
SINGULAR REPRESENTATION

James Michael Openshaw

A thesis submitted for the degree of

Doctor of Philosophy



Pembroke College

University of Oxford

2018

Contents

<i>Abstract</i>	v
<i>Acknowledgements</i>	vii
o Introduction	1
0.1 Preliminaries	2
0.2 Aboutness: Russellian themes	5
0.2.1 Russellian motives	6
0.2.2 Aboutness and propositional constituency	9
0.2.3 ‘Aboutness’ by description	12
0.2.4 Acquaintance and RUSSELL’S PRINCIPLE	14
0.2.5 Transparency and the shifting scope of Russellian acquaintance	18
0.2.6 Summary	22
0.3 Aboutness: post-Russellian updates	24
0.3.1 Reference	25
0.3.2 Singular thought	35
0.4 Strategy	39
1 Singular thoughts and <i>de re</i> attitude reports	41
1.1 The argument from attitude reports	44
1.2 Contextualism and singular thought	51
1.3 Blueprint for a contextualist semantics	58
1.3.1 Saying what others think	58
1.3.2 Cumming’s (2007) puzzle	66
1.3.3 Tricky cases	69
1.3.4 Objections	71
1.4 Correlation without co-valuation	74

1.5	Barriers to rejecting co-valuation	77
1.6	Conclusion	83
2	Massive duplication and egocentric semantics	85
2.1	Anchoring	86
2.2	Context and compositional semantics	91
2.2.1	Kaplanian semantics	94
2.2.2	Complaints with the Kaplanian framework	96
2.2.3	Summary	98
2.3	Truth <i>at</i>	99
2.3.1	Truth at a context of use	101
2.3.2	Variable assignments	106
2.3.3	Summary	108
2.4	i-Reference	111
2.5	Egocentric	114
2.6	Semantic value and semantic content	117
2.7	Other-representation	129
2.8	Conclusion	132
3	Evans (1982) on singular representation	133
3.1	Evans's project	134
3.1.1	Ideas	137
3.1.2	The Generality Constraint	137
3.2	Discrimination and the fundamental level of thought	139
3.3	The photograph model of aboutness	143
3.4	Information-based thought	146
3.4.1	Information-based Ideas	147
3.4.2	Case study: demonstrative identification	149
3.4.3	Well-groundedness	152
3.5	The Russellian status of information-based thoughts	153
3.6	Objections	155

3.6.1	The overdemandingness of RUSSELL'S PRINCIPLE	155
3.6.2	The situation-insensitivity of RUSSELL'S PRINCIPLE	157
3.6.3	Transparency and understanding	162
3.7	Conclusion	171
4	RUSSELL'S PRINCIPLE revived	173
4.1	Knowing which	177
4.2	Precisifying RUSSELL'S PRINCIPLE	181
4.2.1	Singular representations	181
4.2.2	Aboutness and safety	187
4.2.3	RUSSELL'S PRINCIPLE precisified	190
4.3	Dickie's (2015) account	200
4.3.1	Bodies of beliefs	200
4.3.2	Cognitive focus	201
4.3.3	Aboutness and justification	206
4.3.4	Problems	208
4.3.5	Intermediate conclusion	215
4.4	Implications	215
4.4.1	TRANSPARENCY	217
4.4.2	Diachronic shifts in aboutness	221
	Conclusion	223
	Appendix: The Many	225
i	The Problem(s) of the Many	226
ii	Intentional problems of the many	229
iii	A metaphysical solution	230
iv	A better metaphysical solution?	234
	<i>Bibliography</i>	239

Singular Representation

James Openshaw. Pembroke College, Oxford.

A thesis submitted for the degree of Doctor of Philosophy, Trinity term 2018.

Abstract

This thesis is a study of aboutness. It defends the claim that we have *singular* thoughts about ordinary objects and argues that an essential part of how we do so is by maintaining singular *representations*. This proposal allows us to avoid traditional, unsatisfying conceptions of the scope of singular thought while restoring the sense in which such thought is a distinctively epistemic achievement. Reconnecting the study of aboutness with epistemology promises to alleviate the sense of directionlessness in the contemporary literature, offering a firmer grip on the phenomenon along with new, systematic resources for its investigation.

Chapters 1–2 explore the effects of contextualist machinery on orthodox views about singular thought. It is widely thought that if there is to be a plausible connection between the truth of a *de re* attitude report about a subject and that subject's possession of a singular thought, then there can be no *acquaintance* requirement(s) on singular thought. **Chapter 1** shows that this view rests on a faulty picture of how we talk about attitudes. Indeed, the truth of a *de re* attitude report cannot be taken to track the singular/non-singular distinction without collapsing it. A new, contextualist picture is needed. That there must be a distinction between singular and non-singular intentionality is emphasized in **Chapter 2**, where a key explanatory role for singular thought—brought out by a thought experiment due to Strawson—is examined. I show that the role does not call for any distinctive kind of mental content.

Once we abandon the two widespread views questioned in Chapters 1–2, our grip on the phenomenon of singular aboutness is loosened: it is not constitutively tied to the kinds of attitude-reporting data or mental content by which it is often assumed to be revealed. Where are we to look for insight? What makes something the object of a singular thought?

According to Russell, it is a datum of intuition that singular thought involves a kind of knowledge; a theory of aboutness will precisify the intuitive notion of 'knowing which thing one is thinking about' in order to capture this demand in a philosophically revealing way. If Russell is right, teasing out this connection to knowledge will allow us to see what it takes for a particular thing to be the immediate subject matter of thought. **Chapter 3** discusses Evans's theory of this kind. **Chapter 4** examines recent work by Dickie. While serious concerns emerge in each case, insights recovered are used to precisify Russell's requirement, leading to a novel picture of singular representation and the epistemic character of this achievement.

While the chapters follow a narrative, providing an extended rationale for the proposal in Chapter 4, each may be read in isolation by those familiar with the philosophical issues. For those who are not, the Introduction provides sufficient background.

Thesis word count: 74,974

Acknowledgements

I owe a substantial debt to each of my supervisors, John Hawthorne and Tim Williamson. John has been a vital source of encouragement since the beginning of this project. His thoughtful contributions and imaginative approach to philosophy have been invaluable. Tim's attention has improved this thesis dramatically since our first meeting. Without his supervision a wealth of details would have remained imprecise, and the big picture even less in focus. I am deeply grateful to John and Tim for their guidance and generosity.

For discussions throughout this project I want to thank Jon Banks, Jacob Berkson, Laurenz Casser, Luke Davies, Imogen Dickie, Cian Dorr, Paul Egré, Jonathan Erhardt, Jade Fletcher, Rachel Fraser, Peter Fritz, Mirela Fuš, Michael Glanzberg, Simon Goldstein, Robin Jeshion, Alex Kaiserman, Hans Kamp, James Kirkpatrick, Max Kölbel, Matt Leonard, Annina Loets, David Mathers, Beau Mount, Peter Pagin, Christopher Peacocke, Brian Rabern, Alex Roberts, Jeff Russell, Sarah Lane Smith, Isidora Stojanovic, Trevor Teitel, and Juhani Yli-Vakkuri. Oxford's graduate community quite generally has been a happy place to do philosophy these past few years, in seminars, reading groups, and corridors. Special thanks are due to David Chalmers, Bill Child, Martin Davies, and Rachel Goodman, who read and commented on my work in various settings, and to Michael Price and Andy Yu for innumerable conversations about all sorts of things and for taking the time to read parts of this thesis.

I am grateful to those who attended talks in Barcelona, Kansas City, Oviedo, Oxford, Stockholm, and Warsaw for their helpful questions, and to an anonymous referee for *Mind & Language* whose suggestions improved the material in Chapter 1.

I am also indebted to my early teachers at Leeds, who first got me excited about philosophy and then gave me the confidence to pursue it further. Thanks, in particular, to John Divers, Andrew McGonigal, and Robbie Williams.

I am very grateful to the University of Southern California, who hosted me for a rich and enjoyable Spring semester, and to the Arts & Humanities Research Council, Pembroke College, the Philosophical Fellowship Fund, the Royal Institute of Philosophy, and the Vice-Chancellor's Fund at Oxford for their essential financial support at various intervals throughout the course of this research.

Thanks to friends not already mentioned, for making life much easier to live.

Finally, I owe a profound thanks to all my family. This is as much a product of your love and support as it is of my own work.

To the memory of my grandfather, Harold

Everyone by nature desires knowledge. [...] experience is knowledge of particulars, [...] and actions and the effects produced are all concerned with the particular. [So if one] does not know the particular, one will often fail [...]; for it is the particular that must be treated.

— Aristotle, *Metaphysics* (Book I, §980a–981a; modernized).

...the object of the thought [is] a certain complex [...] in which Mont Blanc is itself a component part. If we do not admit this, we get the conclusion that we know nothing at all about Mont Blanc.

— Bertrand Russell (1904/80: 169).

Introduction

Mind is no frictionless spinning in the void. It is capable of being *about* the world, of turning itself to a particular thing and making that thing its object. This presence of particular things in the world before the mind, in our thought or awareness, is one of the most fundamental features of our mental lives. It is also one of the most elusive. What is aboutness? What *makes* something an object of thought?

If it is possible to make progress on these vertiginous questions, a natural place to begin is with simple, subject-predicate thoughts of the form α is F . That thoughts concerning the “possession of a quality by some particular thing are the simplest imaginable”—the very building blocks of aboutness—is a familiar idea in the theory of mind (Russell 1918/2009: 26). Perceptually attending to Leonard the cat, Alice may make a judgment she would express by saying ‘He is hungry’. Her thought is in an intuitive sense about Leonard.

According to philosophical orthodoxy, the kind of aboutness Alice achieves with respect to Leonard in this scenario is to be contrasted with that involved in a thought she might direct towards *the first cat to have been born at sea*, whichever cat that might have been. Here the most she is able to do is form a thought *satisfied* by some cat—namely, that one born at sea before any other—and which would be perfectly thinkable had that cat never existed. According to this orthodoxy, Alice’s thought in the first case is about a particular cat in a *singular* way; her thought in the second case is, if she is lucky (so that the description is uniquely satisfied), ‘about’ a cat in a *descriptive* way.

This thesis is a study of (singular) aboutness. Contemporary theorizing about this phenomenon stands in need of reconceptualization. Only if we do so correctly are we able

to give an adequate account of the mind's relation to ordinary objects like Leonard the cat. Much of the thesis presses this need for reconceptualization. On the positive picture I defend in Chapter 4, aboutness involves *singular representation*. Alice is in a position to have a singular thought which is about Leonard only by virtue of having formed a distinctive kind of representational vehicle which 'locks on' to him, a vehicle based on some epistemically rewarding link(s) which provides a means for reliably forming a relevant range of true beliefs concerning Leonard. This account breathes new life into a venerable idea which has prematurely fallen into disfavour: that aboutness is a distinctively epistemic achievement. Reconnecting aboutness with knowledge offers a sense of direction to the inquiry and a firmer grip on the phenomenon itself, along with new methods for its investigation.

Before we get to the proposal ventured here, or to any contemporary contribution, we must focus in on the explanandum. In §0.2 I provide this focus through the lens of the phenomenon's life in early analytic philosophy, with §0.3 providing updates of the Russellian themes we recover. First, though, we must address some preliminary matters.

0.1 Preliminaries

We are concerned with aboutness. But aboutness seems a heterogeneous thing. The sentence

- (1) A U.K. prime minister once visited Myanmar.

may be said to be about U.K. prime ministers, about David Cameron (the unique satisfier of that description), about Myanmar, about the event of Cameron's visiting Myanmar, or about international relations between the U.K. and Southeast Asia, to name only a few candidates. Ryle (1933) pointed out long ago that, at the level of the sentence or the conversation, a shift

of interest, emphasis, or grammatical form may lead us to revise our response to a question of a sentence's subject matter. If you thought it was obvious that (1) is about U.K. prime ministers or about David Cameron, you probably think the following sentence is about Myanmar.

- (2) Myanmar was once visited by a U.K. prime minister.

Even this exercise suffices to show that the phenomenon of aboutness is sensitive to the distinction between active and passive form. Similarly, consider whether either of (3) or (4) are about Rudy the raven.¹

- (3) All ravens are black.
(4) No non-black thing is a raven.

It is attractive to answer 'Yes' in the case of (3), since Rudy is in some sense part of what explains (3)'s truth. But if, as also seems plausible, one goes on to answer 'No' with respect to (4), the notion of aboutness seems sapped of obvious semantic interest. For (1)–(2) and (3)–(4) are truth-conditionally equivalent pairs.²

Similar things may be said at the level of thought. Unfortunately, Ryle ended his short paper by remarking, "*Thinking and Knowing about*. I volunteer nothing about these 'abouts'" (1933: 88). The issues he raised make it difficult enough to see on what grounds one could claim, for example, that Alice's thought about Leonard the cat is about Leonard and only about Leonard in any obvious, pre-theoretic sense of aboutness.

¹ This example, drawn from Hempel's (1945) 'paradox of confirmation', is due to Yablo (2014: 19–22).

² There are also nonintentional uses of 'about', as in 'What's the fuss about?', which, at least on one reading, asks about the *cause* of the fuss in question (and on another perhaps about its aim or purpose).

None of this, however, means that there are no interesting, isolable intentional phenomena in the vicinity. Indeed, one of Ryle's disambiguations of 'about' has particular clarity: 'aboutness (r)'. On this disambiguation, a sentence is about a thing by virtue of containing an expression whose significance is bound up with its successfully *referring* to a particular thing (1933: 87). Strawson (1950) observed that the task "of forestalling the question, 'What (who, which one) are you talking about?' [...] is the referring [...] task" (335). Among the expressions which compose to form truth-evaluable sentences about particular things, there are those which refer. A proper understanding of the category of *referring*—or *singular*—terms thus promises direct insight into aboutness in language.³ Such a term,

when it occurs in a [sentence], is always, at least according to one of the possible ways of analysis [...], the subject that the [sentence] is about (Russell 1903: §46).

More will be said about singular terms in later sections. In the meantime, two questions remain outstanding. Might there be internal semantic distinctions within the superficial category of singular terms? And what can this species of aboutness in language tell us about *the mind*?

First, both (2) and

- (5) The country which declared its status as an independent republic on January 4th 1948 was once visited by a U.K. prime minister.

³ The term 'singular' is unfortunate. The natural contrast being with 'plural', it suggests that singular noun phrases cannot refer to pluralities (e.g. 'those marbles', 'Simon and Garfunkel', etc.). 'Particular' might have been better, suggesting a contrast with 'general'. While talk of 'particular-propositions/-thoughts' has some precedent (see Russell 1913/84: 130; Evans 1982: 109, n. 32), I yield to the standard nomenclature.

feature a term whose function in the sentence appears to be that of providing an answer to Strawson's question. As we will see in §§0.2–3, however, if philosophical orthodoxy is right, this similarity hides deep structural differences.

Second, that there are thought-vehicles which are somehow the cognitive analogues of sentences containing singular terms is not controversial. But how these thoughts should be characterised is most certainly controversial. The basis for a clear characterisation of *singular thought* will be constructed throughout the course of this thesis. §§0.2–3 lay the groundwork for this characterisation by introducing key features of its philosophical ancestry.

0.2 **Aboutness: Russellian themes**

The vertiginous questions with which we began are not new. This section sets out the semantic and epistemological features distinctive of singular aboutness within the context of their historical emergence.

There are moments in Plato's *Theaetetus* which suggest that he is concerned with how our knowledge of truths is founded upon a knowledge *of* the particular things which those truths are about.⁴ And there are moments in Medieval philosophy which suggest a scepticism as to whether this knowledge *of* particular things—a knowledge required in order to *name* a thing—could be achieved.⁵ The clearest origins of the contemporary discussion of singular thought *per se*, however, is the work of Russell.

This section introduces our explanandum by recovering a package of Russellian themes. §0.2.1 explores the forces behind the development of Russell's views on aboutness, views

⁴ The passage in question is 201d8–202d7. See Bostock (1988) and Ryle (1990) for discussion.

⁵ See Bauder (2016) and King (2015).

characterised in §0.2.2, with §0.2.3–5 considering the distinctive requirements imposed on aboutness. §0.2.6 provides a thematic summary.

0.2.1 Russellian motives

Our pleasure in anyone who in some way resembles those we
love should warn us that no love is in its essence individual.
— Bradley (1930: §18).

Moore’s and Russell’s early work on the nature of judgment, knowledge, propositions, and truth was conceived as an attack on degenerate forms of the claim that the mind cannot concern itself with mind-independent phenomena. Their way of prescinding from this doctrine (Moore (1899); Russell (1903)), relatives of which persisted in pockets of 19th century Idealism, played an important role in the emergence of the themes at the heart of our explanandum.⁶

Russell (1904b) identifies the following five ‘theories of knowledge’.

- i. It may be urged that the knowledge does not differ from that which is known, i.e. there is no *object* of knowledge.⁷
- ii. We may admit the distinction [...], but hold that the latter is merely immanent.
- iii. We may hold that the object is immanent when false, transcendent when true.

⁶ As Russell (1959) recalled: “It was towards the end of 1898 that Moore and I rebelled against both Kant and Hegel. Moore led the way, but I followed closely in his footsteps” (1959: 42). “I felt it, in fact, as a great liberation, as if I had escaped from a hot-house onto a wind-swept headland” (48).

⁷ By ‘the object of knowledge/judgment’, Russell means the propositional content of one’s mental state/act.

- iv. We may hold that when a judgment is false there is no object, but when true, there is a transcendent object.
- v. We may hold that the object is always transcendent (Russell 1904b: 63).

The distinction between immanence and transcendence here is equivalent to—and no more precise than—that between mind-dependence and mind-independence. Russell’s *bête noire*, which he (1904b) calls “Idealism”, “oscillates between (i) and (ii)” (64). I will call this thesis *psychologism*.

PSYCHOLOGISM: The objects of judgment and knowledge are constituted by the subject’s act of judging (or state of knowing).

“Our whole power of acquiring knowledge”, Russell says, “is bound up with this distinction” between the *act* and *object* of perception and judgment (1912: 42). By the lights of Moore and Russell, an attraction to psychologistic claims was deeply embedded within Idealism. To the extent that they are unattractive, the whole project must be overturned.

It deserves clarification that Moore and Russell were hardly going against the tide in their rebellion on this matter. Thomas Case (whose *Physical Realism* (1888) was published at the height of Idealism) and John Cook Wilson had earlier swung at least Oxford’s general consensus in the direction of the views Moore and Russell were endorsing.⁸ Moreover, most *Idealists* were at pains to reject PSYCHOLOGISM, a claim associated more with British Empiricism than Idealism.⁹ T. H. Green, one of the more influential British Absolute Idealists, considered the

⁸ Though Cook Wilson published little, his (1926) posthumous collection insists that “the object is distinct from our act of knowing it, [to deny this] would necessarily result [in] a mere subjective idealism. Reality would become an absolutely unknowable ‘Thing in Itself’, [...] an hypothesis that we could not possibly justify” (797).

⁹ Of the few explicit endorsements of PSYCHOLOGISM, most prominent are Ferrier (1854) and Royce (1885).

object of knowledge to be “independent of our mind *qua* individual mind”, notwithstanding its being “constituted by our mind *qua* a participant in the eternal consciousness” (Passmore 1957: 57). He would have agreed with Russell when he wrote:

I do not think that, when an object is known to me, there is in my mind something which may be called an ‘idea’ of the object [...]. The [false] assumption is that, *if anything is immediately present to me, that thing must be part of my mind* (1913/84: 22).

The targets of the ‘anti-Idealist’ arguments Moore (1903) and Russell (1912) gave were of the broadly Berkeleian variety. The way Russell would often recall it, however, it was the work of Bradley against which he and Moore were rebelling.¹⁰ While the claim that Bradley endorsed PSYCHOLOGISM may involve some projection, his system certainly skirted with no less alarming conclusions which Moore and Russell sought to avoid.

PARTIALISM: Truth and falsehood are not absolute properties of ordinary judgments (or their objects), but apply only in degrees (Bradley 1893: 320–1).

GENERALISM: Thought cannot concern itself with particular things or matters of fact.¹¹

Moore and Russell each set out their opposed ‘theory of knowledge’ according to which the world is formed of *concepts* (and, for Russell, *things*), both the constituents of propositions

¹⁰ “Bradley argued that everything common sense believes in is mere appearance [...]. With a sense of escaping from prison, we allowed ourselves to think that grass is green, that the sun and stars would exist if no one was aware of them” (Russell 1961/2009: 15–6).

¹¹ “Ideas [i.e. the constituents of judgments] are universal [...]. The fact *given* us is singular [...] but our terms are all general [...]. [A] judgment will be true of any case of a certain sort; but it cannot be true of the reality; for that is a fact and not a sort (Bradley 1883: 49–50).

and the potential objects of thought, which are “indifferent to their nature whether anyone thinks them or not” (Moore 1899: 180–2).¹² For Moore and Russell, this overhaul was essential to securing the mind’s capacity to concern itself with mind-independent phenomena; to know reality as it is in itself, unmediated and undistorted. Concerning both PSYCHOLOGISM and GENERALISM, the response of Moore and Russell is to collapse the “veil between us and outside things” (Russell 1910/51: 160). In judging, the subject is unmediatedly related to denizens of mind-independent reality: the object of judgment being a complex of which these terms are the constituents. Concerning PARTIALISM, the object of judgment is now simply a complex which exists. For its truth it need not ‘correspond to’ or ‘cohere with’ any further fact.¹³ And reality, being atomic, is capable of compositional analysis. The metaphysics underpinning Bradley’s rationale for PARTIALISM is undermined by fiat: “the admission of many terms destroys monism. [...] it seems undeniable that [...] no proposition contains less than two constituents” (Russell 1903: §47).¹⁴

0.2.2 Aboutness and propositional constituency

A constant theme in Russell’s work is that thinking *about* a thing involves its being a constituent of the immediate object of one’s thought.¹⁵ Given his anti-psychologistic ambitions, it is clear

¹² For Russell’s concurrence, see (1903: xlv–xlvi). Russell (1904b: 63) thus places himself in category (v) above.

¹³ Since propositions are also needed to witness falsehoods, the distinction between the true and the false “cannot be further defined, but must be immediately recognized” (Moore 1899: 180). Russell (1904b) complains that this “*seems* to leave our preference for truth a mere unaccountable prejudice” (75), but goes on to explain away this appearance. He soon took a different approach, however. (See n. 15, below.)

¹⁴ The denial of PSYCHOLOGISM alone would not render PARTIALISM false. It is this *atomism* of reality and meaning which is needed to secure the absoluteness of truth and falsehood.

¹⁵ Russell later (circa October 1909) dispensed with propositions in favour of his *multiple relations* theory. (That view falls under category (iii) or (iv), above, at best—those in which Russell (1904b: 63) places Meinong.) Nonetheless, the occurrence of a term in a complex in which a subject is related by a relation such as judging has equal epistemological significance. I will talk of ‘propositional constituency’ throughout for convenience.

why Russell should imbue such constituency with epistemological significance. If it was epistemologically significant that the immediate object of judgment should be a complex with mind-independent things as constituents, should there not be similar significance attached to each particular term's being such a constituent? Russell's answer here is resolutely affirmative.

RUSSELL'S PRINCIPLE: We cannot make a judgment or supposition without knowing what it is that we are making a judgment or supposition about (1910/51: 160).¹⁶

This "obvious" (1913/84: 110), "fundamental epistemological principle" (1910/51: 159), "evident as soon as it is understood" (1910/51: 160), entails that a term's occurring in a complex to which a subject is related by an intentional relation requires that she 'know what it is'. If the objects of thought are complexes whose significance percolates up from their constituents, it is compelling to suppose that having a thought in *some* sense involves *knowledge of* that complex's constituents. All cognitive relations to truth-evaluable objects would then presuppose a subject's knowledge of its constituents.

Russell's principle is compatible with there being a variety of ways in which a subject might achieve such discriminating knowledge. But this sort of knowledge cannot itself just be further propositional knowledge. Instead, Russell supposes,

If I am to know or think that Theaetetus is sitting, or if I even ask whether Theaetetus is sitting, I must, it seems, know my *Theaetetus*-piece and know my *sitting*-piece in a sense of 'know' quite unlike that in which what I know is the answer to a

¹⁶ We will see in §0.2.3 that this principle is tied to, and predated by, its acquaintance-theoretic characterization.

question. [...] I must know Theaetetus in the sense of the French verb ‘connaître’ as distinct from the French verb ‘savoir’ (Ryle 1990: 26).¹⁷

Russell’s claim, moreover, is that this non-propositional knowledge has priority over propositional knowledge:

...propositions concerning the particular are not necessary to be known in order that you may know what the particular itself is. It is rather the other way around (1918/2009: 32–3).

What does this knowledge (*connaître*) come to? It is important that it not be hostage to intuitive verdicts about the application of the ordinary language locution ‘knowing which’ (or ‘knowing who’, *inter alia*). ‘Knowing what’, as it appears in RUSSELL’S PRINCIPLE, is a term of art. This is important because the ordinary notion seems shot through with context-sensitivity (Quine 1977: 10; Boer and Lycan 1986). If RUSSELL’S PRINCIPLE is to be of serious theoretical interest—if it is to be anything like a ‘fundamental epistemological principle’—it must be characterizable independently of intuitive verdicts about the felicity of an ordinary ‘knows which’ report.

For Russell, this distinctive species of knowledge inherits the immediacy of the object of judgment to the act of judgment. If a complex rather than some *idea* is to be the immediate object of judgment—something laid out before the mind—a complex-*constituent* must no less

¹⁷ Proops (2011: 169, n. 21) attributes the early 20th Century interest in this distinctive kind of knowledge to John Grote (1865), who called it ‘knowledge of acquaintance’ (contrasting it with ‘knowledge of truths’), and subsequently William James (1890). The use of the verb contrasts ‘*kennen*’ or ‘*connaître*’ versus ‘*wissen*’ or ‘*savoir*’ appears in Grote (1865: 60), James (1890: 588), and Russell (1912).

be an immediate object of one's mind. This primitive, non-propositional knowledge of things is what Russell calls being *acquainted* with a thing.¹⁸

§0.2.3 introduces a distinctive kind of 'aboutness' which does not fall within the scope of RUSSELL'S PRINCIPLE. This will be a second-rate sort of aboutness. For Russell, it is aboutness proper which puts us into unmediated contact with the objects of thought, and which underpins our global capacity to obtain knowledge of any sort whatsoever.¹⁹

...the object of the thought [...] is, to my mind, a certain complex [...] in which Mont Blanc is itself a component part. If we do not admit this, then we get the conclusion that *we know nothing at all about Mont Blanc* (Russell 1904/80: 169; emphasis added).

0.2.3 'Aboutness' by description

In the early phase of Russell's thought, it seems that intentionality *per se* is aboutness—a matter of being unmediatedly related to reality. Even in *The Principles of Mathematics* (1903), however, Russell recognises a second-class kind of 'aboutness', which does not suffice to put 'before the mind' of the thinker the *terms* which her thought may, in a pre-theoretic sense, be 'about'.

Unlike Moore (1899), Russell draws a distinction among propositional constituents: *things* and *concepts*. The former are indicated by proper names, while the latter are indicated by all other significant words (1903: §48).²⁰ After a mention of Bradley's apparent PSYCHOLOGISM,

¹⁸ The 'knowledge of' locution is now uncommon. Kaplan (1989b), however, remarks that he is "not entirely unsympathetic to" the view that "*knowledge of*" a thing is necessary for having a singular thought about it (607).

