Frank, and Brian Thomas. "Do 'New Species' Demonstrate Darwinism?" *Acts&Facts* 38, no. 2 (2009): 36.
- . "Genesis Flood Insights More Relevant Today." *Acts&Facts* 40, no. 2 (2011): 15-16.
- Shulman, Holly. C. *The Voice of America: Propaganda and Democracy, 1941-1945*. Madison: University of Wisconsin Press, 1990.
- Shumann, David W., Richard E. Petty, and D. Scott Clemons. "Predicting the Effectiveness of Different Strategies of Advertising Variation: A Test of the Repetition-Variation Hypotheses." *The Journal of Consumer Research* 17, no. 2 (1990): 192-202.
- Siepmann, Charles A. *Radio, Television, and Society*. New York: Oxford University Press, 1950.
- "Sign of the Times." *Answers* 5, no. 1 (2010): 9.
- "Slaying the Dragon Myth." *Answers* 6, no. 1 (2011): 10.
- Smith, Anika. "Blown Away by Signature in the Cell." Center for Science and Culture, http://www.evolutionnews.org/2009/09/blown_away_by_signature_in_the024761.html.
- . "Darwin Day Poll Elicits Response from Richard Dawkins." Center for Science and Culture, http://www.evolutionnews.org/2009/02/darwin_day_poll_elicits_respon016901.html^.
- . "Darwin Day Poll Shatters Stereotypes: Democrats Favor Freedom to Discuss Evolution's Strengths and Weaknesses More Than Republicans." Center for Science and Culture, http://www.evolutionnews.org/2009/02/poll_shatters_stereotypes_with016931.html.
- . "Mansfield Mans up in Critique of Evolution." Center for Science and Culture, http://www.evolutionnews.org/2009/03/mansfield_mans_up_in_critique018901.html.
- . "Melanie Phillips Gets It Right: Why Intelligent Design Is Not Creationism." Center for Science and Culture, http://www.evolutionnews.org/2009/04/melanie_phillips_gets_it_right020061.html.
- . "Playing "Science Says" Is a Political Game." Center for Science and Culture, http://www.evolutionnews.org/2011/01/playing_science_says_is_a_poli042541.html.
- . "Unbelievers at the Holidays: Two Different Takes on Why There Are Still Doubts About Darwin." Center for Science and Culture, http://www.evolutionnews.org/2009/11/unbelievers_at_the_holidays_tw028591.html.
- Smith, Sarabeth A. "What's Old is New Again: Terrorism and the Growing Need to Revisit the Prohibition on Propaganda." *Syracuse Journal of International Law and Commerce* 37, no. 299 (2010): 299-337.
- Smith, Ted J., III. "Propaganda and the Techniques of Deception." In *Propaganda: A Pluralistic Perspective*, edited by Ted J. Smith, III, 65-98. West Port: Praeger, 1989.
- Snelling, Andrew A. "5. Scientific Accuracy." *Answers* 6, no. 2 (2011): 61-62.
- . "Beneath the Cross." *Answers* 4, no. 2 (2009): 78.
- . "Carbon-14 in Fossils and Diamonds: An Evolution Dilemma." *Answers* 6, no. 1 (2011): 72-75.

- . "Cincinnati—Built on a Fossil Graveyard." *Answers* 6, no. 3 (2011): 50-53.
- . "Emeralds—Treasures from Catastrophe." *Answers* 6, no. 4 (2011): 72-75.
- . "Genesis: Real, Reliable, Historical." *Acts&Facts* 38, no. 9 (2009): 12-14.
- . "No Slow and Gradual Erosion: Flood Evidence Number Five." *Answers* 4, no. 1 (2009): 96-99.
- . "Order in the Fossil Record." *Answers* 5, no. 1 (2010): 64-68.
- . "Radiometric Dating." *Answers* 6, no. 3 (2011): 151.
- . "Radiometric Dating: Making Sense of the Patterns." *Answers* 5, no. 1 (2010): 72-75.
- . "Radiometric Dating: Problems with the Assumptions." *Answers* 4, no. 4 (2009): 70-73.
- . "Rock Layers Folded, Not Fractured: Flood Evidence Number Six." *Answers* 4, no. 2 (2009): 80-83.
- . "Rubies & Sapphires: Sparkling Reminders of God's Judgment." *Answers* 5, no. 2 (2010): 66-69.