¹⁹ Contemporary endorsements of this sort of priority claim can be found in Bach (2010), Burge (1977; 2007), Dickie (2010), Evans (1982), and Goodman (2013).

²⁰ Indication, in Russell (1903), is the relation between expressions in language and the terms which they contribute to the proposition expressed. *Proper names*, for Russell (1903), range from 'Plato' and 'this' to 'I'.

Russell reiterates his thesis that terms are not further *representantia* (1903: §51). However, he immediately qualifies this with the claim that certain expressions *do* indicate representational intermediaries:

...such concepts [constituents of propositions] as *a man* [...] have the property which I call *denoting*. [...] when *a man* occurs in a proposition [...], the proposition is not about the concept *a man* [but] some actual biped denoted by the concept (1903: §51).

Words like ‘a’, ‘every’, and ‘some’ are said to make a different kind of semantic contribution to the propositions they serve to express. Russell wants to insist that a proposition containing a concept which denotes is “not *about* the concept, but about a term [or complex of terms] connected in a certain peculiar way with the concept” (1903: §56). While expressions like ‘warm’ and ‘green’ indicate concepts, expressions like ‘man’ indicate *class-concepts*. A denoting *phrase* consists of a word indicating a class-concept preceded by a determiner—‘all’, ‘every’, ‘any’, ‘the’, etc. Despite this orthographic structure, denoting phrases are linguistic atoms (1903: §72). And in each case, the same property of denoting is concerned.²¹

Of the many natural questions which arise, what happens when the relevant class is empty? Judgments such as ‘All chimaeras are animals’ in fact fail to be *about* anything at all, for Russell claims that there *is no* null class (1903: §73). Even if there were, it would offer no ‘term or complex of terms’ for the judgment to be about, in his intended sense (1903: §65). While not all judgments are *about* some term(s), then, it remains that all judgments have objects—propositions—which are unified complexes of terms and concepts, as per Russell’s adherence

²¹ What semantically distinguishes these denoting phrases is the object denoted by the proposition expressed, whether that be the class of all men (as in ‘All men’), some particular man (as in ‘Some man’), etc. (1903: §61).

to the theory of knowledge in (v) (§0.2.1). The picture is obscure, but it appears to involve the claim that denoting is not a relation.²²

We will see in §0.2.4 that Russell (1905) revises his story about denoting. In even the earliest stages of Russell’s work, however, he emphasises a kind of ‘aboutness’ *by description* which does not put before the mind of the thinker the terms which her thought may, in the intuitive sense, be about.²³

0.2.4 Acquaintance and RUSSELL’S PRINCIPLE

If the attack on PSYCHOLOGISM was primarily concerned with assigning objects of judgment partly constituted by *things* themselves, RUSSELL’S PRINCIPLE suggests that it is ‘knowing what’ which has the burden of explaining how this aboutness is accomplished.

While Russell followed Moore (1899: 183) in claiming that perception is a cognitive act, “the object of [which] is an existential proposition” (1904b: 34),

it seems undeniable that there is also mere awareness, in which the object is not a proposition; for unless we were aware *what redness is*, we could not know that redness exists (1904b: 34; emphasis added).²⁴

²² “...a concept may denote although it does not denote anything” (Russell 1903: §73).

²³ Russell’s revisions to the story of denoting in his (1905) seem to be motivated more by semantic dissatisfaction than ontological dissatisfaction (as often suggested). For one thing, there is something much too close to Frege’s concept *horse* problem for Russell to be comfortable, given his attack on Frege (1903: §§481–3). Specifically: there can be no propositions *about* denoting concepts, for they would thereby instead be about their *denotations*. If we infer that we are acquainted with denoting concepts, for instance when we judge that some man is mortal, it would seem that some acquaintances are unnameable. Furthermore, what could it be to be acquainted with the term *some man*, which denotes not any particular man, nor “each separate man, but a kind of combination of all men” (1903: §62)?

²⁴ The term ‘acquaintance’ appears at (1904b: 62).

Before one is in a position to bear an intentional relation to a complex containing a term, one must be ‘aware of what’ or ‘know what’ that thing is. We saw that awareness or knowledge in this sense *of* an object like Mont Blanc must be a basic intentional state (one in the absence of which thought would have no subject matter). Russell’s *acquaintance* is the necessary condition for this knowledge. “Acquaintance [...] constitutes the mind’s power of knowing things” (Russell 1912: 42).²⁵

The most detailed discussion of acquaintance itself appears in Russell’s abandoned 1913 *Theory of Knowledge* manuscript, where he introduces the notion as follows:

At any given moment, there are certain things of which a man is ‘aware’, certain things which are ‘before his mind’. [...] these are the objects [of] ‘experience’ (1913/84: 7).

...experiencing must be a relation, in which one term is the object experienced, while the other term is that which experiences. [...] it will be better to employ a less neutral word; we shall employ synonymously the two words ‘acquaintance’ and ‘awareness’ (1913/84: 35).

While acquaintance remains unanalysed throughout Russell’s work, he regularly suggests that it does not come in degrees (1914/1993: 151), that it brings ‘perfect and complete’ knowledge of the thing itself such that “no further knowledge of it itself is even theoretically possible” (1912: 47), and that it has priority over knowledge of truths (1912: 46; 144).²⁶ Beyond these scattered remarks, Russell has us use our imagination.

²⁵ “Knowledge *of terms* is what we have called ‘acquaintance’” (1913/84: 105; emphasis added).

²⁶ We will see in §0.2.5 that many of these features of acquaintance are a consequence of his response to the ‘George IV’ argument (1905).

Substituting acquaintance into RUSSELL’S PRINCIPLE gives us the following advanced claim:

RP-ACQUAINTANCE: When we understand, those objects with which we must be acquainted when we understand, and those only, are object-constituents [...] of the understanding-complex (1913/84: 117).²⁷

RP-ACQUAINTANCE provides us with insights into the nature of understanding. By Russell’s lights, in order to understand the thought expressed by ‘Leonard is hungry’ one must be acquainted with Leonard and with the universal *being hungry*.²⁸

In fact, this last claim requires an important qualification. The condition that one be acquainted with NN in order to understand the thought expressed by ‘NN is hungry’ is restricted to instances in which NN is a *logically proper name*. Noun phrases which contribute their object to the propositions expressed by sentences in which they appear are logically proper names. And the distinctive semantic relation which obtains between a logically proper name and the entity which it contributes to the proposition expressed by a sentence in which it appears is *reference*. In sharp contrast, Russell takes it that one can perfectly well understand the thought expressed by ‘The author of Waverley is sleeping’ without being acquainted with said author.

²⁷ The first appearance of RUSSELL’S PRINCIPLE in this acquaintance-theoretic guise is the 1903 manuscript ‘Points about Denoting’, where he writes: “It is necessary, for the understanding of a proposition, to have *acquaintance* with the *meaning* of every constituent of the meaning, and of the whole; it is not necessary to have acquaintance with such constituents of the denotation as are not constituents of the meaning” (1994: 307).

Russell may have endorsed RP-ACQUAINTANCE even earlier, taking it to be an uninteresting claim given the ubiquity of *terms* (see Hylton (2015: 27)); for “every awareness must be awareness *of* something [...]. [Not] that the object must *exist*; [...] there [must simply] *be* such an object” (1904b: 66).

²⁸ According to his (1913/84), one would also need to be acquainted with the general subject-predicate form ‘something has some property’. Even this may not suffice, however. Russell’s explanation of the unity of thought in the case of falsehood is that what unifies the constituents into one complex, not being the instantiation of the property by the object, must be the thinker’s act of ‘mental synthesis’.

And if there had been no unique such author, this, too, would have been no barrier to one's understanding, nor to the significance of the sentence. The recognition of these features

forces us to analyse descriptive phrases [...], and to say that the objects denoted by such phrases are not constituents of judgments in [the expression of] which such phrases occur [...]. [...] this is why, in order to understand such propositions, we need acquaintance with the constituents of the description, but do not need acquaintance with its denotation (1910/51: 166–7; emphasis added).

The kind of 'aboutness' we considered in §0.2.3 is characterized by its object failing to be something which must exist, or with which a thinker must be acquainted, if she is to have a thought which is 'about' it. The corollary of this is that such noun phrases as 'the U.K. prime minister who visited Myanmar' are to be analysed as 'incomplete' expressions, having no meaning in isolation.

Russell's (1905) *theory of descriptions* tells us that what is said by someone who uses the sentence 'The U.K. prime minister who visited Myanmar regrets having called for an EU referendum' is that exactly one proposition of the form ' x is a U.K. prime minister who visited Myanmar and x regrets having called for an EU referendum' is true. The systematic contribution of incomplete terms to the propositions expressed by sentences in which they occur is not one of supplying the sort of constituent the sentence could be said to be about, but of providing a means by which the sentence can express a proposition whose truth depends on a range of *other* propositions, themselves expressible only through sentences whose expressions are complete. In general, sentences containing definite descriptions, of the form 'The F is G ', are truth-conditionally equivalent to sentences of the form 'There is exactly one F and it is G '.²⁹

²⁹ "The only thing that distinguishes 'the so-and-so' from 'a so-and-so' is the implication of uniqueness" (Russell 1919: 176). In first-order logic, the form of such sentences can be expressed: $\exists x (Fx \ \& \ \forall y (Fy \supset y = x) \ \& \ Gx)$.

0.2.5 Transparency and the shifting scope of Russellian acquaintance

He was disturbed by the fact that a dog at three-fourteen
(seen in profile) should have the same name as the dog at
three-fifteen (seen from the front).
— Borges (1962: 114–5).

Though we may not need to be acquainted with Scott to have thoughts about ‘the author of *Waverley*’, so to speak, are we at least often able to have thoughts about individuals like Scott of the sort expressible using a logically proper name referring to him? By 1905 Russell thought not. His rationale for severely limiting the scope of acquaintance was as much semantic as epistemological, despite how it is often presented.³⁰ Russell’s relegation of physical objects like Mont Blanc to the realm of that which is known only ‘by description’ emerges at the close of ‘On Denoting’ (1905). There, Russell presents the power of his theory of descriptions by exploring its dissolution of three puzzles. And in the context of certain other Russellian theses, the first and third of those puzzles make demands on the possible relata of acquaintance.

The first puzzle concerns the meaningfulness and potential truth of negative existential sentences such as ‘The golden mountain does not exist’. The puzzle is that, at face value, such sentences require there to be something of which we can say that it does not exist. The solution, Russell (1905) suggests, is that ‘The golden mountain’ is a denoting expression; “‘existence’ is only applicable to descriptions” (1914/51: 175). In general, if *e* is an expression for which

= *x*) & *Gx*). Of course, contemporary Russellians are unlikely to claim that this is somehow the logical form of ‘The *F* is *G*’. Rather, ‘The’ expresses a binary, higher-order quantifier (see Hawthorne and Manley 2012: 183).

³⁰ See Geach (1957: 46) and Goodman (2013: 132–4).

someone who understands it could come to so much as entertain that ‘*e* does not exist’ expresses a truth, *e* is a denoting term, not a logically proper name. In consequence:

LPN 1: A logically proper name must refer to a thing the existence of which cannot be doubted by someone who understands the name.

The third puzzle appears to concern substitution in intensional contexts. George IV, Russell imagines, may wish to know whether Scott was the author of *Waverley*. Given the following principle,

If *a* is identical with *b*, whatever is true of the one is true of the other, and either may be substituted for the other in any proposition without altering the truth or falsehood of that proposition (1905: 485),

George IV wishes to know whether Scott is Scott. But George IV does not wish to know *that*...³¹

While the relevant substitution thesis which Russell takes as given in this argument is often construed as a linguistic thesis (Linsky 1966; Soames 2003), it is in fact a *propositional* thesis (see Proops (2011)). Russell’s claim is that the substitution of identical propositional constituents preserves truth-value.³² His solution is that where there is significance and truth in a purported identity sentence of the form ‘*a* = *b*’, this must always be because one of the expressions flanking the identity sign is a denoting expression, and so does not inherit its significance by virtue of contributing some propositional constituent but by otherwise—i.e. in

³¹ A less taxing solution than that which follows to these kinds of substitution puzzles is given in Chapter 1.

³² Not only does this explain the fact that Russell (1905) takes the substitution thesis to be unworthy of doubt, it provides the only sensible reading of the following: “The puzzle about George IV’s curiosity is now seen to have a very simple solution. The proposition ‘Scott was the author of *Waverley*’ [...] does not contain any constituent ‘the author of *Waverley*’ for which we could substitute ‘Scott’” (1905: 488–9) (Proops 2011: 160).

the way shown by the theory of descriptions (§0.2.4)—playing a systematic role in the determination of the proposition expressed. There is then no question of substituting Scott for the propositional contribution of ‘the author of *Waverley*’, for *there is no such thing* in the latter case. The result is that ordinary proper names like ‘Hesperus’ and ‘George Orwell’ are disguised descriptions. Concerning the objects of acquaintance, there can be no informative identities expressed using only logically proper names.

LPN 2: Where two logically proper names flank an identity sign, the resulting sentence will be either cognitively insignificant (to anyone who understands it) or false.³³

This is not to say that understanding a logically proper name is a *luminous* condition.³⁴ So long as understanding a logically proper name involves knowing which of one’s acquaintances is named by that name, one might take oneself to understand a logically proper name when one fails to do so (Russell 1918/2009: 34). Still, if one succeeds in understanding a logically proper name, identities expressed through the use of that name with another logically proper name will fail to be cognitively significant.

Russell’s argument for restricting the scope of acquaintance, then, goes as follows. In the case of creatures like ourselves, the existence of ordinary physical objects may always be called into question. Such objects do, if anything does, afford perspectives concerning which it might be informative for us to learn that they are perspectives on the same thing. Ordinary physical objects, then, cannot be the referents of logically proper names which we understand.

³³ Proops (2011) convincingly suggests that this sort of argument commits Russell to the multiple relation theory of judgment. For it can be cognitively significant to learn of one proposition that it is expressed by two distinct sentences. As a result, sentences themselves are often ‘incomplete symbols’.

³⁴ A condition is luminous just in case being in that condition suffices for being in a position to know that one is in that condition (see Williamson (2000)).

In general, categories of entity which do not satisfy the following schema cannot be acquaintances for a subject S .

REVELATION: If S is acquainted with x , S is perfectly and completely acquainted with x (via every facet of x).

Aboutness, for Russell, is *transparent*: it is not possible for a thinker to be in error as to whether she is thinking about a thing. Such mistakes are ruled out by the exigent demands on acquaintance.

TRANSPARENCY: It is impossible for a rational subject to be in error as to whether she instantiates the property $\lambda x \cdot x$ is *thinking about* a (where a is a logically proper name).

If one is capable of having the thought at all, no such error is possible, and a claim of the form $a = \beta$ is always cognitively insignificant or false.

Post-(1905), Russell's view is that *sense-data* are the 'aspect-free' relata of acquaintance in sensory experience. By the time he came to offer a sophisticated treatment of acquaintance (circa 1913), he restricted its scope to sense-data, universals, and logical forms. We are presented with particulars in sensation, memory, and imagination, with universals in understanding or 'conception', and with logical entities in 'logical intuition' (we may additionally *attend*, in each of these cases, to parts of the entity presented); acquaintance being that most general and comprehensive relation applying in each of these cases (1913/84: 45).

0.2.6 Summary

The vast majority of philosophers have found Russell's conclusions about the scope of acquaintance, and thus of aboutness, profoundly unattractive.³⁵ Russell's (1913/84: 10) assurance that we need not believe that "the experience of each moment must be a prison for the knowledge of that moment, [and that] we cannot know any particular thing unless it is part of present experience" was that we may know *by description* that there is much else to the world. (Compare the 'prison' imagery in n. 10, above.) Despite his protests, however, such a predicament has come to seem little less barren than the degenerate forms of 'Idealism' Russell sought to eliminate.

Sense-data at the times when they are data are all that we directly and primitively know of the external world (1956: 148).³⁶

If we may only know ordinary objects like Mont Blanc and Leonard the cat 'by description', our cognitive grip on reality is scarcely better than according to the proponent of PSYCHOLOGISM.

Russell came to acknowledge this. He would admit in Kantian phrase that "The physical object is a 'thing in itself' which cannot be known directly. Even its existence is doubtful, since it depends on a rather precarious induction" (1911/92: 136). If it was 'utterly obscure' (1910/51:

³⁵ Further arguments entail that sense-data (i) may be distinct despite being phenomenally indiscriminable, due to the intransitivity of phenomenal indiscriminability (Russell 1914/1993: 148); and (ii) may never 're-appear' once one's attention is turned away from them, else (if a logically proper name for a sense-datum can always be understood by the sensing subject) LPN 2 would become questionable (Proops 2011: 178–83).

³⁶ See also Russell (1913/1984: 40). However, it is worth mentioning contemporary philosophers like Chalmers who, concerned to carve out a kind of 'primary' meaning such that it is *a priori* knowable whether two concepts share such meaning, endorse similar views—e.g. that we are acquainted with exactly those (instances of) phenomenal properties instantiated in our experience (and indeed that this is a conceptual truth) (2010: 285–91).

160) how the *ideas* of PSYCHOLOGISM should come to be about ‘the sun and the stars’ (to echo §0.2.1), it should be equally obscure how Russellian subjects, circa 1905, succeed in thinking about such things. Biting the bullet and concluding that we get to have thoughts about the medium-sized dry goods we know and love through a ‘semantic shot in the dark’ is deeply unappealing.³⁷ Russell found himself once again in a ‘hot-house’ (cf. n. 6, above).

He would escape again, at least by his own lights. In his (1914), Russell concluded that the best explanation for the continuity of what sense-data presents is not a world of material objects (as he argued at (1912: 23ff)), but a world of *unsensed sensibilia* existing in public space and time.³⁸ Here there are no unknowable noumena, for physical objects are the kind of thing we are acquainted with, they merely have a somewhat surprising nature.

However, this is the very arc of the post-Kantian tradition which Russell had been keen to peel away from. The indefensibility of positing a noumenal realm of ‘things in themselves’ according to such thinkers leaves in its wake a world permeated by mind (Fichte 1794/5; Schelling 1800; Hegel 1807; Schopenhauer 1818/1964). Moore and Russell’s rebellion left a legacy for philosophy of mind and language, but whether it fulfilled their early ambitions is less clear.

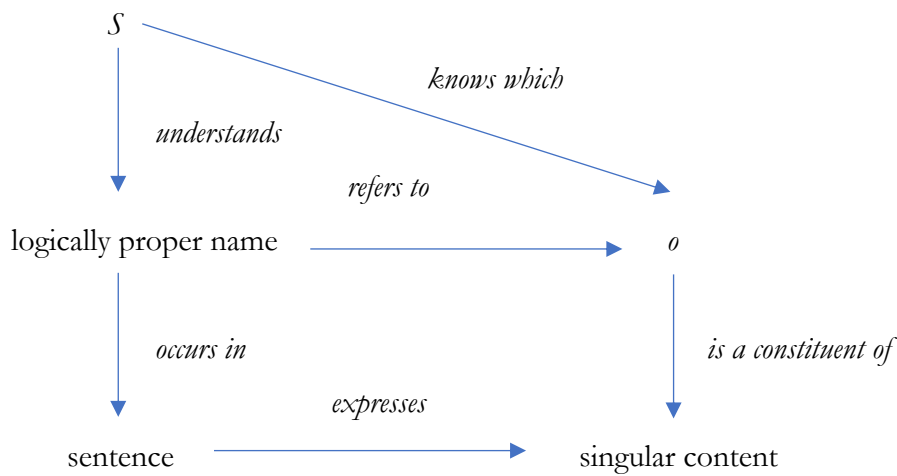
To summarise, core themes inherited from various stages of Russell’s thinking include:

- | | |
|--------------|--|
| ABOUTNESS: | There is a distinctive phenomenon of aboutness—namely, reference and singular thought—which is tied to propositional constituency. |
| DESCRIPTION: | There is a second-class kind of ‘aboutness’—namely, by description—which is not tied to propositional constituency. |

³⁷ The phrase is due to Chastain (1975: 254).

³⁸ “I shall give the name *sensibilia* to those objects which have the same metaphysical and physical status as sense-data, without necessarily being data to any mind. Thus [...] a *sensibile* becomes a sense-datum by entering into the relation of acquaintance” (1914/86: 7).

- ORDINARINESS: We can think about ordinary objects like Leonard the cat.
- ACQUAINTANCE: This aboutness is subject to an acquaintance condition: to think a singular thought about o one must be acquainted with o .
- TRANSPARENCY: It is impossible for a rational subject S to be in error as to whether she instantiates the property $\lambda x . x$ *is thinking about* α .



— Figure 1: *Russellian aboutness*.

This thesis explores these Russellian themes. The core problem which Russell leaves to be resolved is how ORDINARINESS is to be maintained. By Chapter 4 it will have emerged that this problem can only be solved by rejecting TRANSPARENCY.

0.3 Aboutness: post-Russellian updates

Our explanandum is the mind's capacity for aboutness. In §0.2 we recovered a package of themes involved in Russell's account of aboutness. This section applies some contemporary updates to these themes.

0.3.1 Reference

Russell introduced us to a division within the category of noun phrases between those whose *contentfulness*, in the sense of having a capacity to systematically contribute to the truth-conditions of the sentences in which they appear, does not hinge on their picking out an object and those whose contentfulness *is* tied to the object(s) which they are about. According to Russell's theory of descriptions, the object which 'The U.K. prime minister who visited Myanmar' happens to pick out plays no constitutive role in that expression's contentfulness. In contrast, logically proper names are contentful only in virtue of there being an object, indeed *that very object*, which they are about. *Reference*, for Russell, is that privileged binary relation between logically proper names and their objects.

That there are referring expressions is not a controversial claim.³⁹ What is controversial is *which* noun phrases in natural language are referring terms—or, at least, which noun phrases are associated at logical form with referential material.⁴⁰ The class of referential noun phrases in natural language has traditionally been taken to include, most uncontroversially, deictic pronouns ('you', 'this', 'those'), and, in addition, proper names ('Bertrand Russell'), complex proper names ('Mount Snowdon'), plural proper names ('The Obamas'), modified proper names ('a young Marcel Proust'), so-called capitalized descriptions ('the Space Needle'), and at least referential 'uses of' definite descriptions (e.g. 'the man with the martini', in Donnellan's (1966)

³⁹ Bradley (1883) argued that because expressions such as 'this', 'I', and 'now' are used in application to "innumerable instances", far from being paradigms of reference, they are paradigms of descriptive expressions, picking out universals (1883: 49). The treatment of context-sensitivity given by the Kaplanian framework in Chapter 2 provides a straightforward corrective to this line of thought.

⁴⁰ Some have entertained the possibility that all devices of reference in natural languages are phonologically and orthographically unrealized; reference being exclusively carried out by covert material at logical form (see *inter alia* Cumming (2007), Dever (1998), Hawthorne and Manley (2012), and Santorio (2012)). So long as there *are* referential devices associated with surface forms, however, these views do not call into question the phenomenon of reference *per se*. (Pietroski (2007), by contrast, conjectures that there may be no lexicalized devices of reference. Since this remains a conjecture, I pass over its ramifications here to maintain focus.)

example), to name but a few. Acknowledging the referentiality of many of these expressions suggests that being referential is compatible with the possession of internal syntactic structure.⁴¹

Reference is best construed as a semantic natural kind, membership of which is typically accompanied by a number of semantically distinctive features. This sub-section explores these features. Before diving in, however, now is a good time to return to a point from §0.1. I said that deep semantic differences may lurk within the category of terms whose function is that of forestalling Strawson's (1950) question—'What (who, which one) are you talking about?' (335). In that very paper, Strawson defends the view that definite descriptions are not to be given the analysis of Russell's *theory of descriptions*.

Rather than go into details about Strawson's (1950) arguments or the treatment he proposes, I will keep this section brief and contemporary. A wealth of objections have been raised against the classic Russellian account of definite descriptions since 'On Denoting' (1905). Often these appeal to adverse consequences of the treatment when the definite description occurs in the scope of a modal or attitude operator, or in a non-declarative sentence (such as a question). A simple and unobjectionable illustration of the difficulties (due to Elbourne (2018)) can be given using a kind of declarative sentence in an uncontroversially extensional context.

- (6) No boy sold the dog he had bought.

⁴¹ The behaviour of proper names in certain contexts suggests that even these are more complex than traditionally assumed. Burge (1973) observed that names can behave like predicates of one sort or another: for example, 'Every Tyler I know is a philosopher'. Cases of interposed adjectives such as 'the mighty Thames' or 'the big Lebowski' also suggest a more complex structure. The claim that names *are* predicates might seem to undermine the view of names as referential devices. But the most promising forms of predicativism posit covert referential material to take over the task of accommodating their characteristic *rigidity* (see below). Matushansky (2008) argues that names are two-place predicates, with both a restrictor argument place and an argument place for "the naming convention in force" which is typically saturated by a free variable (592). (Burge (1973) and Larson and Segal (1995) suggest a covert demonstrative constituent, with the occurrence of 'Tyler' in 'Tyler is a philosopher' interpreted, effectively, as *that Tyler*. Arguments against this view are given by Elbourne (2002).)

Russell’s theory predicts that (6) is truth-conditionally equivalent to the following:

- (7) No boy bought exactly one dog and sold it.

As Elbourne (2018) observes, (7) is true both in scenarios where (i) no boy bought any dog; (ii) all boys bought more than one dog. But (6) is *not* intuitively true in either scenario (i) or (ii).

One way of accommodating this observation involves claiming that definite descriptions are referential. On this view, ‘The F ’ takes the value of a predicate F as argument and has as its output an object. As Frege put it, “the definite article of ordinary language [...] serves to form proper names out of concept-words” (1893/2013: 49–50). This story is then supplemented with the claim that a definite description introduces a presupposition that there is one and only one F (in a contextually restricted domain) and, where a thing (uniquely) satisfies the presupposition, ‘The F ’ refers to that thing.⁴² This proposal runs strongly against the grain of the Russellian thesis that definite descriptions should be classed alongside quantificational noun phrases.

While objections of this sort certainly present difficulties for the classical Russellian treatment, it is possible to reconcile the quantificational picture of definite descriptions by supplementing it with presuppositional resources. Along with the explicit truth-conditional requirement that there be exactly one F (on a model more faithful to Russell), or at least one F (on an alternative treatment compatible with truth where there is more than one F), we may identify the same ‘specificity’ presupposition to the effect that there is exactly one F .⁴³ On this view, however, definite descriptions are not referential.

Elbourne (2018) shows that presuppositional treatments of both kinds predict the data above. Whether the presupposition associated with (6) is either of the following,

⁴² *Inter alia*, Heim (1991), Elbourne (2013), and Rothschild (2007).

⁴³ Elbourne (2018) calls this the *quantificational presuppositional treatment*, associating it with Karttunen and Peters (1979) and Hawthorne and Manley (2012) *inter alia*.

- (8) Every boy bought exactly one dog.
- (9) At least one boy bought exactly one dog.

both theories predict that (6) will fail to be true in scenarios of type (i) or (ii).

The take-home point for present purposes is that it at least remains an open question whether the Russellian semantics for definite descriptions requires mere supplementation or outright rejection in favour of a referentialist treatment. In the remainder of the thesis, I will be assuming that the *quantified presuppositional theory* is accurate. The issue does not have profound implications on the philosophical contributions. Assuming that definite descriptions are not referential will help to preserve some classical Russellian distinctions between cases of aboutness and ‘aboutness by description’, and to also limit interruptions where departures from the orthodoxy demand explanation. For reasons of simplicity and space, I leave the worthwhile investigation of the ramifications of the referentialist treatment for another day. Even staunch referentialists who see their view as having immense significance for the study of aboutness should be interested in how far the package of Russellian themes from §0.2 can be pushed.⁴⁴

In the remainder of this section, I return to the elucidation of some distinctive characteristics of the semantic natural kind of *reference* in natural language.

i. Object-dependence and content constituency

Like much of the nomenclature in the area, ‘object-dependent’ is imperfect. It suggests, first, that one cannot have object-dependent thoughts about that which one might be tempted to describe as ‘non-objects’, such as relations. Second, it suggests that the notion is merely

⁴⁴ See Hawthorne and Manley (2012: 184–90) for a brief exploration of some thematic consequences of the referentialist treatment of definite descriptions, and Elbourne (2013) for a systematic defence of the view.

counterfactual. While I acquiesce to the prevailing terminology, the sense of dependence in play should be understood as of a distinctively metaphysical character.

Since there are semantically context-sensitive referring terms, the most precise way to articulate object-dependence is to say that an expression is object-dependent on an occasion of use iff it is contentful on that occasion in virtue of there being an object it is about on that occasion. Hawthorne and Manley (2012: 9–10) observe two varieties of object-dependence between which this statement is ambiguous. An expression is *object-dependent for contentfulness* (on an occasion of use) just in case its having any content at all (on that occasion) requires that it be about an object. More strongly, an expression *has an o-dependent content* (on an occasion of use) just in case its having any content at all (on that occasion) requires that it be about the object it is in fact about (*o*).

A closely connected phenomenon is content-constituency. The above claims about object-dependence suggest that what is expressed by a sentence containing a referring expression depends on the existence of the object(s) which that expression is about. The *content* is object-dependent in a derivative sense: where it is expressible, it is expressible partly in virtue of the existence of the object(s) in question. On the Russellian picture, such contents are distinguished by their having the object(s) as constituents.⁴⁵ However such contents are to be distinguished, they provide an insight into the phenomenon of singular aboutness insofar as such contents are eligible objects of thought. I will call the contents expressed by sentences exhibiting o-dependence (anywhere in the sentence) *singular* contents. In what follows, then, I

⁴⁵ There are compelling reasons to think that propositional constituency should be taken as *sui generis*. Ordinary constituency seems to be transitive. Yet if we imbue propositional constituency with any epistemological significance—for example that subjects must be acquainted with each constituent of a proposition to which they are intentionally related—the constituents of the *constituents* of propositions (for example, Socrates' left kidney) will make equal epistemological demands. (If we wish to allow propositions which are 'about' other propositions without thereby being 'about' *their* constituents, we will want this relation to be intransitive. And if we wish to allow propositions which are 'about' themselves, we will not want this *sui generis* relation to be asymmetric.)

will be assuming the ‘Russellian’, structured view of contents, but neo-Fregeans (who propose that the constituents of object-dependent propositions are object-dependent *senses*) will be able to follow along as well.

ii. Rigidity

A further mark of reference is *rigidity*. Kripke (1980) tapped into a “direct intuition” (14) concerning the truth-conditions of sentences containing referring terms, namely that the truth at counterfactual situations of the propositions expressed by such sentences is a matter of whether a *given, fixed* individual has the relevant property (assuming the individual exists at that situation): there is “a single individual and a single property such that, with respect to every counterfactual situation, the truth-conditions [require] the possession of the property by that individual, in that situation” (1980: 10). This leads naturally to a thesis about the way in which referring terms behave in the scope of modal operators which can be brought out in the following schema:

For all x , if $x = N$, then necessarily $\Phi(x)$ iff necessarily $\Phi(N)$

where N is substitutable by a noun phrase and $\Phi(N)$ by any sentence embedding N (under only truth-functional operators).⁴⁶ In general, terms like ‘Socrates’ are rigid in that the truth-values of extensional sentences in which they appear, when evaluated at any world, are determined by how things are with the object(s) which they are in fact (on that occasion of use) about.⁴⁷

Within the class of rigid expressions, there are those which pick out the same object at *all* worlds, regardless of whether the object exists, those which fail to pick out anything at worlds

⁴⁶ Dorr (2014: 25).

⁴⁷ For brevity, I will not discuss the interplay between referential devices and hyperintensional operators.

where the object they would otherwise be about does not exist, and those which can apparently fail to pick out the object they would otherwise be about even at worlds where it exists.⁴⁸ Further distinctions can be found within the class between the *de facto* and the *de jure* rigid.⁴⁹ A *de facto* rigid expression picks out the same object at all worlds in part thanks to the necessary existence of the object picked out. For example, ‘The smallest prime number’ picks out the number 2 at all worlds. But this fact about the expression arises from the necessary existence of the number and its necessary satisfaction of that description. (Contrast this with ‘Tom’s favourite number’, where Tom’s favourite number is in fact 2.) *De jure* rigid expressions like ‘2’ or ‘Tom’, in contrast, need no metaphysical help in their successfully being rigid in any of the three senses above: *conditional on their referring*, they need no metaphysical help in picking out the same object at all worlds.

iii. ‘Direct’ reference

The above observations suggest that the semantic contribution of ‘The U.K. Prime Minister who once visited Myanmar’ to sentences in which it appears is not *exhausted* by the object which it happens to be about. For there is more to the determination of their extension on an occasion of use than is represented by a constant function from worlds. In contrast, expressions like ‘Socrates’ are apt to be represented by such constant functions, for they will pick out the same object at all worlds (at least at those where the referent exists). As Kaplan put it,

the intuitive idea is not that of an expression which *turns out* to designate the same object in all possible circumstances, but an expression whose semantical *rules*

⁴⁸ See Hawthorne and Manley (2012: 10–12) for discussion.

⁴⁹ See Kripke (1980: 21, n. 21). This distinction will be important for necessitists (see Williamson (2013)).

provide *directly* that the referent in all possible circumstances is fixed to be the actual referent (1989a: 493).

The idea that singular terms refer ‘directly’, without the mediation of a satisfactional constraint, has a persisting influence.⁵⁰

iv. Descriptive names

Before moving on to examine characteristic features of aboutness at the level of thought, something must be said about the status of a kind of expression with a rather uncharacteristic semantic profile. ‘Pearl Poet’ is used by scholars of medieval literature to refer to the author of *Pearl*, a 14th Century poem in Middle English. The author is conjectured to have also written *Sir Gawain and the Green Knight* and *Patience*. For these scholars, ‘Pearl Poet’ is a *descriptive name* in the sense that, by virtue of explicit stipulation, it refers, if it refers at all, to whichever 14th Century poet uniquely authored *Pearl*.

Descriptive names are rigid. The sentence ‘If things had gone differently, Pearl Poet could have been illiterate’ makes sense if we have in mind, for example, a world at which the 14th Century poet who in fact authored *Pearl* was born into abject poverty (and so did not author *Pearl*). They are not directly referential, however. The introduction of the descriptive name involved the reference-fixing stipulation that it refer to whichever 14th Century poet uniquely authored *Pearl*. Someone who does not realise that the name is being used in that way at least intuitively fails to understand sentences in which it occurs. What about object-dependence?

⁵⁰ Kaplan was not the first to use this imagery: “Whenever the grammatical subject of a proposition can be supposed not to exist without rendering the proposition meaningless, it is plain that the grammatical subject is not a proper name, i.e. not a name directly representing some object” (Russell and Whitehead 1910/27: 66).

Were it to turn out that the poems were written by a *collective*, or that they were forged in the 19th century, would sentences in which ‘Pearl Poet’ occurs fail to be contentful? The assumptions of this thesis are compatible with an affirmative answer, particularly if admitting descriptive names as singular terms does not entail that coining or participating in the use of a descriptive name puts one in a position to author singular thoughts about the referent (if there is one). Even Evans (1982), who makes special room for the referentiality of descriptive names, concludes: “We do not produce new thoughts [...] by a ‘stroke of the pen’” (1982: 50). Nevertheless, on the resulting picture, descriptive names whose reference-fixing description is successful are referential and express a singular content.

It may be objected: that such terms express singular content surely means that they cannot be *understood* by someone who is not acquainted with the referent. Is such a requirement not extremely implausible given the ordinary practice of communicating with expressions like ‘Pearl Poet’?

Something like this objection was troubling Kaplan (1969) when he wrote:

I am unwilling to adopt any theory [...] which permits me to perform a dubbing in absentia, as by solemnly declaring ‘I hereby dub the first child to be born in the twenty-second century ‘Newman 1’, and thus grant myself standing to have beliefs about that as yet unborn child (Kaplan 1969: 228–9).

Kaplan later retracted this conclusion and came to recognise the possibility of referring using devices like ‘Newman 1’. However, this is because he came to separate two phenomena: that of using a linguistic device to refer to *o* and that of having a singular thought about *o*. As he conjectures in (1989b: 606–7),

although the language enables us to *express* contents that would otherwise be inaccessible [...], something more, something like being *en rapport* with the components of the content, is required to *apprehend* the content (and thus to hold attitudes toward it). I think of the proposal as a requirement that we have *knowledge of* the components. [...] I am not entirely unsympathetic to this view.⁵¹

There may well be some philosophically interesting connection between reference, understanding, and singular thought in general. While it is *prima facie* unpromising that there is any constraint on successfully *using* a referential expression that one be in a position to author a singular representation about its referent, the prospects of something like this constraint in the case of understanding are more plausible.⁵² In Chapter 3, we will see that this interconnection is important to Evans (1982). This will not be explored in detail here, however.⁵³

The linguistic themes explored above suffice to sharpen our preliminary insight into the phenomenon of reference in natural language. We turn now to explore how the above semantic

⁵¹ See also Salmon (2004: 325–6). Kaplan (1989b) does qualify this by saying he is still inclined to think that introducing a descriptive name “constitute[s] a form of cognitive restructuring; [broadening] our range of thought” (1989a: 560, n. 76). A more thoroughgoing defence of the position above is given by Soames: “in cases involving so-called descriptive names [...] [d]oes the speaker understand the sentence? In a sense he does, since he understands all the words, as well as how they are combined in the sentence. However, in a sense he doesn’t [...]. [...] the speaker’s [...] understanding of the words in the sentence and their mode of combination, is not [...] sufficient for him to believe a singular proposition” (1995: 518, n. 5).

⁵² For example, it is possible to be totally sensorily deprived but, in pointing fortuitously at an object in one’s vicinity, to use a sentence which expresses a singular proposition, by saying ‘That is red’. For a defence of such a connection, however, see Bach (2006; 2010).

⁵³ Are there other exceptions? If there are devices of *arbitrary* reference (see Breckenridge and Magidor (2012)) it is unlikely that understanding sentences in which they occur requires whatever cognitive achievement is necessary for understanding a deictic pronoun on an occasion of use. Perhaps one conclusion is that expressions with *o*-dependent contents make special demands on understanding while expressions which are merely object-dependent for contentfulness do not.

features are manifested at the level of thought alongside epistemological features, and to how reference in language might provide an insight into its twin category at the level of thought.

0.3.2 Singular thought

Our investigation into aboutness began with the intuitive class of ‘atomic’, subject-predicate thoughts of the form α is F .⁵⁴ While it seems possible to ‘think about’ a thing in a way which is not truth-directed—as perhaps when one idly thinks about one’s brother or what one is going to have for lunch—complete, truth-directed thoughts, or judgeable contents, provide us with sharp insight into the phenomenon of aboutness. For aboutness must here be the kind of feature which can explain thoughts’ candidacy for truth-evaluability.

The semantic properties of being singular or being descriptive do not apply in the first instance at the level of complete sentences or thoughts. Of the constituents which make up sentences or complete thoughts, rather, there is a semantic distinction between the singular and the descriptive.⁵⁵ Linguistic expressions which have this semantic property of referring are singular terms. Thought-constituents which have this property are singular representations. The connection between singular terms and singular representations is revealed at the level of content: sentences containing singular terms, and singular representations exercised as vehicles of thought, express the same distinctive kind of content.

⁵⁴ A sentence of the form $Ft_1, \dots, t_n$ is *atomic* just in case F is a predicate of arity n and each of $t_1, \dots, t_n$ is a variable or singular term.

⁵⁵ Perhaps sentences and complete thoughts inherit a derivative property of being singular or descriptive. However, the possibility of sentences like ‘A U.K. Prime Minister once visited Myanmar’ will mean that qualifications are in order if the division is to be clear or absolute. Neale (1990) endorses the application of ‘singular’ to propositions which are “object-dependent with respect to the subject position of the sentences used to express them” (1, n. 1). However, this makes the phenomenon hostage to the difference between active and passive forms. There is a related hurdle insofar as it is possible to refer to properties with terms like ‘redness’, but not with ‘... is red’.

Though the twin categories of singular term and singular representation are deeply analogous, this is not to deny there are differences. For one thing, linguistic expressions are (what we might call) *characterful* vehicles. Linguistic expressions are associated with a dimension of meaning which provides something like a reconstruction of the tacit knowledge which enables hearers to ascertain the content expressed by a use of a sentence. It is a kind of meaning which concerns “the rules, habits, conventions governing its correct use, on all occasions (Strawson 1950: 327). Mental representations are thinker-bound, so they lack the kind of public, conventional life which might lead to such constraints on their use.

Rather than make substantial commitments to any story about singular representations at the outset, I will mostly let our inquiry make demands about the nature of singular representations as we go along. A few things will be said about singular representations in Chapter 1. The full picture will be elucidated only in Chapter 4. This way of proceeding will make it easier for the reader to grasp the features of singular representations, and it will be more hospitable to those who are suspicious of appeals to mental representations in philosophical theorizing.

In what remains of this section, I soothe some very general worries about appealing to mental representations in theorizing about aboutness.

First, appealing to representations might be thought deeply antithetical to the efforts of Moore and Russell (see §0.2) in rebelling against PSYCHOLOGISM. If we achieve ‘aboutness’ only by having ‘before our mind’ some agent-bound representational vehicle, however distinctive it might be, do we not slide back to a retrograde PSYCHOLOGISM?

It is important to remember that PSYCHOLOGISM is a view about the nature of the *objects of thought*. Representationalism is a view about how the mind gets to *have* objects. Representationalism is compatible with the claim that the objects of thought are (sometimes)

thoroughly mind-independent.⁵⁶ Insofar as singular representations are the vehicles we use to successfully think about particulars, we can think of them as object-concepts, at least so long as concepts are not essentially shareable. That singular representations are not shareable does not entail that there is no way of representing others' propositional attitudes (see Chapter 1). Nor does it entail that *thoughts* (contents) are not shareable.

Second, there will be some who merely think it premature to engage in theorising about mental representations. I share this worry. The full picture of singular representations given in Chapter 4 makes no pronouncements about thought being linguistic, about the 'generality constraint', about how 'connectionist' models of mental representation cannot be right, etc.⁵⁷

If we choose not to theorise about mental representations, what is the alternative? Contemporary anti-representationalists like Stalnaker (1984) theorise about the structure of mental content in a way which abstracts away from matters of format. Such theorists are not denying that there *are* representations, however: "the possible worlds definition of proposition does not then deny that beliefs are internally represented. But it remains neutral on the form that those representations must take" (1984: 22). This way of theorizing has certain advantages. However, it is not as if it provides real insights into the nature of aboutness. To see this, consider how, according to possible worlds theories of mental content like Stalnaker's (1984), the belief- and desire-states of a rational agent are characterised.

To desire that *P* is to be disposed to act in ways that would tend to bring it about that *P* in a world in which one's beliefs, whatever they are, were true. To believe that *P* is to be disposed to act in ways that would tend to satisfy one's desires,

⁵⁶ This is not a new way of talking about representations. Stout, a contemporary of Russell and Moore, was keen to emphasise that the 'representations' to which he appealed were not, like Lockean ideas, psychologistic 'veils'; there is something about representations, rather, which somehow *gives us access to* the thing itself: "[representations] perpetually point beyond themselves to actual existence" (Stout 1905: 11).

⁵⁷ While Chapter 1 assumes that thought has a language-like structure, this is merely a convenience (see §1.3.4).

whatever they are, in a world in which *P* (together with one's other beliefs) were true (1984: 15).

On its own, this characterisation does not provide the full story.

Mary is angry at Fred [...]. She wants him to suffer, and believes that he will suffer if she plays her cello badly at three o'clock in the morning. That, at least, is one hypothesis [...]. Here is another: Mary wants *Albert* to suffer, and believes that *Albert* will suffer if she plays her cello at three in the morning. [...] Now one might find the second hypothesis less plausible—even perverse—since Mary has no reason to want Albert to suffer; she has never met or heard of him. [...] The *only* difference between the two proposals, let us suppose, is that in the perverse hypothesis, Albert is everywhere substituted for Fred. [...] Not only do belief and desire interact to produce the same actions, according to the two hypotheses, but also there is an exact correspondence between the beliefs hypothesized and the desires hypothesized (1984: 17).

If we are to give anything like a satisfying theory of intentionality, we must take into consideration not only the functional role of mental states—the states and events to which they tend to give rise—but also the worldly states and events from which thinkers' mental states arise. To adequately explain a thinker's behaviour as rational, we must identify mental states which are *about* the things with which her causal-historical path through the world is intertwined. The question then is *how* these relations play their aboutness-fixing role. On this matter, the

possible worlds framework itself provides no answer. Stalnaker's (1984) suggestion that a causal role in the production of a belief state suffices for aboutness is clearly only schematic.⁵⁸

While the difference of theoretical apparatus between those appealing to possible worlds contents and those appealing to more fine-grained resources may matter less than is sometimes thought for the phenomenon of aboutness to emerge, this is no reason to aim for neutrality on such apparatus here. Possible-worlds theorists have had much less to say about aboutness, and while there are avenues worth exploring, I shall continue in what follows along our structured-content, representationalist trajectory.⁵⁹

0.4 Strategy

Russell's commitment to a view of singular thought so narrow in scope as to rule out thoughts about ordinary, mind-independent objects is profoundly unattractive. The post-Russellian predicament has seen the overwhelming majority of philosophers seek dilutions of acquaintance. This project has been of limited success. As Davies (1981) summarised the consensus, which has grown little in the interim:

The negative partial answer is that if a person is totally causally isolated from the object then he can have no singular beliefs concerning it. The positive partial answer is that if a person has had frequent perceptual (particularly visual) contact with the object [...] then he can have singular beliefs concerning it (1981: 97).

⁵⁸ "We believe that *P* just because we are in a state that, under optimal conditions, we are in only if *P* [...]. Beliefs have determinate content because of their presumed causal connections with the world" (18–9).

⁵⁹ For recent exceptions see Yablo (2014) and Glick (forthcoming).

Indeed, there is a general sense of directionlessness in the literature. This has increasingly given rise to the idea that ordinary language propositional attitude reports provide the best sort of insight into the phenomenon of singular thought (see Chapter 1). In turn, this has led to dilutions of acquaintance which threaten to collapse the very distinction between descriptive and singular aboutness.⁶⁰ This attitude is unsustainable so long as we do not simply deny the phenomena recovered in §0.2–3. Not all intentional distinctions must capture distinctions in the thinker’s cognitive or practical abilities, but if a thought’s being singular is associated with any of the Russellian themes from §0.2, it must capture something.⁶¹ Is there a way forward?

Remember that when Russell offers his “fundamental epistemological principle” as a condition on aboutness (1910/51: 159), he said that it was “obvious” (1913/84: 110) and “evident as soon as it is understood” (1910/51: 160). This provides one theoretical anchor, motivating an investigation of what ‘knowing which’ might plausibly amount to. Aboutness, so conceived, makes distinctively epistemic demands, and a theory of aboutness will precisify the notion of knowing which in a way which is philosophically satisfying. This thesis argues that this project can be carried out, and in Chapter 4 I lay the foundations for this project by precisifying RUSSELL’S PRINCIPLE. This will involve rejecting one of the Russellian thematic principles (§0.2.6), namely TRANSPARENCY. The positive strands in this thesis, then, identify a way of reconciling the claim that we have singular thoughts about Leonard the cat with the claim that singular thought involves a distinctively epistemic achievement. These claims must be reconciled if we are to escape Russell’s self-imposed prison and earn the conclusion that ordinary objects are among the things which may be the immediate subject matter of mind.

⁶⁰ For example, Salmon writes: “[Singular thought] does not require anything as stringent as knowing who the person is [...]. [...] when the investigating homicide detective utters ‘Smith’s murderer is insane’ using the description attributively, [...] his knowledge of the murderer is by description, in Russell’s phrase. Never mind; he still manages to pull off a [singular thought] (2004: 324–5).

⁶¹ Salmon (2004) goes on to posit a “*de re* connectedness” (325) requirement, though what this amounts to is unclear.

Chapter one

Singular Thoughts and *De Re* Attitude Reports

The Introduction presented a distinctive species of aboutness which orthodoxy calls *singular* thought. On the received view, one entertains a singular thought if and only if one bears a propositional attitude (e.g. belief or desire) to a certain sort of content—namely, a *singular* content. Having such a thought about an object is incompatible with its nonexistence. Since their very contentfulness hinges on their being about a particular object, it is standard to think of the contents expressed by singular thoughts as being object-dependent. According to the Russellian picture assumed here, singular content is so-distinguished by virtue of being partly constituted by the represented objects themselves.¹

It has long been tempting to think that part of what explains the distinctive epistemological and semantic features of singular thought is that their availability is subject to a distinctive constraint.² Adopting Russell’s nomenclature, we can call these *acquaintance* constraints: a subject must be acquainted with an object to have a singular thought about it. While there is a lively debate about what it is, exactly, to be acquainted with an object (in the

* For reasons of space some material appearing in Openshaw (2018b) is abridged in the present chapter.

¹ Everything said in this chapter, however, will be translatable into a neo-Fregean framework, according to which singular contents contain object-dependent *senses*. McDowell (2009) suggests that the sort of treatment assumed here, which captures phenomena of cognitive significance by keeping track of the representational vehicle by means of which a Russellian content is expressed, is “a mere notational variant” of the neo-Fregean’s (2009: 178). Other prominent neo-Fregeans have recently opted to talk of *mental files*: “representational vehicle[s] that [play] the role of mode of presentation” (Récanati 2012: 244).

² I say ‘distinctive constraint’ since there are plausibly very general constraints on thought *per se*.

term's post-Russellian usage), it has been common to suppose that singular thoughts are subject to a substantive constraint of this sort. Perhaps, for example, there must be “an extensive causal dependence of [the subject's] states upon [the object's, such that] this causal dependence [be] apt for the reliable transmission of information” (Lewis 1979a: 542).

I will use ‘acquaintance’ liberally throughout this chapter as an umbrella term for any distinctive requirement bearing family resemblances to the paradigm constraints in the literature. The reader is invited to substitute appearances of ‘acquaintance’ with her favourite general constraint—whether causal (e.g. Kaplan 1969), epistemic (e.g. Evans 1982), or cognitivist (e.g. Jeshion 2010).

Unfortunately, an influential argument stands in the way of the claim that there is *any* sort of acquaintance constraint on singular thought. Acquaintance constraints, it is alleged, are incompatible with our best account(s) of the connection between singular thoughts and the way in which we ascribe thoughts in ordinary language; specifically, through the use of sentences of the following form:

Alice believes that Leonard is hungry.

By analogy with the level of singular thought, there exists a class of singular *terms*: terms whose presence in a sentence suffices for the expression of singular content. We can call propositional attitude reports like ‘Alice believes that Leonard is hungry’, in which a singular term features in the ‘that-’ clause, *de re*. (*De re* is to therefore be read as a property of reporting constructions, not of the attitudes reported.) According to a tempting line of thought, true *de re* attitude reports provide a window onto the presence of singular thoughts. If the predicate ‘believes that Leonard is hungry’ is true of Alice, or if ‘believes that *x* is hungry’ is true of Alice on an assignment of Leonard to ‘*x*’, it would appear that Alice believes a singular content about Leonard, and, for that matter, that she must entertain a singular

thought about him. We can summarise these claims about the connection between singular thoughts and *de re* attitude reports as follows.³

HARMONY: Any belief report whose ‘that-’ clause contains, at the level of logical form, either a singular term or an objectual variable bound from outside the scope of the belief operator requires for its truth that the subject believe a singular content.

SUFFICIENCY: Believing a singular content is sufficient for entertaining a singular thought.

HARMONY and SUFFICIENCY codify *prima facie* plausible connections between a set of notions intertwined in the philosophical and semantic literature since the 1950s. According to HARMONY and SUFFICIENCY, singular terms offer “a window into a certain kind of content, and attitude reports that use them reveal a distinctive kind of mental state” (Hawthorne and Manley 2012: 4).

The next section sets out the classic argument against acquaintance, most recently—and to many convincingly—pressed by Hawthorne and Manley (2012). It will become clear that even those persuaded by Hawthorne and Manley’s careful discussion should be interested in the response defended here. In §1.2 I outline that response. I advance a powerful and independently attractive semantic framework for propositional attitude reports in §1.3, and deploy that framework in §§1.4–5 to secure the acquaintance-theorist’s response. The upshot is that there is an independently motivated response to the dominant argument against acquaintance-theoretic ideology.

³ Both principles are adapted from Hawthorne and Manley (2012: 38).

1.1 The argument from attitude reports

In their (2012), Hawthorne and Manley use HARMONY and SUFFICIENCY to highlight the raft of problem cases known to exist for anyone hoping to endorse the following thesis:

CONSTRAINT: For S to entertain a singular thought about o , S must be acquainted with o .

Call supporters of CONSTRAINT *acquaintance theorists*. Notice that HARMONY and SUFFICIENCY are not claims of which acquaintance theorists are likely to be especially wary. Part of the *prima facie* motivation for thinking that there is a distinctive kind of representation in the vicinity falls out of a cursory look at some attitude reporting practices, and part of the *prima facie* motivation for positing an acquaintance constraint is to explain these practices. The rough idea is this. Suppose Ralph believes, like you and I, that there are spies, and so that there is at least one spy. (The example is due to Quine (1956).)

(1) Ralph believes that there is at least one spy.

(1*) Ralph believes that $\exists x (\text{Spy}(x))$

But Ralph has never encountered a spy. His belief is of a mundane, general sort, and would not, unlike (2)—informally regimented as the *de re* ascription (2*)—be of interest to MI5.

(2) There is some thing such that Ralph believes it to be a spy.