- . "Transcontinental Rock Layers: Flood Evidence Number Three." *Answers* 6, no. 3 (2011): 100-03.
- Sparks, Glenn G., and Cheri W. Sparks. "Effects of Media Violence." In *Media Effects: Advances in Theory and Research*, edited by Jennings Bryant and Dolf Zillmann, 269-85. Mahwah: Lawrence Erlbaum, 2002.
- Spencer, Nick, and Denis Alexander. *Rescuing Darwin: God and Evolution in Britain Today*. London: Theos, 2009.
- Spinney, Laura. "The Underhand Ape: Why Corruption is Normal." *New Scientist*, <http://www.newscientist.com/article/mg21228372.200-the-underhand-ape-why-corruption-is-normal.html>.
- Sproule, J. Michael. *Channels of Propaganda*. Bloomington: EDINFO Press, 1994.
- . "Progressive Propaganda Critics and the Magic Bullet Myth." *Critical Studies in Mass Communication* 6, no. 3 (1989): 225-46.
- . "Social Responses to Twentieth-Century Propaganda." In *Propaganda: A Pluralistic Perspective*, edited by Ted J. Smith, III, 5-22. West Port: Praeger, 1989.
- Staff, Joint Chiefs of. "Department of Defense Dictionary of Military and Associated Terms." Washington: Department of Defense, 2012 [2010].
- Steel, Ronald. *Walter Lippmann and the American Century*. New Brunswick and New Jersey: Transaction Publishers, 1999.
- Steinfatt, Thomas M. "Evaluating Approaches to Propaganda Analysis." *ETC.* 36, no. 2 (1979): 157-80.
- Stempien, Richard, and Sarah Coleman. "Processes of Persuasion: The Case of Creation Science." *Review of Religious Research* 27, no. 2 (1985): 169-77.
- Sternberg, Richard. "Guy Walks into a Bar and Thinks He's a Chimpanzee: The Unbearable Lightness of Chimp-Human Genome Similarity." Center for Science and Culture, http://www.evolutionnews.org/2009/05/guy_walks_into_a_bar_and_think020401.html.
- . "How the Junk DNA Hypothesis Has Changed since 1980." Center for Science and Culture, http://www.evolutionnews.org/2009/10/how_the_junk_dna_hypothesis_ha026421.html.
- . "When 'Junk DNA' Isn't Junk: Farewell to a Darwinist Standard Response." Center for Science and Culture,

- http://www.evolutionnews.org/2009/04/when_junk_dna_isnt_junk_farewe019981.html.
- Stetzer, Ed, and Jason Hayes. "Reaching Twenty-Somethings." *Answers* 4, no. 4 (2009): 32-35.
- Stewart, David W., and David H. Furse. *Effective Television Advertising: A Study of 1000 Commercials*. Lexington: Heath and Company, 1986.
- Stewart, David W., Paulos Pavlou, and Scott Ward. "Media Influences on Marketing Communications." In *Media Effects: Advances in Theory and Research*, edited by Jennings Bryant and Dolf Zillmann, 353-96. Mahwah: Lawrence Erlbaum, 2002.
- Stiff, James B., and Paul A. Mongeau. *Persuasive Communication*. 2nd ed. New York: Guilford Press, 2003.
- Suedfeld, Peter, Stephen Bochner, and Carol Matas. "Petitioner's Attire and Petition Signing by Peace Demonstrators: A Field Experiment." *Journal of Applied Social Psychology* 1, no. 3 (1971): 278-83.
- Swasy, John L., and James M. Munch. "Examining the Target of Receiver Elaborations: Rhetorical Question Effects on Source Processing and Persuasion." *The Journal of Consumer Research* 11, no. 4 (1985): 877-86.
- Szerszynski, Bronislaw. "Understanding Creationism and Evolution in America and Europe." In *Science and Religion: New Historical Perspectives*, edited by Thomas Dixon, Geoffrey Cantor and Stephen Pumfrey, 153-74. Cambridge: Cambridge University Press, 2010.
- Taylor, George H. "Global Warming—When Politics and Science Collide." *Answers* 5, no. 3 (2010): 56-58.
- Taylor, Paul F. "Closing the Gap." *Answers* 5, no. 4 (2010): 32-34.
- Taylor, Philip M. *Global Communications, International Affairs and the Media since 1945* London: Routledge, 1997.
- . *Munitions of the Mind: A History of Propaganda from the Ancient World to the Present Era*. 3rd ed. New York: Manchester University Press, 2003.
- Taylor, Shelley E. "The Interface of Cognitive and Social Psychology." In *Cognition, Social Behavior, and the Environment*, edited by John H. Harvey, 189-211. New Jersey: Lawrence Erlbaum Associates, 1981.
- "Tennessee Teen Schools Columnist on Evolution and Science Education." Center for Science and Culture,
http://www.evolutionnews.org/2011/06/tennessee_teen_schools_knoxvil047171.html.
- Theaker, Alison. *The Public Relations Handbook* New York: Routledge, 2001.
- Thomas, Brian. "The Apobetics of Aesthetics: A Hairy Problem for Evolution." *Acts&Facts* 38, no. 4 (2009): 18.
- . "Did Dinosaurs Die from an Impact?" *Acts&Facts* 39, no. 5 (2010): 16.
- . "Doubts Raised About the 'Goldilocks' Planet." *Acts&Facts* 39, no. 12 (2009): 17.
- . "Evolutionary 'Game Changer' Doesn't Change Anything." *Acts&Facts* 40, no. 12 (2011): 16-17.
- . "The Ida Fossil: A Clever Campaign for a Lackluster 'Link'." *Acts&Facts* 38, no. 7 (2009): 17.
- . "The Stones Cry Out: What Rocks and Fossils Say About the Age of the Earth." *Acts&Facts* 40, no. 1 (2011): 17.
- . "Thank God for Wood." *Acts&Facts* 40, no. 10 (2011): 17.
- . "Why Do Animals Play?" *Acts&Facts* 39, no. 1 (2010): 16.

- Thomas, Brian, and Frank Sherwin. "Eyewitnesses to Extinction: Testimonies to the Life and Death of Dinosaurs." *Acts&Facts* 40, no. 6 (2011): 16-17.
- Thomas, William I., and Dorothy S. Thomas. *The Child in America: Behavior Problems and Programs*. New York: Alfred A. Knopf, 1928.
- Thouless, Robert H. *Straight Thinking in War Time*. London: Hodder and Stoughton, 1942.
- Tomkins, Jeffrey. "Dinosaur Protein Sequences and the Dino-to-Bird Model." *Acts&Facts* 38, no. 10 (2009): 12-14.
- . "Evaluating the Human-Chimp DNA Myth--New Research Data." *Acts&Facts* 40, no. 10 (2011): 6.
- . "First Phase Complete in Human and Chimp Genome-Wide DNA Comparison." *Acts&Facts* 40, no. 12 (2011).
- . "Human-Chimp Similarities: Common Ancestry or Flawed Research?" *Acts&Facts* 38, no. 6 (2009): 12-13.
- . "Ongoing Telomere Research at Odds with Human-Chimp Chromosome 2 Model." *Acts&Facts* 40, no. 11 (2011): 6.
- Tormala, Zakary L., and Richard E. Petty. "Contextual Contrast and Perceived Knowledge: Exploring the Implications for Persuasion." *Journal of Experimental Social Psychology* 43, no. 1 (2007): 17-30.
- . "Source Credibility and Attitude Certainty: A Metacognitive Analysis of Resistance to Persuasion." *Journal of Consumer Psychology* 14, no. 4 (2004): 427-42.
- Toumey, Christopher P. *God's Own Scientists: Creationists in a Secular World*. New Brunswick: Rutgers University Press, 1994.
- U.S. Air Force. "500 Kip Note." National Museum of the US Air Force, <http://www.nationalmuseum.af.mil/shared/media/photodb/photos/050503-F-1234P-004.jpg>.
- "Uk Schools Ok for Creation." *Answers* 4, no. 3 (2009): 12.
- Upchurch, John. "The Danger of Biologos: Blurring the Line between Creation and Evolution." *Answers* 6, no. 4 (2011): 38-41.
- UpChurch, John. "Mapping out the Truth: A Creationist-Run Dinosaur Dig." *Answers* 5, no. 1 (2010): 56-59.
- Vardiman, Larry. "Has Einstein's Limit on the Speed of Light Been Broken?" *Acts&Facts* 40, no. 12 (2011): 22-23.