(2*) $\exists x (\text{Ralph believes that } \text{Spy}(x))$

The acquaintance theorist can use HARMONY and SUFFICIENCY in conjunction with CONSTRAINT to explain why (2) is false while (1) is true: Ralph is not acquainted with any spy.⁴

Now for the problem cases. There are instances of true, *de re* attitude ascriptions where it is not clear that the subject bears any acquaintance-like relation to the *res*. And when we look at a sufficiently diverse range of such cases, it becomes clear, given the heterogeneity exhibited, that any constraint that might be said to hold is going to be highly disjunctive, epistemically indistinctive, and causally vacuous.⁵ In that case our three principles are incompatible. Rather than go through such a series of cases here, I present one representative example where it is both unclear what acquaintance constraint could be said to obtain and plausible that the relevant *de re* attitude report is neither false nor deviant.⁶

Out of her profound admiration for the spies of MI6, Her Majesty the Queen has decided that each year she will award a Medal of Heroism. Since the files on spies are highly classified, however, she is required to hire an assistant, M, to determine a recipient. She suggests that M award it to the top-performing spy in one of the six continents MI6's spies are posted in. The next day, M assigns continents to the numbers 1–6 and rolls a fair die. Since it lands on 4, she concludes that the top-performing spy posted in Asia is to receive the honour. M consults the classified records and identifies the agent, who is named 'Bond'. Later, M informs the Queen only that a unique spy has been selected. In her speech congratulating Bond at the clandestine ceremony (from which the Queen is absent), M truly reports:

(3) The Queen believes that Bond is a hero.

⁴ There are cases where Ralph is acquainted with some *x* but (2) remains intuitively false. (Suppose Ralph's brother-in-law is in fact a spy.) Such cases do not undermine our explanation. To say (2) is false because Ralph is not acquainted with *x* does not entail that in all cases where Ralph *is* acquainted with *x* (2) is true.

⁵ Hawthorne and Manley (2012) provide a thorough evaluation of the data.

⁶ I owe the shape of this example to Goodman's (2013; 2018) of the childless Gerard seeking an heir.

Given HARMONY, the Queen believes a singular content, and so by SUFFICIENCY has a singular thought. But despite CONSTRAINT she is in no obvious way acquainted with Bond.⁷

In light of cases of this sort, the consensus is that our three principles are incompatible: “If one accepts HARMONY [and SUFFICIENCY], one has to give up acquaintance as a constraint on singular thought” (Récanati 2010: 167–8). If that is right, acquaintance-theoretic ideology is indeed “a dispensable relic of a bygone era” (Hawthorne and Manley 2012: 25). Now this would be a profound conclusion. As Jeshion (2014) urges, the attempt to carve some line between canonical cases of singular thought and cases like the above precludes the identification of any explanatorily valuable acquaintance constraint, undermining the very distinction between singular and descriptive intentionality:

...*however* we explain [...] these sets of cases, what is truly left of the distinction—and, more important, *the value of the distinction*—between singular and descriptive thought? In my view, there remains no contentful, philosophically fruitful distinction (2014: 84–5).^{8,9}

Acquaintance-theorists will want to take a hard look at HARMONY and SUFFICIENCY. SUFFICIENCY, as Hawthorne and Manley put it, is “simply a consequence of a common characterisation of singular thought” (2012: 38). While HARMONY is certainly not sacred, it is supported by the following intuitive picture. Expressions embedded in ‘that-’ clauses have the

⁷ Of course, one could claim that the Queen *is* acquainted with Bond by weakening one’s conception of acquaintance. However, we will soon see that there are cases in which it is even less clear what generalized requirement might be satisfied. My purpose in this chapter is to show that even very demanding views on what it takes to be acquainted with an object can be reconciled with *de re* attitude-reporting such as (3).

⁸ See also Evans’ (1982: 199) remark on the implications of tying the presence of a singular thought to the “rag-bag category” of cases in which we are inclined to use certain psychological idioms.

⁹ Strictly speaking, the ‘sets of cases’ to which Jeshion (2014) refers are not attitude reports but verdicts of intuition about whether a subject ‘has a singular thought’.

same semantic values as when they are unembedded. The semantic value of a ‘that-’ clause is a content. And belief reports express relations between subjects and contents. So long as ‘believes’ expresses the attitude of *belief*, then, if a ‘that-’ clause is *de re* it will require for its truth that the subject be related by ‘believes’ (as it were) to a singular content. A treatment capable of doing justice to the unquestionable subtlety of our ascription practices while nonetheless conforming to this intuitive picture is, at least, off to a good start. And if something like this treatment can be reconciled with CONSTRAINT, as I shall illustrate, it will have a lot going for it. (Notice that the intent of HARMONY is not to deny that modes of presentation or guises can be truth-conditionally relevant. It is just to insist that if the content of a ‘that-’ clause is singular with respect to *o*, the content believed by the subject must, whatever else it may come with (for instance a mode of presentation (Schiffer 1978)), be likewise singular with respect to *o*.)

Though there is perhaps something to be said for the picture of attitude reports enshrined in the conjunction of HARMONY and SUFFICIENCY, it is by no means sacred, and we should feel no regret for departing from it if doing so is required to do justice to the subtlety of our attitude-reporting practices. Indeed, a member of our inconsistent triad *must* go, or at least undergo qualification (given the argument from attitude reports), and I shall be arguing that it is not CONSTRAINT...

There is a range of alternative strategies one might deploy in response to the argument from attitude reports, each with venerable endorsements: rejecting HARMONY (Bach 2014: 457); espousing an error-theory about ordinary language attitude ascriptions (Kaplan 1989a: 555, n. 71); or claiming that acquaintance is not a *de facto* constraint but a normative, *de jure* constraint which may be violated in practice (Récanati 2010).¹⁰ The response I recommend

¹⁰ Burge (2007: 66) mentions significant uses of propositional attitude reports which “do not reflect any particular concern to describe the relevant attitudes at all [but] are aimed at relating the person with the attitudes to an object of interest for the ascriber”. Within this category are ‘pseudo *de re* ascriptions’ (66) (cf.

emerges from an independently attractive framework which offers solutions not only to the acquaintance-theoretic puzzles represented by (3) but to a wealth of recalcitrant attitude-reporting data. This is a virtue which few of the above strategies have manifested.¹¹ While this strategy has its own small but venerable tradition (see below), it has yet to be explicitly developed.

In fact, Hawthorne and Manley and their followers should avail themselves of the antidote recommended here. Hawthorne and Manley call their view that singular thought is not ‘tied to a special relation of causal or epistemic acquaintance’ (2012: 3)—indeed is ‘not subject to any interesting acquaintance constraint’ (2012: 243)—*liberalism*. But there are two interesting and independent views in the vicinity of this negative thesis.

STRONG LIBERALISM: For S to entertain a singular thought about o , S need do nothing more than be able to entertain a paradigm descriptive thought about o .¹²

Kaplan (1989a: 55, n. 71)). Burge calls such examples “a *de re* ascription of a *de dicto* belief” (ibid.). (See also Michael (2010: 303).) Perhaps Burge is best interpreted as rejecting HARMONY, but what he says is compatible with the response advanced here.

¹¹ In some cases it is not clear they succeed. Récanati (2012) claims that mere *expected* acquaintance with an object suffices for the producibility of a singular thought *vehicle* (mental file) and *can* suffice for entertaining a singular thought *content* if one is correct in one’s expectation (165). He concedes that he lacks an account of what it takes to be right in one’s anticipation (2012: 165, n. 7). Any general account seems bound to exclude at least some putative cases.

¹² STRONG LIBERALISM, or views superficially resembling it, have gone by ‘latitudinarianism’ or ‘(the principle of) unrestricted exportation’ (see Borg (2004), Dennett (1987), Harman (1977), Quine (1977), and Sosa (1970)). This attribution is delicate since the denial of acquaintance constraints on *de re* attitude reports has sometimes failed to be distinguished from the denial of such constraints on singular thought. Summarising the interest in propositional attitudes in the 1950s–70s, Burge (2007) says, “the interest in natural language was so dominant in those days that separating the issues about the character of language use from issues about the nature of the attitudes as sharply as we would today was not common or easy” (66, n. 1).

WEAK LIBERALISM: For S to entertain a singular thought about o , S need not be acquainted with o , but S must do something more than merely be able to entertain a paradigm descriptive thought about o .

Whether one counts as an acquaintance-theorist or a weak liberal will depend on the operative notion of acquaintance. On its Russellian interpretation, acquaintance-theorists will be scarce. But if ‘acquaintance’ is viewed as a term exhausted by its role in characterizing whatever constraints on singular thought there are, weak liberalism will cease to be an interesting category. I will not be taking any stances in this chapter, since my aim is only to show that even those with heavy duty conceptions of acquaintance have available an attractive and non-*ad hoc* response to the argument from attitude reports.

Strong liberals deny that there are any distinctive and general requirements on singular thought. If this is correct, the very distinction between singular and descriptive thought comes under strain. The important point is that the denial of CONSTRAINT is compatible with either of these views. This is important because the argument from attitude reports to which Hawthorne and Manley (2012) appeal, if not reined in, leads to the *stronger* conclusion, which they appear inclined to reject...

There are instances of true, *de re* attitude ascriptions where the subject is *by all except the strong liberal's* criteria incapable of entertaining a singular thought about the object in question.¹³ Suppose Phyllis comes across a blog post in which the author, Alice, who has little familiarity with philosophy, and not the slightest with any of its practitioners, claims that all philosophers are engaged in a worthless enterprise. We can easily imagine a scenario in which Phyllis speaks truly when she reports

¹³ The following example is adapted from Hawthorne and Manley (2012: 51).

- (4) Alice believes that I am engaged in a worthless enterprise.

Hawthorne and Manley are not uninterested in potential “form-theoretic distinction[s]” between kinds of mental object-representation (2014: 507), and in “referential vehicles of thought” (2012: 246), “tags, files, or terms of Mentalese” (2012: 247). And this is a good thing. For it seems scarcely plausible that there should be a notion with the epistemological and semantic import mentioned at the outset whose conditions for being realized are trivial or vacuous. Their worry, rather, is that “muddled ideas about acquaintance” are liable to counteract whatever progress is made on “the role of object representations in our cognitive economy” (2012: 248). So while Hawthorne and Manley’s (2012) contribution to the debate concerning the requirements on entertaining a singular thought is a negative one, they are at least amenable to the view that *something* distinguishes episodes of singular thought from those of descriptive thought. Canvassing options for the weak liberal in response to cases like (4), Hawthorne and Manley suggest that perhaps whenever a thinker believes there to be a unique *F* she either habitually does or easily can form a mental file or tag which is referential. But of course *Alice’s* description is indefinite. Alternatively, they suggest, perhaps there are contexts where singular thought itself is easy to come by (2012: 51). In contexts where (4) comes out true, it is true in virtue of Alice possessing a singular thought. However, I take it that if singular thought itself turns out to be a heavily context-dependent phenomenon, it will be of limited theoretical interest, and incapable of sustaining the epistemological and semantic roles with which it is associated.¹⁴ The strategy I recommend here, then, is likely to be refreshing, not only for the noble acquaintance-theorist, but for anyone persuaded by Hawthorne and Manley’s (2012) who has come to see strong liberalism for the radical position that it is.

¹⁴ On the claim that strong liberalism collapses into a kind of eliminativism about singular thought, see Goodman (2018) and Récanati (2010: 168). Hawthorne and Manley appear willing to concede this (2012: 52, n. 32).

In this chapter, I clarify and develop a view of the connection between singular thoughts and *de re* attitude reports which has been suggested by Evans (1982), Peacocke (1983), Chalmers (2011), and most recently Goodman (2013; 2018). I argue that in addition to being independently attractive, it allows us to maintain both CONSTRAINT and HARMONY while also, as a bonus, preserving the classic acquaintance-theoretic explanation of (2)’s falsity at the imagined context. While one of the upshots is that SUFFICIENCY must be rejected in its unqualified form, there is a robust sense in which it remains universally true, and its use in the acquaintance-theoretic explanation of (2)’s falsity can be retained. Insofar as sacrifices must be made concerning the SUFFICIENCY principle, then, these should come to seem independently plausible.¹⁵ What has made the liberal’s argument compelling is an implicit, poorly-motivated semantics. Once we have a semantics which is sensitive to the subtleties of our ascription practices, a wealth of puzzles—and the principal argument against acquaintance—fall away.¹⁶

1.2 Contextualism and singular thought

Contextualists about attitude ascriptions think that constructions of the form ‘*S* Φ s that *p*’, where ‘ Φ ’ is some propositional attitude verb (e.g. ‘believes’), are context-sensitive. It is possible for two speakers to literally and sincerely assert ‘*S* Φ s that *p*’ and ‘It is not the case

¹⁵ As Hawthorne and Manley remark, SUFFICIENCY “is simply a consequence of a common characterisation of singular thought” (2012: 38).

¹⁶ Broadly similar semantics are discussed in Bach (1997; 2010), Chalmers (2011), Cumming (2013), Forbes (1987), Récanati (1993), Richard (1990), Schiffer (2003), and Stalnaker (1988). In a separate vein, Evans (1982) insists that certain ordinary language attitude expressions have only a loose connection to the level of mental representation he calls *understanding*. This is echoed in Chalmers (2011: 612), Peacocke (1983: 196–7), and especially Goodman (2013; 2018). However, it is sometimes unclear whether these authors mean to reject HARMONY. I clarify and extend the latter train of thought by advancing a semantics akin to the former group of authors.

that S Φ s that p ', respectively, and for each to speak truly. Where this occurs, the (extra-linguistic) *contexts* at which these sentences are used will differ in respect of some feature to which the construction ' S Φ s that p ' is sensitive. The sort of contextualist I have in mind will deny that the speakers express the same semantic content in their respective uses of the sentence ' S Φ s that p ', for there are many belief-relations which can be expressed by the attitude verb 'believes'. Which belief-relation is expressed by a use of 'believes' at a context is partly determined by features of the context, such as the purposes, expectations, and presuppositions of the speakers using these sentences. We might say that ordinary language propositional attitude verbs are indexical expressions. The moral, in any case, is that the role played by attitude-reporting sentences of the form ' S Φ s that p ' in our linguistic practice is not well-served by the specification of some unique and complete semantic content as their compositional semantic value.

This story will be developed in §§1.3–4. There are, of course, many ways of recognising context-sensitivity in attitude-reporting sentences. Assuming the phenomenon is triggered by some syntactic constituent at logical form, it may be located in the attitude verb (e.g. Richard, 1990), in the complementiser 'that-' (e.g. Chalmers, 2011), in some covert indexical (e.g. Schiffer, 1978), or in the report's 'that-' clause: 'that p ' (e.g. Récanati, 1993). Alternatively, we might take the relevant contextually determined propositional constituent to be 'unarticulated' (Crimmins and Perry, 1989). Or we might take the semantic content of ' S believes that p ' on an occasion of use to be incomplete or underdetermined (Bach, 1994). My rationale for presupposing an indexical, 'verbalist' framework in this chapter will become clear.¹⁷

The upshot of the semantic framework advanced in §§1.3–4 is that appearances of 'belief', 'believes', etc. in HARMONY and SUFFICIENCY are context-sensitive. What believing a

¹⁷ The official story will be that attitude verbs like 'believes' contain an argument place for a covert indexical.

singular content amounts to, and what it requires of a subject, is a context-dependent matter. However, expressions such as ‘singular thought’ are theoretical terms of art which do not contain context-sensitive elements at logical form. Whether a subject *has a singular thought* is not a context-dependent matter. On a conception of singular thought constitutively tied to a distinction at the level of *content*, there will be some relation(s) the bearing of which by a subject to a content is not a context-dependent matter. And, as a corollary, whether a subject is *acquainted* with an entity will not be a context-dependent matter. Consequently, there is a nearby principle which the acquaintance-theorist must reject:

CONCORD: Any belief ascription whose ‘that-’ clause contains, at the level of logical form, either a singular term or an objectual variable bound from outside the scope of the belief operator requires for its truth that the subject *entertain a singular thought*.

Note that CONCORD is an abridged form of HARMONY and SUFFICIENCY, absent the context-sensitive appearances of ‘believe’ and ‘believing’.¹⁸ CONCORD claims that at *all* contexts at which a true, *de re* belief ascription is made, the attributee entertains a singular thought. The key point is that HARMONY and SUFFICIENCY, as presented above, leave open the possibility that the appearance of ‘believe’ (in HARMONY) and ‘believing’ (in SUFFICIENCY) might express different belief-relations. CONCORD eliminates this possibility, closing the gap which permitted non-uniform interpretation.

¹⁸ Given the thesis of contextualism, it is worth clarifying that the appearance of ‘believe’ in HARMONY must not be read as corresponding to the theorist’s context (i.e. the context of the individual stating the principle), but as having the semantic value of the use of ‘believes’ at the context of the ascription in question.

While HARMONY remains true for every possible relation expressed by a use of ‘believes’ at a context, this is not true for SUFFICIENCY. Some contexts place undemanding requirements on what a thinker must do in order that she fall under the ordinary language predicate ‘believes that p ’ and, where p is a singular content, it is possible that those requirements are outstripped by the (context-invariant) requirements on entertaining a singular thought. In that case, SUFFICIENCY must be rejected. Some belief-relations one can bear to a singular content do not suffice for one’s entertaining a singular thought. As we will see, those expressed by the uses of ‘believes’ in the contexts of (3) and (4) are of precisely this sort.

What is essential to this move is that the acquaintance theorist will adopt ‘entertains’ as a theoretical *term of art*, sensitive to the explanatory purposes of her theory of mind. In a variety of guises, philosophers have claimed that a thinker may fail to occupy a *belief state*, say, with the content that p , despite falling under the ordinary language predicate ‘believes that p ’ at some context.¹⁹ It is this sort of move which the acquaintance-theorist will deploy at this point in her response to the argument from attitude reports.

[A subject] could be sensibly described as *believing that NN is F* [...]. But it seems to me that this sort of belief-ascription is very closely tied to [her] disposition to *say* that NN is F [...]. And this leaves the substantive question, whether [she] can entertain [singular] thoughts about the referent, in the sense which concerns us, untouched (Evans 1982: 401).²⁰

¹⁹ Evans (1982) and Goodman (2013; 2018) appeal to the notion of ‘entertaining’, Peacocke (1983: 196–7) to the ‘*Bel*’ relation, and Chalmers (2011) to ‘endorsing’. Dorr (2011: 940–1) similarly categorises Loar’s (1988) notion of ‘psychological content’, Stalnaker’s (1988) ‘compatibility with a subject’s beliefs’, and Lewis’ (1979a) ‘the objects of belief’. See also Bach’s (1997) claim that ‘belief reports do not report *beliefs*’ (215).

²⁰ It is tempting to read Evans as suggesting that there are contexts in which ‘believes’ requires little more than that the attributee elicit a disposition to say ‘*NN is F*’. This is compatible with HARMONY. But Evans elsewhere explicitly rejects HARMONY (1982: 129).

[We should distinguish] sharply between the truth of a belief sentence in which the ‘that’-clause contains a [singular term] and the presence of the referent [...] as a constituent in some (neo-Fregean) thought to which the believer has the attitude which I shall label ‘*Bel*’. [...] ‘*Bel*’ is a piece of notation which is intended for making explicit the cognitive features of thoughts to which a subject has propositional attitudes (Peacocke 1983: 196–7).

...to say that someone believes a proposition is to give a fairly coarse-grained description of their psychological state, [...] compatible with numerous more fine-grained descriptions of the [...] proposition that they endorse (Chalmers, 2011: 612). [...] ‘endorse’ is here being used as a technical term (604) [which] captures the underlying cognitive state of believers (619).

Despite the nomenclature, *entertaining* or *endorsing* a proposition need not be an occurrent mental act (unless, of course, one’s theory of mind is only interested in specifying contents for these purposes). Though I may be accused of terminological abuse, I follow the precedents of Evans (1982) and Goodman (2018) in adopting ‘entertains’ as a term of art, since I hesitate to introduce further terminology. In what follows, I attach ‘+’ to ordinary language attitude verbs when I mean to pick out this underlying level of psychological reality. What is not obvious, in sum, is that the relations expressed by ordinary language attitude verbs track our invariant *entertains* relation. While there may be little of philosophical interest to say about the requirements on falling under the ordinary language predicate ‘believes that *p*’ at a context, where *p* is a singular content, there may be much of philosophical interest to say about the requirements on entertaining a singular thought—or, believing⁺ that *p*.

This is not to say that ordinary language attitude verbs are of no serious semantic or theoretical interest. For example, even if it were insisted that ‘believes’ often fails to capture

some philosophically significant level of content, it expresses (at a context) a relation which will interest us in marking relations of agreement and disagreement between conversational participants.²¹

The core of the strategy against the argument in §1.1 is the rejection of SUFFICIENCY except at privileged, theoretical contexts. The rejection of SUFFICIENCY on its own is not a claim about the semantic structure of propositional attitude-reporting sentences. While those wedded to other accounts of propositional attitude reports may be attracted to rejecting SUFFICIENCY, my claim that SUFFICIENCY holds at certain privileged contexts (those, roughly, at which the speakers are engaged in the theory of mind) suggests that there are many belief-relations expressible by ‘believes’, some of which, when borne to a singular content, do suffice for the possession⁺ of a singular thought. HARMONY will then come out true on any uniform interpretation of ‘belief’ and ‘believe’ if we suppose that the context-sensitivity of attitude reports consists in the context-dependence of the ‘belief’ relation. §§1.3–5 show that this sort of picture of the connection between *de re* reports and singular thoughts can be clarified and motivated in an *independently* appealing way. This development, however, involves sacrificing neutrality on the semantics of propositional attitude-reporting sentences (and, given a contextualist treatment, on the source and nature of their context-sensitivity).²² The rationale for maintaining SUFFICIENCY in qualified form is that detaching our account of singular thought entirely from the bearing of an attitude to a singular content threatens to leave us with little grip on the phenomenon (recall the introduction to singular thought given above). The qualification of SUFFICIENCY lets us characterise singular thought via the characterisation of belief⁺ and the specification of those contexts at which ‘belief’, so to speak, amounts to

²¹ This point is made by Chalmers (2011: 619). It is best to interpret ‘agree’ and ‘disagree’ here not as attitude verbs (concerning which there may be some psychologically deeper level of facts of interest to philosophers of mind) but as relations to uses of sentences, playing the role of conversational markers.

²² For reasons of space I am unable to provide an independent defence of verbalism over alternative treatments here, though responses to some natural objections against the view are provided in §1.4.

belief⁺: for to *believe*⁺ a singular content about *o*—to entertain a *singular thought* about *o*—one must be acquainted with *o*.

While we must reject the unqualified SUFFICIENCY principle, it is possible to claim that the appearance of the term of art ‘singular thought’ in SUFFICIENCY has the effect that, whenever SUFFICIENCY is uttered, it is true. Contextualists about knowledge have sometimes suggested that mere mention of a skeptical scenario is sufficient for its being a relevant alternative, a scenario which must be excluded by the subject if she is to possess the relevant piece of knowledge. Lewis (1996) suggests that the mere production of a knowledge report can suffice for the relevance of unattended-to possibilities:

I say *S* knows that *P* iff *P* holds in every possibility left uneliminated by *S*’s evidence—Psst!—except for those possibilities *we* are properly ignoring [...]. Do I claim you can know that a possibility *W* does not obtain just by ignoring it? [...] Well, [...] I do not claim it for any specified *P* or *W*. [...] knowledge just by presupposing and ignoring *is* knowledge; but it is an especially elusive sort of knowledge. [...] Simply *mentioning* any particular case of this knowledge [...] is a way to attend to the hitherto ignored possibility [...] and thereby create a context in which it is no longer true to ascribe the knowledge (Lewis 1996: 561–2).

If this is correct it is possible to suggest that ‘Knowing a proposition is sufficient for undermining Cartesian scepticism’ will be true whenever uttered, despite it not being true with respect to every relation which can be expressed by a use of ‘knows’. By analogy, it is possible to claim that ‘Believing a singular content is sufficient for entertaining a singular thought’ will be true whenever uttered. In the first case, the standards for knowledge are raised by the relevance of skeptical scenarios. In the latter, the standards for *believing a singular content* are raised by the use of a term of art. For all that is to be said here, then, there may be a robust

sense in which SUFFICIENCY is universally true. Arguing for this in any detail, however, is beyond the scope of this chapter. What is important is that as we explore the framework's treatments of recalcitrant puzzle cases, the sacrifices made concerning SUFFICIENCY shall come to seem independently plausible, complementing rather than undermining the considerations which made it seem like a natural principle to endorse.

1.3 Blueprint for a contextualist semantics

It is astonishing what language can do [...]. [And it] would be impossible, were we not able to distinguish parts in the thought corresponding to the parts of a sentence, so that the structure of the sentence serves as an image of the structure of the thought.

— Frege (1923/63: 1).

This section presents one particularly attractive shape for the sort of contextualist semantics discussed in §1.2 and begins to explore its puzzle-dissolving power. While its treatment of *de re* ascriptions is emphasised here, it will be clear that an account of *de dicto* ascriptions is also provided. In §1.4 I return to illustrate how the proposal should be used by acquaintance theorists to respond to the liberal's argument.

1.3.1 Saying what others think

Sentences of natural language are used not only to say how the world is but to say how others take the world to be. On the account presented in this section, we truly report what others think, at least in the contexts upon which all others are parasitic, by taking advantage of the

fact that intentional states of mind are structured in such a way that language may serve as a faithful reconstruction of thought. At least, our folk-psychological practices work on the assumption that propositional attitudes are

structured states (some of) whose components are concepts, and that the concepts composing a particular belief are at least roughly correlated with the words we would use to express the contents of the belief (Stich 1982: 159).

If this is an accurate story, and if our folk-psychological practices are to be in with a chance of being correct, there must be some truth to Frege's remark about the potential for a sentence to serve as an image of a thought. It is, of course, not the whole truth.²³ As we proceed through the course of this chapter, we will see that dilutions of this sort of requirement are both possible and responsible for an array of puzzling attitude-reporting data.

This section assumes a representational theory of mind according to which propositional attitudes are compositionally structured representations. It is not a commitment of the account that representations are shareable, and in the literature this sort of position usually departs from the neo-Fregean tradition in this way: mental content-vehicles "are not shareable like theories or conceptions, but are agent-bound like headaches" (Crimmins 1995: 465).²⁴ Still, some headaches, I want to say, are more (interpersonally) similar than others.

I will be maintaining the assumption that contents have a Russellian structure, constituted by particulars, properties, and quasi-syntactic elements (see Salmon 1986: 143–51).

²³ §1.3.4 will address the issue of dispositional, or tacit, propositional attitudes, and suggest compatibility with a theory of mind which is less structurally demanding than that assumed merely for lucidity in what follows.

²⁴ Proponents of 'this sort of position' include Crimmins (1992; 1995), Crimmins and Perry (1989), Fodor (1990), Millikan (2000), Richard (1990), and Salmon (1986). Cumming (2013), another advocate, baptizes the view 'iconodulism'.

But thinkers entertain Russellian contents under guises. And often, when we talk about thinkers' attitudes, we care about the *how*. The guise under which the subject of a *de re* belief report represents the *res* often matters to us. Other times, as 'direct reference' theorists are wont to point out, we only care about the *what*. When we do care about the how, it seems that context plays a role in determining the standards of 'fit' required between a singular term in the ascription's 'that-' clause and a content-vehicle in the mind of the subject. This has often been referred to as the 'opacity/transparency' distinction. But there is arguably a sliding scale here: "a continuum along which an embedded expression can be explicit about the vehicle of an attributed belief" (Fodor 1990: 169).