- . "An Ice Age in Yellowstone National Park." *Acts&Facts* 39, no. 12 (2010): 12-14.
- . "An Ice Age in Yosemite National Park." *Acts&Facts* 39, no. 3 (2010): 12-13.
- . "New Evidence for Global Cooling." *Acts&Facts* 39, no. 7 (2010): 12-13.
- Vardiman, Larry, and D. Russell Humphreys. "A New Creationist Cosmology: In No Time at All Part 1." *Acts&Facts* 39, no. 11 (2010): 12-15.
- . "A New Creationist Cosmology: In No Time at All Part 2." *Acts&Facts* 40, no. 1 (2011): 12-14.
- . "A New Creationist Cosmology: In No Time at All Part 3." *Acts&Facts* 40, no. 2 (2011): 12-14.
- Walton, Douglas. *Media Argumentation: Dialectic, Persuasion, and Rhetoric*. Cambridge: Cambridge University Press, 2007.
- . "What is Propaganda, and What Exactly is Wrong with It?" *Public Affairs Quarterly* 11, no. 4 (1997): 383-413.
- Water, Marjorie Van de. "Propaganda." *The Science News-Letter* 34, no. 15 (1938): 234-35.

- "Watery Beginning." *Answers* 6, no. 2 (2011): 9.
- Watts, David P. "Reciprocity and Interchange in the Social Relationships of Wild Male Chimpanzees." *Behaviour* 139, no. 2/3 (2002): 343-70.
- Weikart, Richard. "Can Darwinists Condemn Hitler and Remain Consistent with Their Darwinism?" Center for Science and Culture, http://www.evolutionnews.org/2011/10/can_darwinists_condemn_hitler052331.html.
- Welch, David. *Nazi Propaganda: The Power and the Limitations*. London: Croom Helm, 1983.
- . "Power of Propaganda." *History Today* 49 (1999): 24-26.
- . "Propaganda, Definitions of." In *Propaganda and Mass Persuasion: A Historical Encyclopedia, 1500 to the Present*, edited by Nicholas J. Cull, David Culbert and David Welch, 317-23. Santa Barbara: ABC-CLIO, 2003.
- . *The Third Reich: Politics and Propaganda*. 2nd ed. New York: Routledge, 2007.
- Wells, Jonathan. "Art as Lust." Center for Science and Culture, http://www.evolutionnews.org/2009/01/art_as_lust015681.html.
- . "'Junk' DNA: Darwinism's Last Stand?" Center for Science and Culture, http://www.evolutionnews.org/2009/06/junk_dna_darwinisms_last_stand021061.html.
- Wells, William D., ed. *Measuring Advertising Effectiveness*. Mahwah: Lawrence Erlbaum, 1997.
- Wertham, Frederic. *Seduction of the Innocent*. London: Museum Press, 1955.
- Wesson, Robert. *Beyond Natural Selection*. Cambridge: The MIT Press, 1993.
- West, John G. "Behe Critic on Bacterial Flagellum: No Intelligence Required Because 'Natural Forces Work 'Like Magic'.'" Center for Science and Culture, http://www.evolutionnews.org/2010/08/behe_critic_on_bacterial_flage037561.html.
- . "God and Evolution: A Response to Stephen Barr (Part 2)." Center for Science and Culture, http://www.evolutionnews.org/2009/06/god_and_evolution_a_response_t_1021691.html.
- . "Journal Apologizes and Pays \$10,000 after Censoring Article." Center for Science and Culture, http://www.evolutionnews.org/2011/06/journal_apologizes_and_pays_10047121.html.
- . "Reality Check: Oklahoma Darwinists' 'Gotcha' Moment at Cambrian Explosion Film Falls Flat." Center for Science and Culture, http://www.evolutionnews.org/2009/09/reality_check_oklahoma_darwini026071.html.
- . "Refuting Intelligent Design, Biologos Style." Center for Science and Culture, http://www.evolutionnews.org/2011/06/refuting_intelligent_design_bi047391.html.
- . "Santorium Compares Lack of Free Speech on Global Warming to Darwin Debate." Center for Science and Culture, http://www.evolutionnews.org/2009/12/santorium_compares_lack_of_free030031.html.
- . "Scientists Issue Letter Supporting Louisiana Science Education Act." Center for Science and Culture,

- http://www.evolutionnews.org/2011/05/scientists_issue_letter_support046881.html.