The first move in our semantics is to think of there being a kind of set-theoretic entity determined by attitude⁺ states and 'that-' clauses such that each element of the Russellian content expressed is paired with its representational vehicle. A sentence *S*, expressing the content that *p*, determines what I will call a *sticky proposition*: a pairing of the sub-sentential components of *S* with the components of *p* they respectively express. We are to think of 'that-' clauses as determining a proposition-like entity which is 'sticky': picking up the linguistic material by means of which its content is expressed.²⁵ To see this in action, suppose Ba the Babylonian is looking at the night sky. His friend Ia says, 'Ba believes that Hesperus is bright'. We have two relevant sticky propositions, one (of many) determined by Ba's belief⁺ state, one determined by Ia's use of 'that Hesperus is bright'. The Russellian component, which I will henceforth call the 'R-proposition', is preserved across each of the two sticky propositions. That is, we have the planet Venus and the property *brightness*. What differs are the

²⁵ I use 'determines' in connection with sticky propositions, reserving 'expresses' for semantic content proper. Sticky propositions are simply set-theoretic entities to which we as theorists may appeal in stating the truth-conditions of attitude reports. This framework is closest to Richard's (1990; 2013), but the quasi-singular propositions of Schiffer (1978) *et al.* are also similar. Nonetheless, these writers do claim that 'RAMs' and quasi-singular propositions, respectively, are proper objects of belief (see Richard (2013: 101)).

representational vehicles. Where Ia uses a proper name to refer to Venus (*o*) and a predicate to refer to the property of *brightness*, Ba uses two cognitive vehicles, R^1_{Ba} and R^2_{Ba} .

Ba: $\langle \langle o, R^1_{Ba} \rangle, \langle \text{brightness}, R^2_{Ba} \rangle \rangle$

Ia: $\langle \langle o, \text{'Hesperus'} \rangle, \langle \text{brightness}, \text{'is bright'} \rangle \rangle$

What, then, makes Ia's belief ascription true? Is it just that she gets the R-proposition right? This looks much too weak. Would the report 'Ba believes that Venus is bright' be true? If Ia comes to learn that Hesperus is Phosphorus, would her ascription 'Ba believes that Phosphorus is bright (this evening)' be true? There are certain transparent readings of these ascriptions on which they get to express truths, but at most contexts 'Ba believes that Phosphorus is bright (this evening)' will ring false. How can we account for this diversity of intuitive truth-value assignments?

We can define a context-dependent relation between the sticky propositions determined by attitude⁺ states and 'that-' clauses. Call it *correlation*. What correlation amounts to—whether or not two sticky propositions correlate or 'match'—will vary across contexts. In particular, belief reports express different belief-relations at different contexts. And which belief-relation is expressed on an occasion of use turns on the interpretation of a covert indexical, for which ordinary language attitude verbs contain an argument place, determined by the context's set of correlations between all sticky propositions.²⁶ The generalised truth-

²⁶ These relations will be reflexive, symmetric, and transitive. In other words, a context of use will provide a partition on the space of sticky propositions. The transitivity condition is arguably required to accommodate inferences of the following sort: 'A believes what B believes'; 'B believes what C believes'; 'Therefore, A believes what C believes' (where no shift in context occurs). An account which, like Forbes' (1987), requires a context-dependent degree of *similarity* to obtain between 'sticky proposition'-like entities will have difficulties preserving the transitivity needed to underpin such inferences. (See also Richard's (2013) notion of *translation*.)

conditions for attitude reports, in the ordinary case, will run: ‘NN believes that S ’ is true at a context of use c iff NN has a belief⁺ in the Russellian content expressed by ‘that S ’ (at c) and the sticky proposition determined by ‘that S ’ correlates with the sticky proposition determined by NN’s belief⁺ in that content, where the standards for correlation are those operative at c .^{27,28}

This will all become clearer once we get to looking at some puzzle cases. Before that, however, allow me to briefly clarify the role of sticky propositions. Sticky propositions are a set-theoretic resource appealed to when stating the truth-conditions of attitude-reporting sentences. They are not the objects of attitudes or the semantic values of sentences (certainly not if one takes there to be just one sort of entity which plays either of these roles). ‘That-’ clauses embed under quantificational and intensional operators in the usual way. We need not make sense of sticky propositions being evaluated for truth on a variable assignment or at a possible world in order to accommodate constructions such as ‘The thing believed by Tim is necessary’, ‘Everyone in the room believes that p ’, or ‘John believes that p for some p ’. I could, equally, have spoken of correlation as a more complex relation, relating a Russellian content alongside its ‘vehicle matrix’ to some other Russellian content and vehicle matrix. The schematic truth-conditions would then run: ‘NN believes that S ’ is true on an occasion of use if and only if the R-proposition expressed by ‘that S ’ (at c) correlates with an R-proposition expressed by the belief⁺ state of NN, *and* the *vehicle matrix* determined by ‘that S ’ correlates with a vehicle matrix determined by the belief⁺ state of NN, where the standards for

²⁷ These truth-conditions will be augmented in §1.4.

²⁸ Cumming (2013) recommends thinking of this kind of contextualist framework in such a way that the standards for ‘coordination’ between agents’ ‘mental symbols’ are instead introduced postsemantically, by a parameter of the point of evaluation (see Chapter 2). He suggests this to avoid oversophistication worries since linguistic reference “is conventional, and unsophisticated or defiant agents lack both the knowledge and the will to enter into an explicit convention to refer, explicitly or implicitly, to a mental symbol” (2013: 6). However, while on my setup mental symbols are constituents of the content of attitude reports, they are not *referred* to, in Cumming’s sense. Still, those acquaintance-theorists who prefer a picture where the contextual standards are introduced postsemantically may reap the dialectical rewards of this framework.

correlation are those operative at c . The diagram of Ba and Ia's exchange above would then look as follows:

Ba: $\langle o, \textit{brightness} \rangle, \langle R^1_{Ba}, R^2_{Ba} \rangle$
 Ia: $\langle o, \textit{brightness} \rangle, \langle \text{'Hesperus'}, \text{'is bright'} \rangle$

This diagrammatic change should serve to illustrate the terminological nature of the choice at issue.

Let us first explore how the framework handles notorious 'Orcutt' (or 'double vision') cases (introduced to the literature by Quine (1956)). Suppose Ann is up late reading in bed when she hears suspicious rustling from outside. Fearing that her prize-winning vegetables are being sabotaged by a jealous neighbour, she steps out onto the porch, at time t , and fixes her gaze on the bushes from which all the noise seems to be coming. After some hesitation, she plucks up the courage to investigate. She supposes that her cat, Bruce, is likely trailing not far behind her. But once Ann reaches the bushes she realises, at t' , that *Bruce*—whom she had mistakenly locked outside—was responsible for the noise all along. Her two grandchildren, knowingly watching the events unfold from their window, might have had the following conversation at t , as Ann stepped outside:

- (5) A: Ann believes that Bruce is a fox hiding in the bushes!
- (6) B: No, Ann believes that Bruce is her *neighbour*, Casey, sabotaging her vegetables.

Two neighbours unaware of the noise or the creature responsible for it, but seeing that Ann is out in the garden, might have simultaneously had a different conversation, in which they hypothesise only about whether Ann is aware of Bruce's curious nature:

- (7) C: Ann believes that Bruce is curled up asleep on the sofa.
- (8) D: No, Ann believes that Bruce is curiously trailing behind her.

I take it that, in our scenario, the *de re* belief reports in (5) and (7) are false, while those in (6) and (8) are true. The important thing to note is that each conversation has its own standards for resolving which object-representation in Ann's mind is correlated with the use of 'Bruce'. These ways of resolving the unspecificity in which object-representation of the subject's is to be correlated with the name 'Bruce' are incompatible with one another. No single context would easily accommodate both conversational threads, since different requirements on correlation are in play. This explains the invalidity of the inference from (9) and (10) to (11):

- (9) Ann thinks that Bruce is Casey.
- (10) Ann thinks that Bruce is curiously scampering around behind her.
- (11) Therefore, Ann thinks that Casey is curiously trailing behind her.

Quite generally, if the subject has multiple representational vehicles concerning a single thing (in the sense that it is in principle possible for them to rationally take conflicting attitudes⁺ to contents which are singular with respect to that thing), there will be cases in which it is important for the context to resolve a *de re* ascription, for there will be multiple eligible candidates which may be correlated with the singular term in the reports 'that-' clause, and which one is correlated may affect the truth-value of the report.

This sort of data arguably provides motivation for thinking of transparency/opacity not as a binary phenomenon, but as something which comes in degrees. It is not that there are just two interpretations of a *de re* ascription like (6): one which requires that Ann think, concerning Bruce *qua* her beloved pet cat, that he is her neighbour Casey, and one which

requires nothing more than that Ann have *some representational vehicle or other* which concerns Bruce but with which she associated the property of being her neighbour Casey. Rather, there is a spectrum along which the requirements for correlation vary. The semantic framework sketched here is in a privileged position to accommodate this ‘mixed’ reading data. Subsequent sections will explore a variety of effects this phenomenon has on the truth-conditions of *de re* attitude reports.

In the first instance, correlation relates sticky propositions. It will be congenial in what follows, however, to also talk of correlation relations between the *constituents* of sticky propositions, in a derivative sense.²⁹ Ascriptions (5)–(8) briefly explored the mechanics of correlation between singular terms. But correlation extends to all sorts of expressions appearing in the ‘that-’ clauses of attitude reports. Suppose Lisa is trying to figure out where it would be best to hang a picture in her new office. Looking at the frame, she judges⁺ it, explicitly, to be roughly 30 centimetres in length along each edge. At most contexts, the following report will intuitively be true:

Lisa thinks the frame is roughly 12 inches long.

In this case, the use of the predicate ‘is roughly 12 inches long’ is correlated with a vehicle exercised by Lisa which would, in certain stricter contexts (where the standards for correlation are more stringent), be truly reported only by instead using the predicate ‘is roughly 30 centimetres long’. I will call contextual variation in what is required in order for two expressions to correlate the ‘transparency/opacity’ scale.

²⁹ Further motivation for taking sub-propositional correlation as derivative is suggested by cases in which it matters *where* in the sticky proposition a representational vehicle appears. (See the discussion of (12)–(13).)

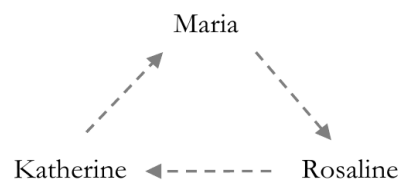
1.3.2 Cumming's (2007) puzzle

The foregoing discussion should indicate the framework's general plausibility. This is important. If the semantics required by acquaintance theorists is independently motivated, the liberal's trademark argument should lose the force it has long been taken to have.

Consider, then, the solution it offers to a further puzzle case, much-discussed in recent literature. Rosaline, Maria, and Katherine are to attend a masked ball.

Each lady anticipates (tepidly) the attentions of a different suitor, and each suitor has given his lady a favour to wear, by which he hopes to recognize her during the masque. The ladies, with malice aforethought, decide to swap favours and so cause the suitors to 'woo contrary' (Cumming 2007: 83).

The exchange of favours is represented in Figure 2, below (Cumming 2007: 84).



— Figure 2.

At the evening's first dance, Biron, originally intended for Rosaline, takes *Katherine's* hand. Maria remarks:

(12) Biron thinks Katherine is Rosaline.

Her remark is true, yet in the same circumstances the following seems false:

(13) Biron thinks Rosaline is Katherine.

The puzzle is that Biron appears to be irrational, at least assuming the ‘is’ here expresses identity (a symmetric relation), since he fails to believe a trivial logical consequence of what he believes. Cumming (2007) uses this puzzle to suggest that names are not singular terms. Can our semantic framework provide an alternative treatment of the puzzle?

The parallels between (12)–(13) and (9)–(11) should be encouraging. On the reading required to generate the irrational entailment (that Biron believes $a = b$ but not $b = a$), each occurrence of ‘Rosaline’ in (12)–(13) and of ‘Katherine’ in (12)–(13) must occur with the same degree of transparency/opacity. However, these are not the readings responsible for the intuitive, divergent truth-value assignments. On the natural diagnosis, ‘Katherine’ appears transparently in (12) and ‘Rosaline’ opaquely. What this means is that, in (12), the constraints required for ‘Katherine’ (roughly, given its grammatical position) to correlate with a representational vehicle in Biron’s mind do not extend beyond preservation of reference. In contrast, the constraints required for ‘Rosaline’ (roughly, given its grammatical position) to correlate with a representational vehicle in Biron’s mind are more substantive. To use the metaphor of mental files, what the truth of (12) requires is, roughly, that information gathered by Biron’s perceptual object-representation of the thing which is in fact Katherine is feeding into his standing file on Rosaline.³⁰ This condition is satisfied in our scenario, and so (12) comes out true.

Constructions in the form of (12) and (13) have a quite general tendency to promote transparent readings of the grammatical subject and opaque readings of the grammatical

³⁰ While it is useful to adopt the ‘file’ metaphor here, I need not incur the commitments associated with prominent file-theorists (e.g. Récanati, 2012). The notion of a representational vehicle I assume is lightweight, corresponding just to whatever cognitive resources a thinker reliably employs in her representations as of a particular object (or plurality). (Note that Cumming (2007: 85), in his solution, appeals to ‘deictic mental symbols used to track objects’.)

object.³¹ Indeed, the same sort of explanation can be given of (13)'s falsity. In (13), 'Rosaline' appears transparently and 'Katherine' opaquely. What this means is that the constraints required for 'Rosaline' (roughly given its grammatical position) to correlate with a representational vehicle in Biron's mind do not extend beyond preservation of reference. In contrast, the constraints required for 'Katherine' (roughly given its grammatical position) to correlate with a representational vehicle in Biron's mind are more substantive. In file-talk, what the truth of (13) broadly requires is that information gathered by Biron's perceptual object-representation of the thing which is in fact Rosaline is feeding into his standing file on Katherine. This condition is *not* satisfied in our scenario, and so (13) comes out false. The truth in the vicinity, of course, is that Biron thinks Rosaline is *Maria*.

In sum, our framework explains the divergent truth-values of (12) and (13) as follows. The 'that-' clause of Maria's utterance of (12) expresses the following sticky proposition:

$$\langle \langle =, 'is' \rangle, \langle k, 'Katherine' \rangle, \langle r, 'Rosaline' \rangle \rangle$$

At the context at which (12) is uttered, the sticky proposition its 'that-' clause expresses is correlated with at least one sticky proposition expressed by Biron's belief⁺ state, namely:

$$\langle \langle =, 'is' \rangle, \langle k, R^1_{\text{Biron}} \rangle, \langle r, R^2_{\text{Biron}} \rangle \rangle$$

In contrast, the sticky proposition determined by the 'that-' clause of an utterance of (13) at the same context, illustrated below, is not correlated with the above sticky proposition, nor with any other in the space of Biron's belief⁺ state.

³¹ Not always, however. Suppose Rosaline scolds Biron. He might excuse himself with either 'I thought you were her!' or 'I thought she was you!' Likewise, there appear to be ways of making a use of (13) felicitous. Cumming (2007: 86, n. 16) brings this out using the following dialogue: 'Who does Biron think Rosaline is?'; 'He thinks Rosaline is Katherine'.

$\langle \langle =, \text{'is'} \rangle, \langle r, \text{'Rosaline'} \rangle, \langle k, \text{'Katherine'} \rangle \rangle$

This fails to be correlated with the same sticky proposition with which the ‘that-’ clause of (12) is correlated partly due to the quasi-grammatical structure preserved by sticky propositions, in virtue of which the sticky proposition determined by (12) is distinct from that determined by (13). Again, constructions in the form of (12) and (13) have a quite general tendency to promote transparent readings of the grammatical subject and opaque readings of the grammatical object.

1.3.3 Tricky cases

There are more complicated scenarios in which it seems that correlation is required to select multiple representational vehicles. Returning to our story about Bruce the cat, suppose that as Ann first steps out to investigate the noise she sees a small animal, which is in fact Bruce, scurry across the garden. Since she already suspects her neighbour Casey to be responsible for the commotion, however, she does not think much of the scurrier. Call this visual representational vehicle ‘*V*’. As she gets closer to the rosebush, she reaches in and feels something fluffy—again, it is in fact Bruce. Suppose that Ann does not associate the fluffy object with the small animal, nor, again, with the source of the noise, with Casey, or with her beloved cat Bruce. Call this haptic representational vehicle ‘*H*’. Now consider the following *de re* belief report.

(14) Ann believes that Bruce is small and fluffy.

As in reports (4) and (5), ‘Bruce’ is used transparently: correlation between the relevant content-vehicles in this case seems to require little more than sameness of referent.³²

To the extent that one is inclined to evaluate (14) as true, there are various ways an explanation might go. We could say that ‘Bruce’, in its single appearance, is correlated with *both* V and H . However, this strategy would need to be finessed in order to accommodate cases where, in addition, the subject associates with V the property of not being fluffy, or with H the property of not being small. A more preferable option is to suggest that insofar as the ascriber speaks truly, she speaks lazily—eliding the proper repetition of ‘that Bruce is’ in the second conjunct. Its second appearance would be correlated with H and the first correlated with V .

Perhaps in support of this proposal, note that it is often difficult to make use of unevenly demanding correlations within this sort of construction. Although Ann represents Bruce, via H , as being fluffy, suppose that she does not think of Bruce (*qua* her beloved pet cat) as fluffy. (I.e. the former vehicle preserves little more than reference, whereas the latter is apt for correlation in contexts with highly opaque standards.) Now consider the pairs below.

(15a) Ann believes that Bruce is fluffy and her beloved pet cat.

(15b) Ann believes that Bruce is fluffy and that Bruce is her beloved pet cat.

(16a) Ann believes that Bruce is fluffy and not fluffy.

(16b) Ann believes that Bruce is fluffy and that Bruce is not fluffy.

³² I say ‘little more than’ here since if the standards were wholly transparent, Ann’s ‘Bruce’-vehicle or her ‘sabotager’-vehicle, both of which concern Bruce, could be correlated with ‘Bruce’ in (14) without making the report false. But this seems incorrect on the natural reading of (14). Here, we see further evidence of the way in which correlation is not a binary phenomenon. ‘Bruce’ cannot be read as *wholly* transparent, since Ann’s ‘Bruce’-vehicle—i.e. the one with which she associates the property of being her beloved pet cat—cannot be correlated with ‘Bruce’ without making (14) false.

Both (a) sentences sound intuitively bad, whereas the (b) sentences sound more promising. This seems to suggest that when correlation differs not only in its relata but in its context-dependent standards, there is additional pressure for the speaker to be explicit in her repetition of the singular term (in this case, ‘Bruce’) in order to signal her intention to introduce new standards. In contrast, an informed hearer of (14) can be more reasonably expected to detect the speaker’s exercise of two minimally demanding correlation relations (though, again, repetition of the term ‘Bruce’ would have made this reading more accessible).

1.3.4 Objections

Before moving on to elucidate how the contextualist proposal above can be used in answer to the argument from attitude reports in §1, now is a good time to assuage some potential concerns.

1. *What is it about the interests, expectations, and presuppositions of speakers that determines which set of correlations on sticky propositions are in play at a given context?* Attending to the details of the Ann and Bruce example in §1.3.1, the reason A and B’s context determines standards sufficiently loose as to permit correlation between their uses of ‘Bruce’ and the relevant object-representation in Ann’s mind at *t* is that the purpose of their conversation is to establish what Ann *mistakes Bruce* (*qua* ‘that thing in the bushes’) for. These interests, as we have seen, are like those of Maria’s conversation in connection with Katherine in (12). In contrast, C and D’s conversation occurs in a context in which the standards are not sufficiently loose as to permit correlation between their uses of ‘Bruce’ and that same object-representation in Ann’s mind at *t*. This is because they are interested not in who Ann might have mistaken Bruce the cat for, but with whether Ann is aware of *her cat’s* behavioural disposition. This is witnessed by the fact that an utterance of (6) at this context would be as wild—and, indeed, *false*—as (11) is. And, again, this same phenomenon is responsible for

generating the ‘puzzling’ falsity of (13). The general explanation is that speakers’ interests, and their expectations about their audiences’ interests (among other things), play a role in determining the degree of match required (between, at least (see §1.4), the expressions in the ‘that-’ clause and the vehicles in the mind of the subject) in order for an attitude report to be true.

2. *In what sense is the opacity/transparency distinction a ‘sliding scale’ or a matter of degree?*

Reporting beliefs is not like direct quotation. Attitude reports cannot embed the very vehicles of thought which subjects themselves use. And accuracy or faithfulness to the way in which a subject thinks of a thing will come in degrees. For example, in the example of Lisa above, where Lisa uses a cognitive vehicle she might most faithfully give voice to by saying ‘roughly 30 centimetres’, an attributor might, depending on the standards at the context of use, felicitously use ‘roughly 30 centimetres’, ‘roughly 12 inches’, or even ‘roughly the length of a sheet of A4’. Familiarly, in the same sort of way, ‘Clark Kent’ can be more accurate to a subject’s way of thinking of a person than ‘Superman’—with the felicity of an alternative device such as ‘That person’ (pointing to the man) perhaps falling somewhere in between.

3. *Isn’t it often true to ascribe beliefs to subjects concerning things about which they have no representational vehicle?* I venture that you, the reader, believe that Palermo is north of Malawi and that $7935 + 8226 = 16161$, despite you having never explicitly reflected on the matter. Often these are called ‘tacit’ or ‘dispositional’ beliefs, the idea being that while the subject does not believe⁺ the proposition attributed, they could be brought to do so with gentle coaxing given what they do believe⁺.³³

There is no requirement in the proposal articulated here that there must be a representational vehicle in the mind of the subject for each expression in the ‘that-’ clause of a

³³ In this sense, the notion of belief expressed by ‘believes’ is a folk-theoretical construct: “Beliefs are the things that have belief-ish causal powers” (Crimmins 1992: 55); “Belief is an explanatory construct: we attribute beliefs in others largely in order to explain their behaviour” (Chalmers 1996: 19).

true attitude report. There may often be cases in which a vehicle in fact utilised by the subject bears an underwhelming relationship to one used in the ‘that-’ clause of a true attitude report, contextual standards being sufficiently weak as to permit correlation nonetheless. If, say, a subject lacks the aesthetic concept *yugen*, it can still be appropriate to ascribe to them beliefs in the instantiation of this property if their response to a certain piece of art is suitably suggestive, just like, more dramatically, it can be appropriate to ascribe to a chess-playing computer the belief that it should get its queen out early on the basis of its playing patterns.³⁴ In each of these cases, the representational system may have some low-level or approximate representation of the thing(s) in question, which is apt, at felicitous contexts, to be a constituent in a correlated sticky proposition. But if there are cases where it does not, we can allow that the sticky proposition determined by a ‘that-’ clause may correlate with a ‘gappy’ sticky proposition—a sequence containing the R-proposition some of whose constituents *fail* to be associated with vehicles of the subject’s belief⁺ state.³⁵ What matters is that in the paradigm cases of our attitude-reporting practices, upon which other cases are parasitic (in taking place at contexts where the standards for correlation are weaker), faithful representation of how a subject takes the world to be is successful partly in virtue of the structure of thought. (This claim is compatible with supposing that there are, in practice, *no* contexts in which this tighter structural correspondence between language and thought is set up, perhaps because thought is not linguistically structured. It might be, that is, that all attitude reports must, because of their ambitions, take place at contexts at which the standards for correlation are, by some absolute standard, weak.)

³⁴ The example is Dennett’s (1978).

³⁵ Richard (2013: 13–25) provides an especially detailed discussion of accommodating dispositional attitudes in the present sort of framework.

1.4 Correlation without co-valuation

We are now in a position to use our contextualist framework to motivate a fresh look at the reporting data represented by (3), which form the heart of the argument against CONSTRAINT.

De re attitude ascriptions require for their truth that the singular sticky proposition determined by ‘that *S*’ be correlated, by contextually determined standards, with a sticky proposition determined by the attributee’s attitude⁺ state. Most of those who have discussed the general sort of semantics I am offering for attitude ascriptions have taken sameness of R-proposition to be a necessary condition for the truth of an ascription.³⁶ In that case, the sticky proposition determined by the subject’s attitude⁺ state must also be singular. However, we should *reject* the principle that correlation requires ‘co-valuation’ (sameness of semantic value). Some attitude ascriptions do not demand for their truth that the R-proposition be preserved across correlation. This will be the key to providing truth-conditions for ascriptions like (3).

(3) The Queen believes that Bond is a hero.

In the scenario of (3), a (fairly idealised) toy model of the sticky proposition determined by the Queen’s belief⁺ state would be:

$\langle \langle \iota x Fx, R^1_Q \rangle, \langle is\ a\ hero, R^2_Q \rangle \rangle$

³⁶ Fodor (1990) and Richard (1990; 2013: 85) *inter alia* explicitly endorse this constraint; only Chalmers (2011), Goodman (2013; 2018), and Récanati (1993; 2000) reject it.

R^1_Q is a representational vehicle whose translation into English might be ‘the top-performing spy chosen by the assistants’.³⁷ This expresses a quantificational constituent of a Russellian proposition, $\iota x Fx$. R^2_Q expresses the property *is a hero*. In contrast, the sticky proposition determined by the ‘that-’ clause of M’s report in (3) is:

$$\langle \langle b, \text{‘Bond’} \rangle, \langle \text{is a hero}, \text{‘is a hero’} \rangle \rangle$$

Here, b is the *res* of the ascription: Bond himself. In this case, the R-proposition is not preserved across correlation. The R-proposition of M’s use of ‘Bond is a hero’ in (3) is $\langle b, \text{is a hero} \rangle$, whereas the R-proposition corresponding to the relevant sticky proposition determined by the Queen’s belief⁺ state is $\langle \iota x Fx, \text{is a hero} \rangle$. In spite of this, our contextualist semantics provides the resources for an explanation as to how the two sticky propositions satisfy the requirements for correlation. At the envisaged context, it suffices for correlation between $\langle b, \text{‘Bond’} \rangle$ and $\langle \iota x Fx, R^1_Q \rangle$ that b alone is in the extension of ‘ F ’ (‘the top-performing spy chosen by the assistants’), as expressed by the belief⁺ state of the Queen. At contexts like that in (3), contextually relevant factors such as the purposes, expectations, and presuppositions in play mean that attributors may refer to the object which in fact *satisfies* the definite description constituent of the subject’s belief⁺ state. Perhaps what is important in the context of (3), for example, is that the audience of the clandestine ceremony *are* in a position to entertain singular thoughts about Bond (in virtue of their being acquainted with him).

In a slogan, then: correlation does not require co-valuation. Indeed, at some contexts, mental correlates of indefinite descriptions appear to suffice for the truth of a *de re* attitude report. Recall the case of (4). There, the standards in play at the context are sufficiently diluted

³⁷ I idealize here in many ways, of course. It is also unlikely that the description is purely qualitative—lacking any singular material for, e.g., time and location. But the description need not contain a term referring to Bond.

as to allow Alice's descriptive content-vehicle (akin to 'all philosophers') to be correlated with Phyllis' use of 'T'.

The principal goal in this chapter has been to offer an attractive way of defending the conjunction of acquaintance-theoretic conceptions of singular thought with natural semantic principles linking singular thought to our ordinary talk about the attitudes. The contextualist semantics articulated here allows this. Moreover, it does so in a way which preserves the traditional acquaintance-theoretic explanation of the falsity of reports like (2), above. These sorts of cases are those which take place at contexts at which the standards required for correlation are not so diluted that correlation between attributor's singular (sticky) proposition and attributee's descriptive (sticky) proposition suffices for the report's truth. And, in order to *entertain* a singular content about some spy, Ralph must be acquainted with that spy. That cases like (3) are possible does not infringe on this explanation. Despite the claims of prominent liberals that 'CONSTRAINT' has no explanatory value whatsoever when it comes to the acceptability of [*de re*] attitude reports' (Hawthorne and Manley 2012: 39), then, acquaintance *can* have a systematic role to play in the truth-conditions of attitude reports, after all.

Of course, it would be nice if there were precedents supporting the denial of the 'co-valuation' principle. In fact, the case of Lisa, above, figuring out where to hang her picture, provides just such a precedent. Looking at the frame, we said, Lisa might explicitly judge⁺ it to be roughly 30 centimetres in length. But at most contexts the following report

Lisa thinks the frame is roughly 12 inches long.

will nonetheless be true. In this case, the use of the predicate 'is roughly 12 inches long' is correlated with a vehicle exercised by Lisa which would, in certain stricter contexts, be truly reported only by using the predicate 'is roughly 30 centimetres long'. But being roughly 30 centimetres long and being roughly 12 inches long are distinct properties. As a result, the R-

proposition expressed by the ‘that-’ clause of the attitude report is distinct from the R-proposition expressed by Lisa’s belief⁺ state.

Consider another example:

(17) Charley wants a hat just like mine.

On its most natural reading, (17) falls under Fodor’s (1970) category of the ‘non-specific *de re*’ (239–43). To access this reading, suppose what Charley wants is any hat which is a Dodgers baseball cap. (17) will be true, on this reading, if it is also the case that (perhaps unbeknownst to Charley) the *speaker* owns a Dodgers baseball cap. A wealth of semantic treatments have been proposed for this reading of such reporting constructions (see von Stechow and Heim (2011: 99–117)). Making the case for one of these would require a long digression. However, these readings do appear to run against the co-valuation principle. The ‘that-’ clause expresses a proposition which has the property *being a hat like the speaker’s* as a constituent. And Fodor’s (1970) point is that the proposition Charley entertains instead has as a constituent the property of *being a Dodgers hat*.

In the final section of this chapter, I briefly discuss some significant obstacles to positing violations of the co-valuation principle. The removal of these is crucial to safeguarding the acquaintance theorist’s response to the argument from attitude reports.

1.5 Barriers to Rejecting Co-valuation

Consider the following sort of case used by Chalmers (2011: 615–6) to motivate a rejection of his analogue of the co-valuation principle. Yusuf and Zoe are basketball coaches for children. Yusuf notes:

(18) Jack is tall.

His use of ‘tall’ at the context picks out the property $tall_1$. Later, Zoe is alone coaching young adults. At the later context, a similar use of ‘tall’ would pick out a different property: $tall_2$. At this context, Chalmers (2011: 615) observes, ‘Jack is tall’ would be false. Jack may be tall for a child, but he is short compared to the young adults. Nevertheless, Zoe’s report

(19) Yusuf believes that Jack is tall.

remains intuitively true, despite the fact that a use of ‘tall’ at her context picks out $tall_2$ as opposed to $tall_1$. In the terms of the semantic framework adopted here, the truth of Zoe’s ascription seems to require correlation between the two sticky propositions below.

$$< < j, \text{‘Jack’} >, < tall_1, \text{‘is Tall’} > >$$

$$< < j, R^1_Y >, < tall_2, R^2_Y > >$$

Chalmers (2011) concludes that if we are to account for the truth of Zoe’s utterance of (16), we must reject the co-valuation principle, for $tall_1$ and $tall_2$ are distinct properties.

Unfortunately, we cannot motivate denials of the co-valuation principle in this way. There may be cases in which the two relevant R-propositions differ in truth-value. And where the attitude verb of the report is *factive* (or *contra-factive*), it might be that instances of the following (non-negotiable) inference pattern fail to hold: where Ψ is a factive attitude verb,

$S \Psi$ s that p .

Therefore, p .

It is a corollary of Chalmers' (2011) claims about the above case that the following report may be true (as used at a context *c*) despite the falsity of 'Jack is tall' (as used at *c*).

(20) Yusuf knows that Jack is tall.

This happens if, as in the scenario described, the R-proposition entertained by Yusuf, $\langle j, tall_1 \rangle$, is true while the R-proposition expressed by the 'that-' clause of the attitude report, $\langle j, tall_2 \rangle$, is false, since the individual (Jack) fails to instantiate the property $tall_2$. In that case, a variety of inference patterns which seem constitutive of factive attitude verbs are invalid:

Someone knows that *p*.

Therefore, *p*.

In fact, the problem extends beyond arguments involving factive attitude verbs to arguments otherwise about the truth-values of beliefs. For example, the following pattern of argument is intuitively valid:

Yusuf believes that *p*.

It is not the case that *p*.

Therefore, Yusuf believes falsely that *p*.

The acquaintance theorist should refrain from motivating her rejection of the co-valuation principle in the way suggested by Chalmers (2011). Of course, the more general threat is that *any* account which posits violations of the co-valuation principle will invalidate the inference patterns above. This is a consequence worth avoiding. So we must explain our intuitive assessment of the truth of (19) and (20) in a way which preserves not only the

plausible inference patterns above but also the violations of co-valuation needed by the acquaintance-theorist.

While there are felicitous readings of (19) and (20), it is worth remembering that the context is *ex hypothesi* one at which a use of (18) comes out false. This makes the fact that the reporter nonetheless decides to say Yusuf knows or believes that it is true a little mysterious. It is natural to instead suggest that (19) and (20) are true at the later context only to the extent that a use of (18) might itself come out true at that same context. Context-sensitive expressions can be used *deferentially*. In Zoe's use of the expression 'tall' (in (19) and (20)), there is a covert argument-place for the old context at which 'tall' expresses a property Jack does instantiate. To the extent that the report is true, it is not the case that it is true while its 'that-' clause expresses the same proposition as the *false* use of (the homophonous but perhaps distinct construction) 'Jack is tall' to which Chalmers (2011) draws our attention. In that case the above inference patterns can be safely preserved along with the truth of (19) and (20) in the envisaged scenario.

That context-sensitive expressions like 'tall' can be used deferentially should not be surprising. It is well-known that terms like 'local' can be used in precisely this way. The entailments of Chalmers' (2011) claims about 'tall' concerning 'local' look beyond the pale. By subscribing the deferential uses of context-sensitive terms like 'local', we can reveal the various equivocations. For example,

Dave believes there is a local_D bar (i.e. local to *Dave*) that sells beer.

It is not the case that there is a local bar (i.e. local to *the speaker*) that sells beer.

Therefore, Dave falsely believes there is a local_D bar (i.e. local to *Dave*) that sells beer.

Crucially, none of these issues impair our proposed treatment of reports such as (3), which also entails violations of co-valuation. The R-proposition expressed by the 'that-' clause

of the report, $\langle b, \text{is a hero} \rangle$, entails the truth of the R-proposition expressed by the belief⁺ state of the Queen, $\langle \iota x Fx, \text{is a hero} \rangle$. The R-proposition entertained by the Queen, being quantificational, is at a level of generality above the singular R-proposition expressed by the attributor's 'that-' clause. Given that in these kinds of cases, to which the liberal's argument appeals, the attributors refer to some thing which satisfies the description entertained by the subject, it will not be the case that a corresponding knowledge report is true at some context c despite the falsity of the R-proposition expressed by the report's 'that-' clause at c . And so, given that Bond is the unique individual picked out by $\iota x Fx$ as tokened by the Queen's belief⁺ state, it will not be the case that (21), below, is true at a context c despite the falsity of the R-proposition expressed by 'Bond is a hero' at c .

(21) The Queen knows that Bond is a hero.

This pattern will hold throughout the cases to which liberals appeal in the argument against CONSTRAINT.

There is one more general concern for the foregoing story about propositional attitude reports. What is to prevent our framework from allowing mismatches between 'that-' clauses and the belief⁺ states of subjects? What is to prevent it from allowing 'Joe believes his pen is blue' to be a true report of Joe's belief that his table is brown? Once we reject the co-valuation principle, in order to recognise the truth of (3) at the envisaged context, it might seem that no effective constraints are placed on correlation.

It is important to remember that it is not that no constraints are placed on correlation. Rather, what the operative constraints on correlation are is a context-dependent matter. Contextual factors such as speakers' interests and their expectations about their audiences' interests partly determine the degree of match required between two sticky propositions in order for an attitude report to be true. That there are such context-dependent constraints is

revealed by the observations about reports such as (5)–(8). To ask whether ‘Joe believes his pen is blue’ could truly report Joe’s belief that his table is brown is therefore to ask whether there is a possible context at which the sticky proposition expressed by ‘Joe believes his pen is blue’ (on that occasion of use) correlates with that expressed by Joe’s belief⁺ state. Is there such a context? If there were, we would again be presented with a violation of the factivity inference pattern (i.e. where Ψ is some factive attitude verb: $S \Psi$ s that p ; therefore, p). If, say, the proposition entertained by Joe were true but the proposition expressed by the ‘that-’ clause of the report (‘that his pen is blue’) were false, ‘Joe knows that his pen is blue’ would come out true despite the falsity of the proposition expressed by the ‘that-’ clause of the report. In response to Chalmers’ (2011) claim that there are contexts which seem to merit rejection of both the co-valuation principle and the universal validity of the factivity inference patterns, I said that we should give an alternative explanation of the data. I provided an explanation which instead appealed to the capacity of certain context-sensitive expressions to be deferential. By analogy, then, in response to any other claim that there are such contexts, either an alternative explanation must be provided, or we must resort to an error-theory for the reports in question. What is lacking from the general concern, in short, and what would be required in order to raise genuine concerns, is positive reason to think that there are such contexts. In the absence of this the objection is without force. Moreover, the acquaintance theorist may once again insist that the universal validity of the factivity inference pattern sets a constraint on what possible contexts there might be—and consequently on what possible correlation relations there might be. We then have positive reason to think that there can be no such context.

1.6 Conclusion

The goal of this chapter has been to deny the widely held view that if there is to be a plausible connection between the truth of a *de re* attitude report about a subject and that subject's possession of a singular thought, then acquaintance-style requirements on singular thought must be rejected. What I have provided is an outline of the kind of contextualist framework which enables the acquaintance theorist to respond to the liberal's argument from HARMONY and SUFFICIENCY to the negation of CONSTRAINT. That this framework is required by even the liberal was illustrated in §1.1 when we saw that their argument otherwise led to the implausible view STRONG LIBERALISM.

At this point in the debate, it is worth reflecting on the position in which we find ourselves. Given the flexibility of the contextualist semantics articulated here, it is possible to reconcile HARMONY and the intuitive truth-value assignments for *de re* attitude reports like (3) and (4) with very demanding views on what it takes to be acquainted with an object. It was dialectically important here to show that the acquaintance theorist has the resources to accommodate *any* case conceived of by the arguer in which a *de re* attitude report about *S* is intuitively true without *S* being acquainted with the *res*. A result of this is that the acquaintance theorist has the resources to view virtually all of our ordinary attitude reporting practices as taking place at contexts where the standards for correlation fall far short of those imposed by her theoretical, joint-carving terms of art ('entertains', 'singular thought', etc). It might be that scenarios like (3), or even (4), most closely model the ascription practices of the folk, if most of the thoughts we *entertain* about objects in the world are taken to be mediated by descriptions (à la Russell). More generally, we might worry that detaching (to a context-dependent degree) a theoretical account of singular thought from the data of ordinary language, *de re* attitude reports leaves us with scant data to govern such an account in the first place.

Accordingly, the broader upshot of the strategy defended here is double-edged. While the framework liberates us to consider even the most demanding conceptions of ‘acquaintance’, as it appears in CONSTRAINT, it presents us with the challenge of identifying the scope of singular thought while allowing it to float free of the truth of ordinary language *de re* attitude reports.

Chapters 3–4 explore the most promising way forward. Perhaps Russell was right that there is a condition on singular thought, namely RUSSELL’S PRINCIPLE, both ‘obvious’ and ‘epistemologically fundamental’. This possibility would not only provide independent motive for the application of an acquaintance requirement, given its obviousness. It would also provide an insight into what such a requirement should amount to. RUSSELL’S PRINCIPLE says that aboutness requires discriminating knowledge of the object of thought. Chapters 3–4 consider how this notion might be precisified.

Before that, however, Chapter 2 considers a further way of gaining traction on the phenomenon of singular thought (other than by appeal to attitude reporting data), examining a theoretical-explanatory role brought out by an influential thought experiment.

Chapter two

Massive Duplication and Egocentric Semantics

Chapter 1 asked whether singular thought is subject to an acquaintance constraint. I showed that an influential argument to the effect that it is not rests on a faulty picture of how we talk about attitudes. However, our conclusion was double-edged. By allowing our account of what it is to entertain a singular thought to float free of the verdicts of ordinary *de re* attitude reports, we incur a commitment to motivating an acquaintance constraint independent of such reporting practices.

Chapters 3–4 examine the prospects for a revival of RUSSELL'S PRINCIPLE. In advance of that examination, this chapter considers an influential argument to the effect that there *must* be thoughts with a distinctive kind of content (namely, singular content): if a creature can have thoughts which are guaranteed to concern its environment and not some qualitative duplicate region, that creature must have thoughts with singular content. I will show that even granting that this role of *anchoring* one's thought and talk to a particular region is an explanatory role to be played by singular thought, it does not on its own get us quite so close to the orthodox picture as consensus assumes. A creature all of whose mental states express only paradigm, qualitative-descriptive content could be 'anchored' in the operative sense.

For the most part, the representational systems I focus on in this chapter will be languages. This is largely because the resources appealed to—the evaluation of vehicles for truth at a sequence of parameters—originate in natural language semantics. This focus will also offer a precision which talk of cognitive vehicles would sometimes lack.

2.1 Anchoring

[The] world [...] would never be found if the investigator were nothing more than the pure knowing subject (a winged cherub without a body). But he is himself rooted in that world; he finds himself in it as an *individual*.

— Schopenhauer (1818/44: §18).

Strawson (1959) argued that thought and talk about spatiotemporal particulars cannot be accomplished just thanks to the mediation of descriptive conditions. If it were, such aboutness would be hostage to contingent facts about reality which are obviously irrelevant. Strawson used the following thought-experiment to bring out the point:

...one may be very well informed about a particular sector of the universe. One may know beyond any doubt that there is only one particular thing or person in that sector which answers to a certain general description. But this [...] does not guarantee that the description applies uniquely. For there might be another particular, answering to the same description, in another sector of the universe. Even if one enlarges the description so that it incorporates a description of the salient features of the sector of the universe concerned, one still lacks a guarantee that the description individuates (Strawson 1959: 20).

This observation about the catastrophic effects on intentionality of duplication in the absence of aboutness *proper* (unmediated, associated with the features in §0.2) has remained influential.

...an inventory of [...] the conceptual resources that enter [a subject's] beliefs, may be insufficient to uniquely determine the time (or other object) to which he

succeeds in referring (Burge 1979: 426). [And so something is required] to account for a thinker's apprehension of an entity without his being able to distinguish it conceptually from all other entities. The apprehension of it depends essentially on contextual, nonconceptual relations to it (1979: 430–1).¹

...we can imagine that somewhere in the universe there is an exact duplicate of the solar system [...]. If such a hypothesis were true, none of us would have a capacity to distinguish the objects of our thought from all other objects by their appearance; yet, surely our thoughts would continue to have objects, and the very objects that they would have had, if the hypothesis had not been true (Evans 1982: 278).

...thought would be impossible without successful reference to spatial particulars, and [...] for that reason we can rule out the idea that success in reference is contingent on the way the world happens to be (Eilan 1988: 106–7).

It seems undeniable that we have singular thoughts about things in the world. If we didn't, our view of the world would be entirely qualitative. We would never be related in thought to anything in particular. [...] Our knowledge of physical things would be, as Russell might say, only by description (Bach 2010: 39).

Our thoughts *do* appear to be about the particular objects to which we are causally, informationally and practically connected [...]. And this is not simply the way things happen to turn out, given that we get lucky in formulating descriptions that

¹ For Burge, a thought is partly nonconceptual iff “the truth-value of [...] what the thinker grasps, thinks, or believes [is not] eternally fixed given its nature” (1979: 430).

those objects *uniquely* satisfy. [...] the causal, informational and practical interactions with the very objects around are what *explain* the fact that our thoughts are about those very objects (Goodman 2013: 123).

Reflection on the possibility of catastrophic failure due to the contingent facts about how repetitive reality happens to be, across space or time, supplies a plausible and popular theoretical-explanatory role for singular thought. There must be a species of aboutness which is *non*-descriptive. According to the orthodoxy a thought of this kind is one “with a *content* of a certain type, [such that] no thought with a content of this type is available where there is no object” (Evans 1982: 73).

Strawson’s (1959) thought-experiment brings out a deeply unintuitive implication of the view that all aboutness is descriptively mediated: it would hold our capacity to have thoughts about ordinary, mind-independent objects like Leonard the cat hostage to facts about how repetitive the universe is. In light of this possibility—that, somewhere, there is a region at which everything in our environment is qualitatively duplicated (the universe being a sphere, each hemisphere a perfect qualitative reflection of the other)—what makes it the case that your system of thought is *about* your immediate surroundings and not its cosmic duplicate?

This way of stating the desideratum brought out by Strawson’s thought-experiment is, I think, too quick. If we are not to assume that the only way of accommodating the anchoring desideratum is by means of devices for *aboutness*, associated with the characteristic features from §0.3, we need to state the desideratum more neutrally. Perhaps a more neutral statement would be that if the truth-values of our thought and talk are to be determined by any particular region at all then they must be determined by our *de facto* environment. This is inchoate as it stands. Is it possible to make this statement more precise?

To indicate that something like this more neutral characterisation of the desideratum is not destined to be inchoate, here is one way of setting it out with more precision. Do not think of what follows as a specification or analysis of the desideratum. Instead, approach it as an intuitive way of gaining traction on its demands. There may be tricky instances where the illustration breaks down. I trust it will nonetheless give the reader a sharper sense of the Strawsonian intuition and suggest that its accommodation may not essentially involve a distinctive kind of intentional content.

Let us say that a thought-vehicle T (or a use of a sentence S) is *sensitive* to a spatiotemporal region R iff the truth-value of T supervenes on how things are (with respect to particulars located) at R . And let us say that a thought-vehicle T is *indifferent* to a region R iff the truth-value of T does not supervene on how things are (with respect to particulars located) at R . For this sort of distinction to do very much, we need to set aside relational properties such as $\lambda x \cdot x$ is adjacent to another region or $\lambda x \cdot x$ is six feet from region R_2 . Without this, there will fail to be any true indifferent thoughts which are about regions or spatiotemporal particulars; that is, no true thought about a region will be indifferent to any region whatsoever. We can say that T (or a use of a sentence S) is *narrowly sensitive* to a spatiotemporal region R iff the truth-value of T supervenes on how things are (with respect to particulars located) at R and is indifferent to how things are outside of R . ‘This region is 5 metres away from some other region’ and ‘This is the only hot region’, said by a speaker at R_1 , are sensitive but not narrowly sensitive to R_1 . Intuitively, this is because $\lambda x \cdot x$ is the only hot region, for example, is a relational property. In contrast, ‘I am happy’ and ‘Here is hot’ uttered at R_1 are narrowly sensitive to R_1 .

Notice that some thoughts are narrowly sensitive because they are sensitive to the maximal region (i.e. that region which overlaps every other): ‘Everything is made of water’, ‘I am the only conscious thing’, and ‘This is of average height’. Let us call thoughts which are narrowly sensitive to a proper sub-region of the maximal region *locally narrowly sensitive*, and those which are narrowly sensitive to the maximal region *globally narrowly sensitive*.

The desideratum on intentional theories brought out by Strawson's (1959) discussion may now be stated as follows. An account of our intentional view on the world must have the following entailment:

ANCHORING: If a thought-vehicle T (or use of a sentence S), at a region R , is locally narrowly sensitive, then T (or S) is narrowly sensitive to R .

What this means is that if a representational system's success is not to be hostage to the existence qualitative duplicate regions, then the vehicles of that representational system must be evaluated for truth in a way which somehow or other privileges, by default, the region of the thinker or speaker over any other region.²

Strawson's (1959) solution was to insist on the *impurity* of *descriptions* we use to represent objects other than through perception. While one cannot know there to be exactly one Φ , one can know there to be exactly one Φ *in one's vicinity*—exactly one Φ 'around here', as it were. All non-perceptual 'aboutness' or 'reference' is descriptively mediated. And it is secured only thanks to a demonstrative element acting as an anchor.

All identifying description of particulars [must] include, ultimately, a demonstrative element. [...] [It is necessary to admit that] of every particular we may refer to there is some description uniquely relating it to the participants in, or the immediate setting of, the conversation in which the reference is made (22).

² I mentioned that there may be tricky instances where this elucidation of the theoretical role breaks down. Consider 'That region is hot', used at R_1 , where the demonstrative refers to region R_2 . This sentence is locally narrowly sensitive but not narrowly sensitive to R_1 . And this seems to go against ANCHORING. There are more sophisticated things that could be said in response here, specifically about the range of the relevant context of use. But remember that ANCHORING is intended merely as a useful gloss on the theoretical role recoverable from Strawson's thought experiment. Furthermore, tricky instances like this involve reference to other regions. The principal point of ANCHORING is that we do not need reference if we do not have it.

The rationale behind Strawson's solution involves a commitment to the principle that *S*'s thinking a singular thought involves the exercise of a capacity to distinguish the object from all other objects whose existence is an open question for *S*. This is why Strawson (1959) is worried that pure descriptions will never suffice so long as massive duplication is an epistemic possibility.

Rather than critically discuss the merits and demerits of Strawson's proposed accommodation of ANCHORING, this chapter shows that the species of non-descriptive intentionality needed to accommodate ANCHORING need not involve aboutness proper at all. It is possible for a representational system to accommodate ANCHORING without it containing referential devices; without being *about* spatiotemporal particulars.³ Accounts which characterize the 'non-qualitative-descriptive kind of intentionality' required by Strawson's thought-experiment by carving a distinction at the level of semantic content assume that representational systems which express contents of only a qualitative-descriptive kind are impoverished. For a user of such a system would be incapable of having thoughts which concern its environment (more generally, its acquaintances) at a world of massive duplication; a result which—the Strawsonian intuition goes—precludes its being an adequate account of *our own* intentionality. I shall show that there are representational systems which fail to express anything other than paradigm qualitative-descriptive content(s), not singular by anyone's criteria, but which succeed in accommodating ANCHORING.

2.2 Context and compositional semantics

The output of a theory of syntax for a natural language, and the input to compositional semantics, is a set of formally individuated expression-types and a series of recursive principles

³ This will emerge at the end of §2.5, with §§2.2–4 setting out necessary preliminaries.

by means of which complex expression-types (in particular, sentence-types) may be grammatically formed.⁴ On one way of conceiving the compositional semantic project, the task is relatively straightforward. Linguistic representation consists in the production of vehicles which fall under these sentence-types. The semanticist assigns to each sentence-type a unique content.

On this picture, the literal meaning of a sentence used by a speaker is absolute: it expresses the same content irrespective of when, where, or by whom the sentence is produced. Proponents of this account are free to acknowledge that ‘what is communicated’ by the use of a linguistic vehicle will often vary across contexts. But this variation is relegated to the domain of pragmatics. In carrying out rigorous, natural language semantics, we must abstract away from contextual features—speakers, times, locations etc.—assigning content to sentence-types. We can call this the *null context* approach to compositional semantics. It is possible to read writers such as Bar-Hillel (1954/70) in broadly this way. To the extent that context-sensitivity is recognised at all, it is seen as an inessential feature of language. Whatever information could be expressed using context-sensitive language, such as in (1) and (2) below,

(1) I am here.

(2) That ship isn’t that ship.

could in principle be expressed via the substitution of context-insensitive expressions.⁵

It is no longer generally thought that an appreciation of the context-sensitivity of meaning in natural language is something which must be accommodated outside the domain

⁴ By ‘expression-types’ I do not mean grammatical phrase structure categories such as *verb phrase* etc. I am taking there to be a syntactically individuated *type* under which two uses of, say, ‘Snow is white’, on separate occasions, might fall. This may be a logical form or it may be some other syntactic representation.

⁵ This in spite of his hypothesis that “more than 90 per cent of the declarative sentence-tokens we produce during our life-time are indexical sentences and not statements” (Bar-Hillel 1954/1970: 76).

of formal inquiry.⁶ One way we might resist that conclusion is by taking the *acts of uttering* sentence-types to be the proper input to semantic theorizing. However, this threatens to involve a departure from the formal ambitions of compositional semantic theorizing: acts do not possess the degree of abstracted simplicity and precision which is exemplified by the sentence-types dispensed by theories of syntax. A more promising approach may be to hand the work of context-sensitivity to syntax, where we can capture the one-many relation between sentences and contents by individuating sentence-types in a sufficiently fine-grained way. A flat-footed way of proceeding would take the ordered string of symbols in (2), for example, to be capable of composing infinitely many homonymous but distinct sentences, for the symbol ‘that’ (the thought would go) conceals a vast array of homonymous expression-types each of which is to be assigned a distinct semantic value. This may be made explicit by indexing each of the infinitely many homographic symbols with an arbitrary subscript, allowing us to pick out the various different sentences those symbols can be used to express, such as (3) and (4) below:

(3) That₂₆ ship isn’t that₈₇₇ ship.

(4) That₁₀ ship isn’t that₁₀ ship.

This notation allows us to give voice to the logical falsity of (4). Unlike (3), (4) is a *coordinated* syntactic disambiguation of (2).⁷ However, applying this treatment of context-sensitivity across the board, we lose the intuitive distinction between the way in which ‘Banks can be unsafe’ and ‘I am here’ bear a one-many relation to the contents they may be used to express. Even if

⁶ The conception of semantics I have in mind bears similarities to *semantic minimalism*, discussed by Borg (2009), Cappelen and Lepore (2005), *inter alia*. However, writers who subscribe to semantic minimalism admit limited sources of context-sensitivity (restricting such phenomena to indexicals such as ‘I’, ‘now’, etc.), and so the minimalist project is not as thoroughgoing as the one discussed here.

⁷ See *inter alia* Dorr (2014: 45–6) and Fine (2007) for this ideology.

this distinction were not worth keeping track of, it is *prima facie* implausible to suppose that no two uses of ‘Now it is sunny’ are uses of one and the same sentence.

2.2.1 Kaplanian semantics

It remained somewhat unclear up until the circulation of Kaplan’s ‘Demonstratives’, in 1977, that a formal theory of meaning could be pursued alongside an appreciation of the role of context. On Kaplan’s proposal, the input to semantic theorizing is still syntactically individuated sentence-types. Context-sensitivity is accommodated by interpreting and evaluating sentence-types alongside a sequence of contextual parameters. It is not that only ‘uses’ of sentence-types are apt for semantic interpretation, but that in order to properly recognise the role of context in an account of meaning in natural language, the input to semantics must be *ordered pairs* of a *sentence-type* and *context of use*.