- . "Slouching toward Columbine: Darwin's Tree of Death." Center for Science and Culture, http://www.evolutionnews.org/2009/04/slouching_toward_columbine_dar019691.html.
- . "There Is No 'Politically Correct' Science." Forbes.com, http://www.forbes.com/2009/02/05/racism-eugenics-economics-opinions-darwin09_0205_john_west.html.
- . "Where's the Dialogue? Alas, Colleague of Francis Collins at "Biologos" Doesn't Offer Any." Center for Science and Culture, http://www.evolutionnews.org/2009/06/wheres_the_dialogue_alas_colle021051.html.
- . "Why the California Science Center's Censorship of Pro-Intelligent Design Film is a Big Deal." Center for Science and Culture, http://www.evolutionnews.org/2009/12/why_the_california_science_cen030421.html.
- West, Sonja. "New Book Uncovers "the Life and Lies of Charles Darwin"." Center for Science and Culture, http://www.evolutionnews.org/2009/06/new_book_uncovers_the_life_and021251.html.
- White, Andrew Dickson. *A History of the Warfare of Science with Theology in Christendom*. Vol. 1. Cambridge: Cambridge University Press, 2009 [1896].
- "Why the Land of Milk and Honey Is Now a Desert." *Answers* 6, no. 4 (2011): 12.
- Willcox, David R. *Propaganda, the Press and Conflict: The Gulf War and Kosovo*. Abingdon: Routledge, 2005.
- Williams, Joe. "Fairness and Pressure Advocacy in Controversial Science." In *Quoting God: How Media Shape Ideas About Religion and Culture*, edited by Claire Hoertz Badaracco, 225-31. Waco: Baylor University Press, 2005.
- Williams, Manuela A. *Mussolini's Propaganda Abroad: Subversion in the Mediterranean and the Middle East, 1935-1940*. New York: Routledge, 2006.
- Williams, Patti, Gavan J. Fitzsimons, and Lauren G. Block. "When Consumers Do Not Recognize "Benign" Intention Questions as Persuasion Attempts." *The Journal of Consumer Research* 31, no. 3 (2004): 540-50.
- Wilson, Timothy D., Daniel T Gilbert, and Thalia P. Wheatley. "Protecting Our Minds: The Role of Lay Beliefs." In *Metacognition: Cognitive and Social Dimensions*, edited by Vincent Y. Yzerbyt, Guy Lories and Benoit Dardenne, 171-201. London: Sage, 1998.
- Wise, Kurt. "The Discontinuity of Life." *Answers* 4, no. 1 (2009): 88-90.
- Wollaeger, Mark A. *Modernism, Media, and Propaganda: British Narrative from 1900 to 1945*. Princeton and Woodstock: Princeton University Press, 2006.
- Wood, Wendy, Frank Y. Wonga, and J.Gregory Chacherea. "Effects of Media Violence on Viewers' Aggression in Unconstrained Social Interaction." *Psychological Bulletin* 109, no. 3 (1991): 371-83.
- Woolston, Howard. "Propaganda in Soviet Russia." *The American Journal of Sociology* 38, no. 1 (1932): 32-40.
- Worchel, Stephen, Susan Arnold, and Michael Baker. "The Effects of Censorship and Attractiveness of the Censor on Attitude Change." *Journal of Applied Social Psychology* 5, no. 3 (1975): 227-39.

- Worchel, Stephen, Jerry Lee, and Akanbi Adewole. "Effects of Supply and Demand on Ratings of Object Value." *Journal of Personality and Social Psychology* 32, no. 5 (1975): 906-14.
- Yalch, Richard F., and Rebecca Elmore-Yalch. "The Effect of Numbers on the Route to Persuasion." *Journal of Consumer Research* 11, no. 1 (1984): 522-27.
- Young, Christian C., and Mark A. Largent. *Evolution and Creationism: A Documentary and Reference Guide*. London: Greenwood Press, 2007.
- Youngkin, Joshua. "Richard Weikart on Darwinism and Hitlerism." Center for Science and Culture,
http://www.evolutionnews.org/2011/09/why_darwinism_should_keep_to_i051001.html.
- Yourman, Julius. "Propaganda Techniques within Nazi Germany." *Journal of Educational Sociology* 13, no. 3 (1939): 148-63.