It is worth being clear on what sort of the entity Kaplan’s context of use is. Some describe it as “the concrete environment in which the utterance is performed” (Scharp, 2013: 210). This is a misattribution. Kaplan remarks, variously: “[the] context of use is this parameter” (1989b: 591); “we should say that context [...] is a package of [...] parameters” (1989b: 591). Of course, what makes it appropriate to call this sequence of parameters ‘the context of use’ is that its values correspond to those of the *de facto* speech situation, as it were. However, the set-theoretic character of the context of use is important.⁸ Following much of the literature, I will take this sequence of parameters to be as rich as is needed to carry out the compositional semantics: “...we should say that context [...] is a package of whatever

⁸ For one thing, a *monster* is an intensional operator which acts on the *character* of expressions. An expression *e* is embedded by a monster, Φ , iff *e* is evaluated at context *c* while Φe is evaluated at a distinct context *c*’. Whether or not there *are* monsters (see *inter alia* Rabern (2012), Santorio (2012), and Schlenker (2003) for arguments in favour), it should be possible to make sense of their existence. But if the context of use were a concrete entity, it is not obvious how we could make sense of such ‘context-shifting’.

parameters are needed...” (Kaplan 1989b: 591).⁹ I doubt that much hangs on the details of how this richness is cashed out, exactly. For example, Lewis (1983b: 230) defends a minimalist conception of context as “a world, time, and speaker”, recovering other contextual features from these coordinates. I will instead speak as if the context of use is itself a generous sequence of parameters.¹⁰

The Kaplanian story goes as follows. In advance of semantic theorising, the ground level of linguistic practice consists of rational creatures producing sounds and inscriptions in the course of their interactions with one another (Scharp 2013: 209). These *utterances* are acts which are tokenings of sentence-types of a language. A related but distinct notion is that of a *use* of a sentence-type, S .¹¹ It is pairs of the form $\langle S, c \rangle$ which are fed into our semantic theory.¹² This enables us to relate the input to compositional semantics one-one with contents.

One thing it becomes possible to then talk of is the function with which each sentence-type is associated, which takes a context of use to the content expressed by that sentence-type on that occasion of use. Kaplan (1989a) calls this the *character* of a sentence.

⁹ See also Belnap *et al.* (2001: 147–8), Lewis (1980), and MacFarlane (2014).

¹⁰ It is also important to distinguish this conception of a context of use from those according to which context is something like a set of propositions—roughly, those mutually presupposed by the participants of the conversation (Stalnaker 1978).

¹¹ We might be tempted to think of the notion of an utterance as explanatorily prior, in some sense. But it is at least odd to think of acts as things which are true or false. Perhaps rational and irrational are the closest notions in the vicinity. And, as Kaplan (e.g. 1989a: 546) is keen to point out, if the notion of a sentence-type ϕ being true in c were to require an utterance of ϕ , we would be unable to evaluate sentences with respect to possible worlds, times, or locations at which there are no utterances. And we would not want (1) to come out as a necessary truth. (Given Kaplan’s claims about context, however, it does come out as a *logical* truth, whereas ‘I am uttering’ does not. Independent of the framework, it is not obvious whether there is an important distinction to be tracked here.)

¹² This allows us to bracket the issue of exactly how speech acts (to which the notion of an utterance is germane) are related to the points in logical space that are contexts of use.

2.2.2 Complaints with the Kaplanian framework

There are reasons to pause for complaint with the basic framework here. First, if what Kaplan (1989a) says is right, ‘I am not here’ is logically false. But we do utter such things felicitously often enough. Consider voicemail recordings and post-it notes left on office doors (‘I am not here right now’). Is the Kaplanian framework incompatible with the truth of these utterances? One option is to say that in recording a message or writing a note one is “arranging to make an utterance at a later time” or “*deferring* an utterance” (Sidelle 1991: 535). Messages and notes are, in this sense, vehicles which speakers can use to make utterances at a context without being at the situation of the context. A second option may be to assign multiple characters to the relevant expressions, or to individuate expression-types in a more fine-grained way by positing homonymy, so that ‘now’ can either express the time at which the utterance was produced or instead the time at which the utterance is intended to be heard by one’s audience.¹³

Further worries surround Kaplan’s notion of character. As I noted in §0.3.2, the idea of a semantic level corresponding to character can be found in Strawson (1950).

The expression ‘I’ may correctly be used by (and only by) any one of innumerable people to refer to himself. [...] to talk about the meaning of an expression or sentence is not to talk about its use on a particular occasion, but about the rules, habits, conventions governing its correct use, on all occasions, to refer or to assert (1950: 327).

¹³ Kaplan (1989a: 491, n. 12) seems to favour something like this response. See Egan (2009), Predelli (2005) for discussion.

On the Kaplanian framework we have begun to set out, character receives a more formal characterisation as a function from contexts of use to contents.¹⁴ Yet if character is to play something like the role of reconstructing the tacit knowledge which enables hearers to ascertain the content expressed by an utterance on an occasion of use, then character cannot be a purely extensional creature. As Braun (1996: 233) points out, while (C) and (C') are necessarily co-extensive relations, only the former is capable of representing the meaning of the expression-type 'I':

- (C) *being the agent of*: a relation that holds between x and c iff x is the agent of c .
 (C') *being the agent of, and such that either $2+2=4$ or $2+2\neq 4$* : a relation that holds between x and c iff x is the agent of c , and either $2+2=4$ or $2+2\neq 4$.

A language user who habitually reasoned to the content expressed by sentences containing 'I' using the procedure articulated in (C') would have made a peculiar error.

Finally, it is doubtful whether it is possible to assign conventional and informative characters to context-sensitive expressions which are (to use Perry's (1997) distinction) not *automatic* (e.g. 'I') but *discretionary* (e.g. 'what's-his-face'), being heavily dependent on nuanced communicative intentions. Dorr (2014) notes that the "fact that one can only use 'What's-his-face' to refer to the thing one intends to be communicating something about by uttering 'What's-his-face' on this occasion" looks a lot like "a constitutive truth about what it is for a speaker to refer to something" (56). If our semantic theory assigns such characters, it will struggle to represent the sort of thing knowledge of which enables hearers to identify the contents expressed by a sentence on an occasion of use.

¹⁴ However, Kaplan's phrasing that "it is convenient to represent character by functions from possible contexts to contents" (1989a: 505), suggests that this is an open question.

While the Kaplanian orthodoxy is not without critics, then, these criticisms are localized. Nothing in what follows will turn on whether or not the function definable from contexts of use to contents is capable of tracking semantically or epistemologically interesting ideology. And while associating utterances with $\langle S, c \rangle$ pairs is a subtle matter, required modifications are unlikely to affect the claims of this chapter.

2.2.3 Summary

A corollary of conceiving of the semantic project in the Kaplanian way I have begun to set out is that there is no sense in asking whether the *sentence* ‘It is sunny’ is true. Instead, the semanticist will tell the following sort of story. A sentence like (5), *on an occasion of use*, makes a claim which concerns the weather at the context of use.

(5) It is sunny.

It is not that it is any part of the meaning of (5) that the weather is sunny, say, just at whatever salient place and time the speaker happens to have in mind. Simply by virtue of the fact that the sentence is used, say, in Los Angeles on March 9th 2016, it is settled that the spatiotemporal region that is relevant for its evaluation is Los Angeles on March 9th 2016.

The following sentence makes a similar claim about the day preceding the time at which the sentence is used.

(6) Yesterday it was sunny.

If used in the same place and time as (5), it is true iff it was sunny in Los Angeles on March 8th, 2016. Whether it is sunny at any other place and time whatsoever is simply irrelevant to a determination of the truth-value of (6) on an occasion of use.

There are two distinct perspectives from which the sensitivity of the evaluation of sentences to contexts can be identified. §§2.3 and 2.4 examine these, respectively.

2.3 Truth at

In the following sentence,

- (7) For some African mountain x , there exists a European mountain y such that y is larger than x .

we take the initial clause to contribute a quantifier which operates on the formula

- (8) There exists a European mountain y such that y is larger than x .

To provide a compositional semantics for a language with these quantificational resources, we need to compute the truth-conditions of the initial sentence as a function of the truth-conditions of the latter. The problem is that there are no conditions under which the latter sentence can be evaluated as true *simpliciter*. No value has been assigned to the variable ‘ x ’. As a consequence, no semantic value can be assigned to (8), infecting the project of assigning a compositional semantic value to our original sentence, (7).

To solve the problem, we can introduce a notion of truth *at a variable assignment*. A model-theoretic semantics for a first-order language uses a *structure*, $\mathcal{S}$, comprised of a non-empty domain of discourse and an interpretation function ($\langle \mathcal{D}, \mathcal{I} \rangle$) assigning objects in that

domain to constants of the language, assigning truth-values to sentence letters, and n -ary relations (sets) to n -ary predicate letters. Variables are not assigned values by the structure. Instead we introduce a notion of *variable assignments* defined over $\mathcal{J}$. Given an infinite stock of variables, a variable assignment α must map each such variable uniquely onto some object in $\mathcal{D}$. Formulae can now be assigned truth-values in $\mathcal{J}$ at a variable assignment α (defined over $\mathcal{J}$). We may then assign truth-values to ‘formula-variable assignment’ pairs $\langle \varphi, \alpha \rangle$.

It is now possible to compositionally assign truth-values to quantified sentences like (7). $\exists x \varphi$ (where φ is, in the typical case, *open* with respect to x (and only with respect to x)) is true at a variable assignment α iff there is some variable assignment β , differing from α at most in the value it assigns to x , such that φ is true at β .¹⁵

' $\exists x \varphi$ ' _{$\mathcal{J}$} is true iff ' φ ' _{β} is true at at least one variable assignment β differing from α at most with respect to x .

This Tarskian apparatus for dealing with quantified sentences is entirely orthodox.¹⁶ Quantifiers are sentential operators which shift the variable assignment parameter against which sentences (open or closed) are evaluated for truth. In subscribing to this account, we are not advocating relativism about *truth* in any interesting sense. The goal of the treatment is to ultimately dispense a definition of truth *simpliciter*. Crucially, we can define truth in terms of the technical notion of truth at a variable assignment:

(I) For all sentences φ , φ is true iff φ is true at every variable assignment.

¹⁵ I use '...' in lieu of corner-quotes.

¹⁶ Strictly speaking, Tarski (1933/83) appealed to the notion of satisfaction by a sequence of objects, not ‘truth at a variable assignment’. Nothing substantive turns on this, however. I use the notion of truth at a variable assignment to draw parallels with strategies to be discussed below.

Without this definition, the compositional semanticist would not have shown how sentences like (7) can so much as be true. It is only because of (I) that we are permitted to move from

' $\exists x \varphi$ '_s is true at variable assignment α .

to

' $\exists x \varphi$ '_s is true.

The lesson we can take from this is that it is sometimes congenial to the project of doing semantics to define a notion of truth for some semantic product at some precisely defined parameter(s).

2.3.1 Truth at a context of use

Unlike the formal languages for which truth at a variable assignment was directly introduced, natural languages exhibit context-sensitivity. This fundamental feature optimises speakers' capacities to exchange information in evolving environments. Directly related to the project of accommodating context-sensitivity is *intensional semantics*: the investigation of sentence displacement across a variety of dimensions—such as time, space, and possibility—as exhibited, some argue, in sentences of English such as (6). However, there are several assumptions underlying the claim that sentences of natural languages are subject to this feature in a way which at least parallels the effects of quantificational operators on open sentences, and it is worth being explicit about these. To avoid oversimplifications on controversial issues, we can temporarily restrict our discussion to a new, artificial language.

Consider *Egocentric*, a language whose basic sentences consist purely of expressions such as ‘Standing’ or the following:¹⁷

(9) Working.

In Egocentric sentences like (9), let us suppose, no individual is semantically contributed. As far as the semantics goes, (9) only makes a claim to the effect that the property of working is instantiated by something or other at some time and location or other... The purpose of the present section is to illustrate how a meagre language of this sort might not only make properly truth-evaluable claims concerning particular individuals (at particular times...), but accommodate the ANCHORING desideratum.

Let us start by enriching Egocentric with operators of the following sort.

(10) WILL Working.

In the way familiar from intensional semantic theories for natural languages (consider, perhaps, ‘Yesterday’ in (6)), we can imagine the job of ‘WILL’ to be that of combining with a sentential kernel, (9), to form a larger sentence.¹⁸ This syntactic assumption (or rather, stipulation) about how ‘WILL’ compositionally combines with other expressions is the first part of our story. Next we make a semantic assumption; that the sentence operated on by ‘WILL’ has the same *semantic value* when embedded as when it occurs unembedded. Within the scope of ‘WILL’ in (10), that is, is the fully-formed Egocentric sentence ‘Working’.¹⁹

¹⁷ I owe the idea for this language to a series of papers by Prior, reprinted in his (1968).

¹⁸ In the case of English it is much more plausible to treat the copula in (5) as present-tensed, so the claim that (6) embeds a sentence which can be used to express a time-neutral claim is not credible.

¹⁹ Alternatively, we could follow the ‘schmentencite’ strategy in Lewis (1980: 88–9) and claim that ‘Working’ in (10) is a totally different semantic device from its homonym, ‘Working’, in (9). Though sentence-like, the

At this point, an analogue of our earlier problem concerning (7) and (8) emerges, for we shall want to compute the truth-conditions of (10) as a function of the truth-conditions of (9). The problem is that, in the scenario as we have imagined it, there do not appear to *be* conditions under which (9) can be evaluated for truth *simpliciter*. If the semantic value of (9), on an occasion of use, is neutral as to which time is relevant for an evaluation of its truth, how is it determined that (9) is true just in case its user is working at the time of use, as opposed to its being true just in case its user is working, say, on July 12th 1990? This, at least, is the kind of story we should naturally want to tell about (5). We should want it to be the case that the semantic values of our new language's sentences receive truth-values which, by default, say something about its users' speech situations.

According to the intensional picture of context-sensitivity explored in this section, the way to reflect this bias is to evaluate sentential semantic values for truth *at* a sequence of parameters whose coordinates default—in a sense to be clarified—to those of the context of use. There will need to be at least as many argument places in our sequence of parameters as there are parameters shifted by the intensional operators of the language. I will, for now, call this *n*-tuple of parameters a *point of evaluation*. The notion of evaluating the semantic value of a sentence for truth at a point of evaluation parallels our earlier notion of evaluating a sentence for truth at a variable assignment. The proposal is to assign truth-values to 'semantic value-point of evaluation' pairs.²⁰

The result of compositional semantics proper, then, for our $\langle S, c \rangle$ pairs is an assignment of a truth-value to the semantic value of *S* at each point of evaluation. And a point

former is a *schmentence*: an expression which combines with expressions like 'WILL' to produce complex sentences. It is the job of sentential semantic values only to determine the truth-value of the sentence on an occasion of use. The job of compositionally determining the semantic values of sentences such as (10) on the basis of constituents such as 'Working' (which is not, in (10), a sentence) is a job for the semantic values of schmentences. Since this proposal has little independent plausibility I set it aside for convenience.

²⁰ There is no constraint that the coordinates of a point of evaluation correspond to a (possible) context of use. Parameters of points of evaluation can be shifted independently.

of evaluation “might have among its coordinates a speaker, a time before his birth, and a world where he never lived at all” (Lewis 1980: 86). If what semantics evaluates for truth is a sentential semantic value with respect to a point of evaluation, what does such a notion—truth *at a point of evaluation*—have to do with any interesting sort of truth; a sort which might plausibly norm linguistic practice, belief, and rational enquiry? What we want, if Egocentric is to be a remotely plausible (fictitious) system of communication, is for the semantic values of its sentences to receive truth-values which, by default, say something about its users’ *de facto* speech situations.

Our earlier strategy in (T) was to quantify over every value our proposed parameter might take. Here, we may set—or *initialize*—our point of evaluation parameter values to those corresponding to the utterance situation. We do this by switching out our pursuit of truth simpliciter with *truth at a context of use*.²¹ It is at this point that our choice of input to compositional semantics in §2.2.1 becomes significant. We access the context of use in order to define a notion of truth with illocutionary import. When we use declarative sentences of natural language to communicate information, the goal is not truth *per se* but truth *at the context of use*.²²

Truth in a context is truth at [a context-initialized point of evaluation], *and this is the semantic notion that is directly relevant to truthful speech* (Lewis 1983b: 231; emphasis added).

²¹ Kaplan (1989a; 1989b), MacFarlane (2014), *inter alia*. MacFarlane (2014: 53) offers reasons for thinking this move has antecedent plausibility.

²² Here I follow the convention of saying ‘*S* is true at *c*’ as opposed to something such as ‘the ordered pair $\langle S, c \rangle$ is true’. The important thing is that sentential semantic values cannot be evaluated for truth other than as a function of a context-initialized point of evaluation.

Why is truth-at-a-context the target notion of a semantic theory? Because truth-at-a-context has direct [...] relevance [to the theory of speech acts]. [...] we try to use sentences that are true at our contexts, and we expect others to do the same (MacFarlane 2014: 53).

We can straightforwardly define truth at a context of use via truth at a point of evaluation as follows. Where w , t , and s represent the world, time, and subject parameters, respectively,

- (S) For all sentences S , S is true at c iff the semantic value of S is true at $\langle w_c, t_c, s_c, \dots \rangle$.

This process of initialization—of defining truth at a context of use *via* truth at a point of evaluation—is what allows us to evaluate Egocentric sentences such as (9) in a way which privileges the agent, time, and location of the context of use over the coordinates of some arbitrary point of evaluation; *it is what has the power to ‘anchor’* users of Egocentric by allowing them to represent their environment. I will follow MacFarlane (2014) in calling our definition of truth at a context of use from truth at a point of evaluation a process at the stage of *postsemantics*.

According to this sort of semantics we could stipulate for our Egocentric language, the semantic values of sentences are, we might say, *use-insensitive*. At the level of semantic value, we can see strong similarities between this treatment of Egocentric and the null context approaches to compositional semantics recalled in §2.2.

2.3.2 Variable assignments

Minimally, we need a point of evaluation to be an ordered set of features of contexts. However, if we follow Kaplan (1989a; 1989b) by including a parameter for variable assignments (for example, for binding occurrences of pronouns), this suggests that the notion of a point of evaluation ought to be broader. For variable assignments are not features of contexts.

Assignments are not features of contexts; contexts determine places, times, worlds [...], but not assignments of values to variables (MacFarlane 2014: 59).

You can reasonably decide to treat [times or locations as parameters of points of evaluation], but that is only because there is in fact a time of use and a place of use. The same cannot be said for ‘the integer of the context of use,’ since there isn’t one. [Context] does not provide an initial assignment of values to variables. [...] the context is supposed to be fact-of-the-matter, and *there is no fact of the matter regarding an initial assignment of values to the variables* (Belnap *et al.*, 2001: 147–51).

From an abstract formal point of view, they [i.e. free variables and indexicals] are highly analogous. [However] Indexicals are real, meaning-bearing elements of the language. Free variables are not; they are artifacts of our formalism. Assignments are *stipulative*: they have no fact-of-the-matter parameter as do the pure indexicals and true demonstratives (Kaplan 1989b: 593).

The construal of a point of evaluation as an ordered set of features of contexts ought to be relaxed in languages which contain operators acting on some parameter F for which it does

not make sense to talk of there being an ‘ F -value’ of the context. To the extent that this is true for variable assignments, we may follow (T) which tells us to simply quantify over variable assignments. So long as we preserve a path from the definition of truth at a point of evaluation to that of truth at a context, the intensional semantic theory has done its job.

(S*) For all sentences S , S is true at c iff, for every variable assignment α , the semantic value of S is true at $\langle w_c, t_c, s_c, \dots, \alpha \rangle$.²³

A sentence of Egocentric S is true at a context of use c iff, for every variable assignment α , the semantic value of S is true at the point of evaluation *initialized at c* .

At least superficially, however, there is disagreement about whether or not contexts determine variable assignments. This unclarity seems to be reflected even in what Kaplan has to say (when compared with the above quotation):

Taking context in this more abstract, formal way, as providing the parameters needed to generate content, it is natural to treat the assignment of values to free occurrences of variables as simply one more aspect of context. [...] I did not then [(1989a)] think of free variables in the robust way I now do, as demonstrative uses of pronouns (Kaplan 1989b: 591).

...let us think of assignments as representing the contribution of the utterance situation. The physical and psychological circumstances that prevail when an LF is processed will (if the utterance is felicitous) determine an assignment to all the free variables occurring in the LF (Heim and Kratzer 1998: 243).

²³ Adapted from Kaplan (1989a: 547). See also (1989b: 592–3).

...a context of utterance c [provides] a possible world, c_W . I further suppose that it provides a variable assignment, c_G (Cumming 2008: 540–1).

The disagreement, I take it, really concerns what role the variable assignment is playing in the semantic theory. Heim and Kratzer take the assignment to play the full role of context: it is what ‘represents the contribution of the situation of use’ by encoding the features to which deictic pronouns are sensitive. But it is also the parameter which plays a role in the semantics of pronoun binding. For Belnap *et al.* and MacFarlane, however, while the assignment parameter plays a role in the treatment of pronoun binding, it is not the parameter involved in the assignment of values to deictic pronouns. There may be reasons for preferring one of these options over the other. If there are substantive issues in the vicinity, they do not affect my discussion.

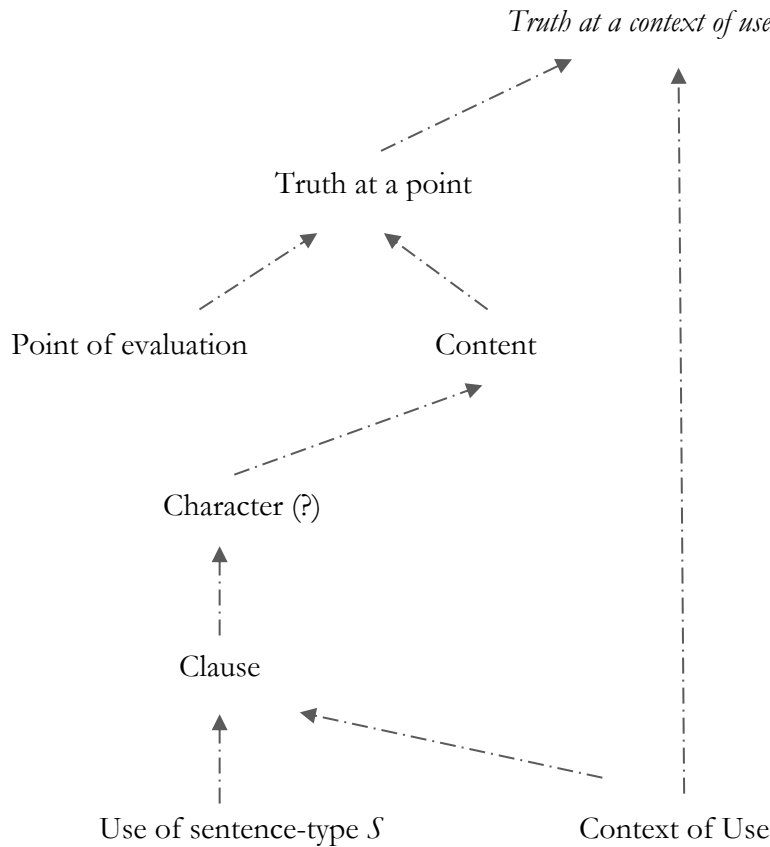
2.3.3 Summary

Intensional operators take the semantic values of sentences as arguments and displace the parameters with respect to which they are to be evaluated, producing semantic values which (might) cease to concern, for example, the time of the context of use, and instead concern some other time. Positing intensional displacement is one way in which we might account for why, when sentences of Egocentric like (9) appear in the scope of certain other expressions, they may have their truth-values determined by how things are not at the location, time, or world (*inter alia*) of use, but elsewhere. We can say that the expression ‘WILL’, in (10), *shifts* the point of evaluation at which the semantic value of the embedded (9) is to be evaluated for truth at a context.

It is worth emphasising that, being fictitious, there are no facts of the matter about Egocentric, and so no facts about its semantic values. Its semantics can be freely stipulated

alongside its lexicon and syntax. Egocentric nonetheless serves to highlight a point, one which could be made using a natural language like English only with myriad qualifications. I supposed that we imagine, as I expect was natural, that sentences like (9) were evaluable for truth only upon specifying an individual and time. This information is intuitively needed in order to fully specify a true or false description of the world. Next, in the way familiar from intensional semantic theories for natural languages, we supposed that the semantic contribution of ‘Working’ is the same in both (9) and (10), and so expressions like ‘WILL’ must operate on fully-formed sentences. Unless ‘WILL’ is semantically impotent, then, it must be that the semantic value of (9) is neutral with respect to time on an occasion of use.²⁴ And if a use of (9) does not supply a value for a parameter which is required in order for it to be truth or false, (9) *has no* truth-value. If it is to be evaluated at all, (9) must be evaluated for truth *at* a point of evaluation. The result is that, according to one orthodox way we could approach semantics for Egocentric, we are to evaluate the semantic values of its sentences for truth only with respect to a point of evaluation. While the result of intensional semantics proper for (9) and (10) is the notion of truth at a point, *on a given occasion of use* postsemantics takes this as input and defines the notion of truth at a context of use. The overarching structure of the kind of intensional semantic theory described above is illustrated in the following diagram.

²⁴ “...intensional operators must, if they are not to be vacuous, operate on contents which are neutral with respect to the features of [a point of evaluation] the operator is interested in” (Kaplan 1989a: 503–4, n. 28).



— Figure 3.²⁵

Stipulative stories about hypothetical languages are by themselves of no philosophical interest. What does this have to do with ANCHORING and the nature of semantic content? After briefly characterizing a second, very different (though compatible) way in which context-sensitivity can be incorporated into semantics (§2.4), §2.5 will clarify the *prima facie* interest in giving a semantics for a language which makes no use of the resources described in §2.4. In

²⁵ Diagram adapted from Scharp (2013: 211). In Figure 3 I have incorporated *two* points at which the context of use is accessed by the semantic theory we have discussed. At the first stage its role is to resolve ambiguity as to which of the various sentence-types a given utterance is the tokening of. This corresponds to what Perry (2001b: 40–1) calls the ‘presemantic’ role of context, and Stanley and Szabo (2000) the ‘grammatical’ role of context. However, as King and Stanley (2007: 139–40, n. 7) point out, the nature of context’s role in determining the sentence-type tokened by an utterance is somewhat different, for “facts about context do not determine which of two disambiguations a given utterance expresses; [instead,] hearers draw on context to figure out which unambiguous [sentence-type] was expressed” (2007: 140, n. 7). It also makes sense to think of language-selection as exploiting a similar mechanism at this point.

short, the claim will be that the ability of a representational system to accommodate ANCHORING may well have little to do with semantics proper. Whether it is also alien to the kind of *content* expressed by the sentences of that representational system on an occasion of use may be thought to depend on the identification of content and sentential semantic value. However, §2.6 argues that this is not the case. Even if we distinguish content from sentential semantic value (and it is argued we should), we are able to conclude that for Egocentric and systems of representation *in general* the question of whether its sentences express a content of a certain sort is separable from the question of whether that system demands a semantics of a certain sort. As a result, whether a representational system can accommodate ANCHORING has no *direct* bearing on whether that system expresses the kinds of content widely thought demanded by that desideratum.

2.4 i-Reference

When the individual is determined (when *the reference is fixed*, in the language of Saul Kripke), it is loaded into the proposition.

— Kaplan (1989b: 569).

At the end of §2.2 I said there were *two* ways in which, on the Kaplanian picture, there may be no sense in asking whether a sentence is true *simpliciter*. The first way in which this may happen, as we explored in the previous section, is that the content expressed by a language's sentences might only be evaluable for truth at a point of evaluation. The second emerges in the presence of a certain kind of singular term.

The class of expression I shall call *i-referential* is granted access to the context of use at the lexical level, prior to the effects of intensional operators and postsemantics.²⁶ The *i-referential* category is introduced on the Kaplanian semantic framework to assist in the treatment of deictic pronouns, which in natural languages appear immune to the shifting effects of intensional operators: they are rigid (§0.3.1). Consider the following example used by Kaplan (1989a: 499):

- (11) It is possible that in Pakistan, in five years, only those who are actually
here now are envied.

In (11), ‘actually’, ‘here’, and ‘now’ refer to the world, place, and time of the occasion of use, even though they are embedded within the scope of expressions at least some of which we should (so the thought goes) treat as intensional operators—and thus as expressions which shift the world, place, and time at which the sentences on which they operate are evaluated.²⁷ A failure to recognise this difference between context of use and point of evaluation would result in slips from the conclusion that since

- (1) I am here now

is true at every context of use, ‘It is necessary that I am here now’ and ‘It is always the case that I am here now’ are true (at every context of use). That, of course, is flatly incorrect. The

²⁶ The ‘i’ abbreviates a suitably loose sense of ‘indexical’. Some writers use the term ‘indexical’ in a narrower sense, for example Stanley (2000: 411). Lewis (1980: 82) used it in a much broader sense which it is important to avoid here, calling *contingency* “a kind of indexicality” (82).

²⁷ For what it is worth, the claim that ‘in Pakistan’ is best construed as an operator is particularly dubious. A more natural treatment considers it an adverb (see Cappelen and Hawthorne (2009: 74)). It is also controversial whether ‘actually’ is an *i-referential* expression (see Soames (2007) for discussion).

reason it is incorrect is that regardless of whether or not ‘I am here now’ is true at all contexts, it is false at some points of evaluation.²⁸

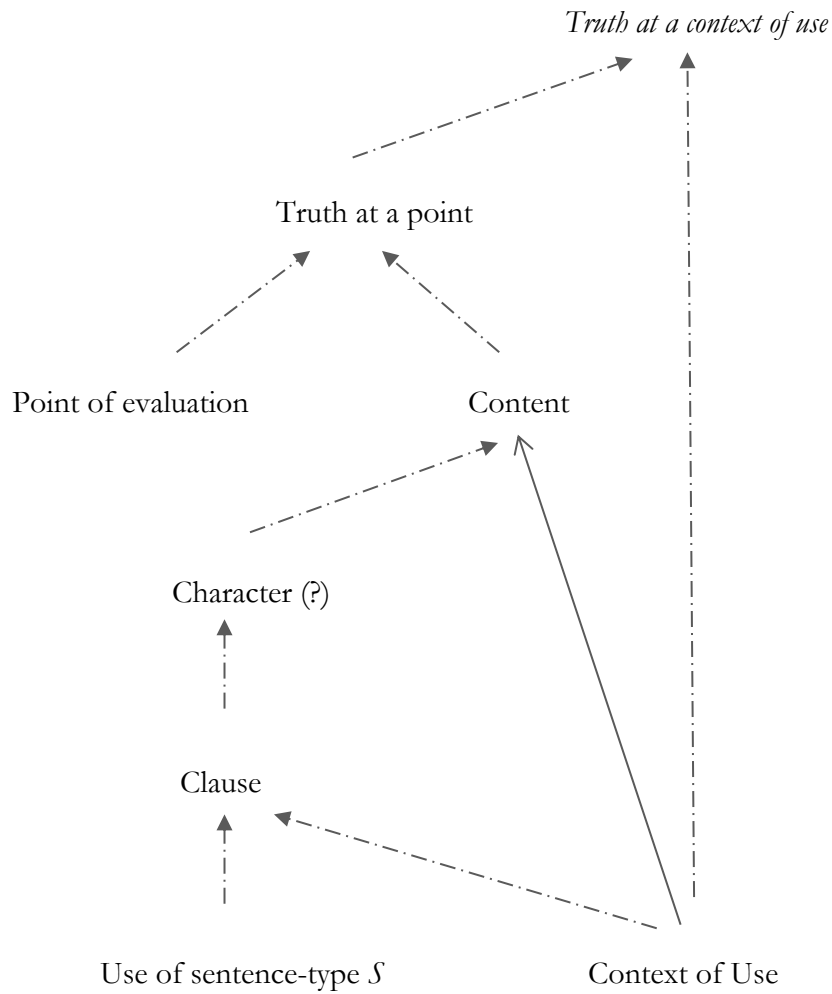
On the Kaplanian framework, sentences containing expressions like ‘I’ and ‘this’ are to be not only evaluated relative to a sequence of parameters—a point of evaluation—but *interpreted* relative to a sequence of parameters—the *context of use*. (This so-called ‘double-relativization’ treatment originates in Kamp (1971).) This additional role of the context parameter reflects the access this privileged class of expressions have to context at the level of Kaplanian character.

What is important about this framework for us is that certain features of the context of use are an input to the compositional derivation of *content* or *sentential semantic value*. As a result of recognising this category of referential expressions, the postsemantic definition of truth at a context of use must also be modified to take account of the fact that the semantic values of expressions vary across occasions of use:

(S**) For all sentences S , S is true at c iff, for every variable assignment α , the semantic value of S at c is true at $\langle w_c, t_c, \dots \alpha \rangle$.

We can illustrate this second picture of context-sensitivity by adapting our earlier diagram.

²⁸ This is why it is important that the point of evaluation need not represent a possible context of use.



— Figure 4.

Given that the semantic values of sentences are contents, the effect is that the content expressed by (1) on an occasion of use is singular with respect to features of context.²⁹

2.5 Egocentric

...in a language with no other subject than me this one
subject of all that I say can go unmentioned.

— Prior (1968c: 230).

²⁹ See Kaplan's (1989a: 503, n. 28) talk of contents being *specific* (versus *neutral*) with respect to (e.g.) time.

Throughout *Papers on Time and Tense*, Prior makes references to a language “in which there are no proper names or pronouns [or indexicals], but in which the ultimate subject of every sentence is understood to be the speaker” (1968b: 213).³⁰ Such a language will by now be familiar. There is one, perhaps natural, way of giving a semantics for our artificial language, conceived of as one in which there are ‘no proper names or pronouns...’, which poses no threat to its accommodating the ANCHORING role. On this i-reference-free treatment, the job of determining an individual with respect to which sentences of Egocentric may be evaluated on an occasion of use is delegated to the process of truth-evaluation. ‘Standing’ is true *at the context of use* c just in case the subject of c , s , stands at the time of c , t , at the location of c , l . All representation, in the way imagined by Prior, implicitly concerns oneself.

One upshot of this possible treatment is that nothing in the semantics proper of Egocentric requires (in order that it accommodate the ANCHORING role) an appeal to context-sensitivity. Instead, the role of the context is exhausted by its import for the postsemantic definition of truth at a context of use. ANCHORING is accommodated because the truth-values of Egocentric sentences at a context of use may be determined by how things are at the point of evaluation initialized at the context of use; that the qualitative properties instantiated at those coordinates are instantiated elsewhere is quite simply irrelevant.

³⁰ The possibility of such an extension of his ‘tense logic’ haunted Prior, for it undermined what was special about tense. Tense somehow demands an intensional treatment, and so tense logic is “metaphysically fundamental” (Prior 1968c: 232): it is the uniquely correct foundational basis for temporal reasoning. Part of what this entails is that it must be possible to express B-series notions in a tense logic founded on A-series notions. In (1968a), he uses a form of hybrid logic to accomplish this. But while this enables us to see instants as mere logical constructions out of tensed propositions (124), the suggestion that the world of *individuals* is mere a logical construction out of ‘individual propositions’ (sentences of his Egocentric logic), while it may offer “a consistent development of the view that no one is directly acquainted with [...] any ‘particular’ but himself” (Prior 1968c: 235), is something Prior had to distance himself from. Ultimately his response was to use the metaphysics he found antecedently attractive to break the tie. Unlike persons, “instants are *not* genuine individuals, so that *their* figuring as values of individual variables *does* need explaining” (Prior 1968b: 219–20). Of course, this will have no dialectical force against his opponent. See Blackburn (2006) for further discussion.

For all sentences of Egocentric $\mathcal{S}$, $\mathcal{S}$ is true at c iff, for every variable assignment α , the semantic value of $\mathcal{S}$ is true at $\langle w_c, t_c, s_c, \dots \alpha \rangle$.

We can express this point in several ways. In Egocentric, on this semantic proposal, the context of use has only a *point*-determining role and never a *content*-determining role; Egocentric expressions are use-*sensitive* and never use-*indexical*; while Egocentric may *concern* individuals (times, etc.), it is never *about* individuals (times, etc.).³¹ In consequence, since no expressions in Egocentric contain referential devices, ANCHORING will turn out irrelevant to the project of compositional semantics. Egocentric's ability to accommodate ANCHORING is irrelevant to its semantics.

On its own, this result is of no philosophical significance. It is only a conclusion about one possible way of running the machinery of semantic theorizing for a rather impoverished fictitious language. However, given the Kaplanian thesis that the semantic values of sentences are *contents*, the putative result is that there is no need to invoke any notion of *singular content* in order to explain how creatures which adopted a representational system like Egocentric succeed in representing their surroundings in a way which is armed against the possibility of Strawsonian massive duplication. That claim does appear to be philosophically significant. For it undermines the arguments of those in §2.1 from the ANCHORING desideratum to the claim that there is aboutness of the sort individuated at the level of content.

Unfortunately, this conclusion about the potential significance of §§2.2–5 has two *prima facie* limitations. Before closing, I show in §§2.6–7 how these limitations can be overcome.

First, any conclusion about content from the above rests on the identification of sentential semantic value and semantic content. Would the denial of this identification not

³¹ The notions of use-sensitivity and use-indexicality are distinguished well by MacFarlane (2014: 64; 79). The final useful form of expression comes from Perry (1986).

then void the above of philosophical interest?³² §2.6 shows that it would not. In fact, the distinction supports the case. Attribution of Egocentric-style *content* is, to an underappreciated degree, independent of semantics. For languages (and plausibly other systems of representation) *in general*, whether that language deserves a semantics of a certain sort is independent of whether sentences of that language (on an occasion of use) *express content* of a certain sort. This will suffice to illustrate that whether a representational system can accommodate ANCHORING has no direct impact on whether it expresses the kind of content widely thought to be entailed by that desideratum.

Second, Egocentric assumes that all representation is *self*-representation. Is it possible to extend the treatment of Egocentric to accommodate (reference-free) other-representation, as it were? §2.7 will outline a way in which this possibility might be realized. It might not only be that “[o]ur entire perceptual and doxastic structure provides us with a way of believing about ourselves, without any expression for ourselves”, but that “[t]he information we get at a certain spot in the world is information about objects in the neighbourhood of that spot in a form suitable for the person in that spot” (Perry 1986: 148–9).

2.6 Semantic value and semantic content

For our semantic treatment of Egocentric to avoid being impoverished, we must posit rich intensional resources. Since the sensitivity of Egocentric sentences to contexts is mediated by its points of evaluation (which are postsemantically initialized to the context of use), these must carry all the information which an i-referential model might attribute to the context of

³² A classic denial of this Kaplanian identification is Dummett’s (1973) distinction between *assertoric content* and *ingredient sense*. See Cumming (2008), Davies and Humberstone (1980), Evans (1979), Lewis (1980), Ninan (2010), Rabern (2012), Salmon (1986), Stanley (1997), and Yalcin (2007) for more recent denials.

use parameter. As we said in §2.2.1, it is only a matter of a language's expressive resources which limit the appeal to the context of use:

Once we have world, time, and speaker, what can be lacking? The place is the place where that speaker is at that time at that world; the appropriate resolutions of vagueness are (under)determined by the pragmatic forces present in the conversation that has been going on around that speaker just before that time at that world; and so on for other features of context, however numerous and however recondite (Lewis 1983b: 230).

We can recover ancillary features of the context of use given just three coordinates—world, time, and subject. Once specified, the structure of logical space does the rest of the work for us.³³ It seems impossible, however, to do this with points of evaluation. A point of evaluation “might have among its coordinates a speaker, a time before his birth, and a world where he never lived at all” (Lewis 1980: 86). Points of evaluation do not always correspond to points in logical space, for we must accommodate the fact that sentences containing *i*-referential expressions—for example, (1)—may be false when embedded by an intensional operator such as ‘Necessarily’, despite being true at every context at which it is used. There is no way to systematically recover ancillary features of context just from the specification of a world, time, and speaker. As a result, the advocate of a framework on which all context-sensitivity is mediated by the point of evaluation must articulate all of the discrete parameters needed in order for the postsemantic machinery to run smoothly.

Is there an objection to the Egocentric project here?

³³ If we assume that individuals are (necessarily) world-bound time-slices, all that need be specified is a subject.

[It is] impossible to lay down in advance what sort of thing is going to count [as a relevant feature of context]. [...] The moral here seems to be that there is no way of specifying a finite list of [...] coordinates (Cresswell 1972: 8).

[Points of evaluation] are no substitute for contexts because contexts are rich in features and [points of evaluation] are poor (Lewis 1980: 87–8).³⁴

Despite these remarks, so long as we remain assured that once isolated and defined any such parameter can be given the same sort of treatment given to world, time, and location, it is unclear why there should be a problem. If, ultimately, we must determine parameters corresponding to ‘standards of permissibility’ (Lewis 1979b: 340–1), ‘standards of precision’ (ibid. 351–4), ‘modal accessibility relations’ (ibid. 354–6; Kratzer 1977), and ‘naming conventions’ (Matushansky 2008) etc., these may all be captured in a way not unlike, though perhaps subtler than, the way in which we determine our world, time, and location parameters.

Another response is available for the Egocentric semanticist envisaged above, however. In Egocentric, and in languages treated equivalently as *i*-reference-free (see Figure 3), it is possible to identify points of evaluation with points in logical space in the same way as Lewis identified contexts with points in logical space. Once we do this, moreover, we are free to recover ancillary contextual features as on Lewis’ (1983b) three-parameter model above.

I want to now consider one argument for the claim that points of evaluation, too, come with all the parameters that a semantic theory for a language could ever require. While I will conclude that it is unsuccessful, it neatly highlights why we might reconsider the Kaplanian identification leaned on in §2.5, to the effect that sentential semantic values are contents.

³⁴ While Lewis (1970) pursued something similar to my semantic treatment of Egocentric for *natural* languages, he rejects such a proposal in his (1980) for having “underestimated the agonies of constructing sufficiently rich [points of evaluation]” (1980: 92).

For our hypothetical users of Egocentric, the point of evaluation parameters recognised thus far fail to provide a sense in which an object might be said to be *to the left* of an individual. In order to evaluate whether an object *o* is *to one's left*, one cannot merely be given the coordinates of a point in logical space. One would also need to be given information as to the subject's *orientation* at that point. Suppose we introduced a sentential operator into Egocentric, 'Leftish', such that 'Leftish *S*' is true iff *S* (despite lacking orientation-specific terms itself) is true at a location to the left of the speaker at the context of use. According to the intensionalist story from §2.3, we will then evaluate the semantic values of Egocentric sentences at a parameter specifying an orientation, too. From this claim, such a theorist may conclude that this extension of Egocentric is coherent only if the semantic values of its sentences—and thus the *contents* expressed—were not in fact already specific (singular) with respect to orientation.

The conclusion of this line of thought is that, for languages quite generally, the possibility of an *F*-parameter in the point of evaluation entails the *actual F*-neutrality of the contents expressed by sentences of the language (on an occasion of use). What would be the rationale behind such a conclusion?

Here is one way of defending this line of thought. The following thought-experiment is due to MacFarlane (2014) (though his point is different from mine):

Suppose we were studying speakers of a primitive language that does not yet contain modal operators [...]. Would we take these speakers' lack of modal vocabulary to debar them from expressing the same kinds of propositions we express—for example, the proposition *that snow is white*? And would we say that, after they have acquired modal vocabulary, the contents of *all* of their beliefs change, and come to be true or false relative to worlds when they were not

before? From the perspective of a philosopher of mind [...], the idea should seem bizarre (2014: 83–4).

The move from the possibility of an *F*-parameter to the actual neutrality of the contents expressed by a language's sentences (on an occasion of use) is plausible to the extent that it is difficult to imagine the content of every sentence changing upon the mere introduction of an expression like 'Leftish'. Why think that *what is said* by a simple sentence changes upon introducing an intensional operator to the language? Even setting aside qualms about the objects of assertion in public language, part of what makes this claim difficult to believe is that the contents expressed by the sentences of a language are widely taken to correspond, in some way, to the contents of the propositional attitudes of the speakers of the language. Why think that what is involved, say, in understanding a simple sentence of a language featuring intensionality (at a given context of use) changes upon the introduction of an intensional operator?

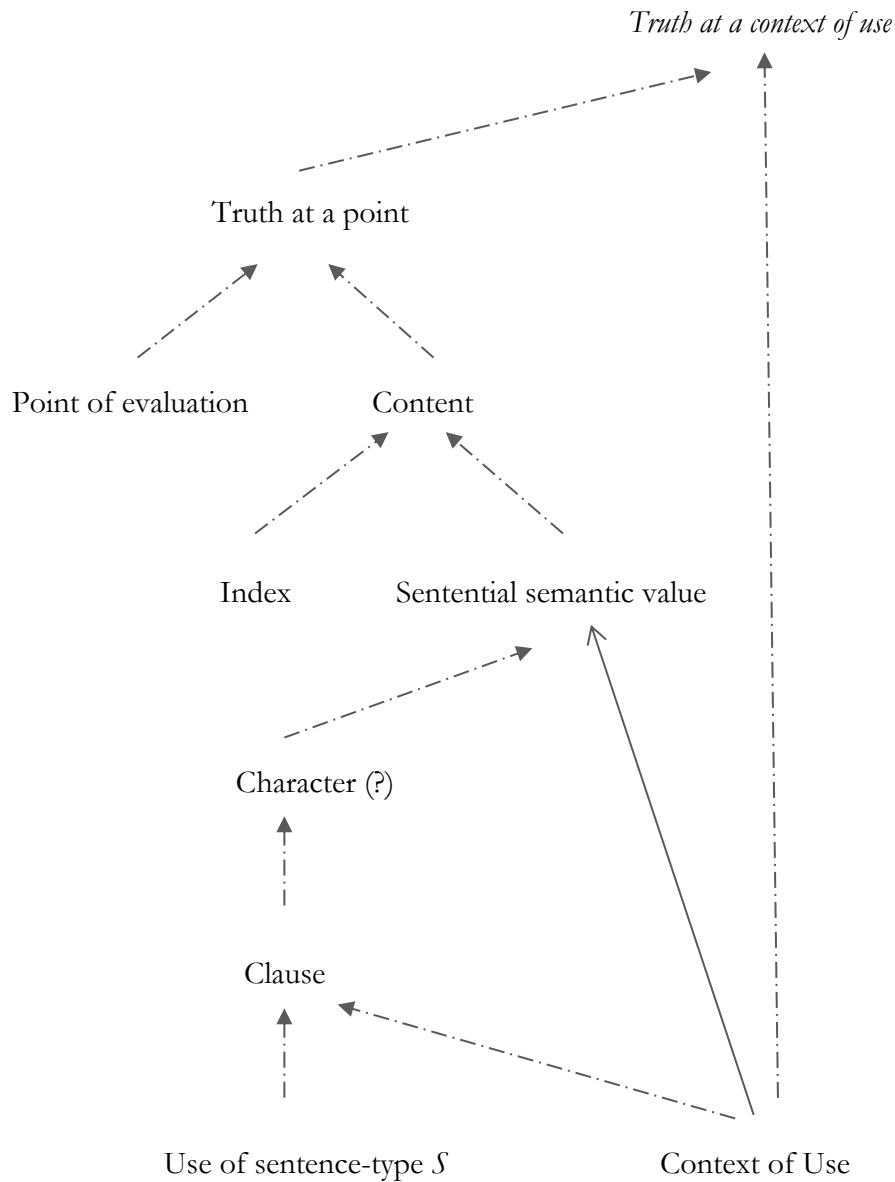
If this curious line of argument is right, then any language featuring any intensionality whatsoever is already replete with as many point of evaluation parameters as could be demanded by any possible intensional operator. It is unclear how those who endorse Kaplan-style operator arguments in general could deny the conclusion of this argument.³⁵ However, it seems to me that the most plausible response to this argument is to view it as a *reductio* of the Kaplanian thesis that sentential semantic values are contents. This controversial claim was used in §2.3 to motivate the introduction (or stipulation) of points of evaluation in our semantic treatment of Egocentric. There, I could have spoken more faithfully by processing sentential semantic values at an *index*, as opposed to a point of evaluation. The latter is the sequence of parameters against which *contents* are evaluated. Semantic values and contents are

³⁵ Such arguments are widely attributed to Kaplan (1989a) but, they are also appealed to by Lewis (1980) *inter alia*. For critical discussion, see Cappelen and Hawthorne (2009: 71), Fritz, Hawthorne, and Yli-Vakkuri (ms.), Glanzberg (2011), and Ninan (2010).

hostage to slightly different theoretical considerations, and there is no *a priori* reason to expect them to converge. While it is plausibly a necessary condition on the introduction of a parameter of the index that there be a sentential operator which shifts that parameter, there may well be independent reasons for introducing a parameter of the point of evaluation. We may wish to evaluate contents with respect to a particular parameter for reasons independent of compositional semantics. For example, Stalnaker (1984) gives an extended defence of possible worlds contents as having just the right structure for the contents of sentences and mental states.³⁶

Figure 5, below, illustrates the overarching structure of a semantic theory which draws this sort of distinction between sentential semantic value and semantic content.

³⁶ On the other hand, drawing the semantic value-semantic content distinction may resolve—by deflating—conflict between eternalism and temporalism about the nature of content, contextualism and relativism about epistemic modals, and direct reference and variabilism about names. See Ninan (2010) and Rabern (2012).



— Figure 5.

If the proposed line of response is correct—if it is right to say that intensional operators, upon their introduction, ought to change the semantic values of all sentences but not *thereby* the contents expressed on an occasion of use—the resulting picture of what sentences ‘say’ (content) and what sentences ‘mean’ (semantic value) is fragmented. There is no reason to infer the presence of a point of evaluation parameter from the presence of an index parameter. That there are operators which shift a parameter of the index does not entail

that contents must be evaluated for truth only at a point of evaluation which specifies a corresponding coordinate. There is, then, no reason to demand that an Egocentric sentence, on the semantic proposal explored in §2.3 and §2.5, must express a content which can only be evaluated for truth at a point of evaluation. That the semantic values of sentences like ‘Standing’ are to be evaluated with respect to an index does not mean that the *contents* expressed cannot be evaluated for truth *simpliciter*. None of this is to say that it is false that Egocentric sentences fail to express fully-specific, classical propositions; it is just to say that *such a picture of the relationship between sentential semantic value and content is in no way determined by compositional semantics per se.*

There is a theoretical distinction between the objects of assertion and compositional values, which we should respect. Theorists working on the nature of assertoric content (or mental content and information) should welcome this distinction, as it allows them to theorize about the nature of content, somewhat liberated from the confines of the strict compositionality principle (Rabern 2012: 94–5).

What we have been led to conclude is that, for languages quite generally, the deliverances of compositional semantics have less influence on the project of characterizing the nature of content than is often appreciated. So long as we have some means of determining a unique content from the semantic value of a sentence on an occasion of use, the overarching semantic project has been successful. And, indeed, we can preserve this determination on the picture which divorces the two notions. While underappreciated, this is not a new observation.

It is enough that the semantic value of a sentence in context should somehow determine the assignment of propositional content. And it does [...]. [...] we have the relation: sentence s is true at context c at index i . From that we can define the propositional content of a sentence s in context c as that proposition that is true [...] iff s is true at c at the [index i_c] that results if we take the index i_c of the context c (Lewis 1980: 93–4).

For Lewis (1980), what was previously the *postsemantic* definition of truth at a context of use (taking place after the determination of content) may be hardwired into the mechanics of the index. As such, there is not even any need to think of the salient, fundamental notion of truth as being truth at a context of use, as opposed to truth *simpliciter*. Following this line of thought, it should be possible to assign contents for Egocentric in such a way that the index parameters are set to the values supplied by the context of use. The content expressed by (9) on an occasion of use will on this treatment be a function from ‘the index of the context of use’ to truth-values. Where w , t , and s are the world, time, and subject parameters, respectively:³⁷

$$(12) \quad [[\text{Working}]]^{<w(t), t(t), s(t) \dots \alpha >}$$

So does this mean that we are led to giving Egocentric a semantics on which its contents are ‘fully specific’, receiving truth-values *simpliciter*? No. And Lewis (1980) agreed. What he actually said was that we could define a *possible worlds* content from the notion of the semantic value of a sentence relative to a context of use:

³⁷ The semantic interpretation function is not ‘doubly relativized’, in reflection of the fact that Egocentric lacks *i*-referential terms.

...we have the relation: sentence s is true at context c at index i . From that we can define the propositional content of a sentence s in context c as that proposition that is *true at world w* iff s is true at c at the index i_c^w that results if we take the index i_c of the context c and shift its world coordinate to w (Lewis 1980: 94; emphasis added).

This picture gives us possible worlds contents, and given that the world which is relevant to the evaluation of the content expressed by a sentence on an occasion of use is the world of the context of use, our postsemantic resources—the definition of *truth at a context of use*—become necessary once again. Possible worlds contents are evaluated for truth at a context of use against a sequence of context-bound ‘parameters’ plus a *bona fide* variable world parameter. We might formalize this content as follows:

$$(13) \quad \lambda w \cdot [[\text{Working}]]^{<w, i(c), s(c) \dots \alpha >}$$

The reason Lewis sought to define content in this way was that—at least prior to his (1979a)—he had independent reasons for thinking that propositional contents were possible worlds contents. Hence his remark:

It would be a convenience, nothing more, if we could take the propositional content of a sentence in context as its semantic value. But we cannot. The propositional contents of sentences do not obey the compositional principle, therefore they are not semantic values (1980: 95).

The reason propositional contents do not obey the compositional principle is that they are not equivalent to and cannot be determined merely by compositional semantic values.

Equally, we may obtain what we might call the corresponding *Egocentric content*:

$$(14) \quad \lambda w, t, s, \dots \cdot [[\text{Working}]]^{<w, t, s, \dots \alpha>}$$

The general lesson is that, for any language L , the question as to whether sentences of L are best construed as expressing Egocentric contents, or possible worlds contents, is independent what sort of theoretical entity the compositional semanticist ought best use to capture what we might call meaning in L . While the identification of sentential semantic value and content pushes one to acknowledge the plurality of point-parameters (in light of the argument from the beginning of this section), the theorist who distinguishes the two notions must consider the possibility that the contents expressed by sentences of Egocentric (on an occasion of use) are of the form in (14).

Rabern (2012: 88, n. 36) has suggested that for languages containing monstrous operators, it will make sense to take compositional semantic values to be context-insensitive. To that extent, arguments to the effect that natural languages contain monsters are arguments which move us closer to the assignment of Egocentric contents.³⁸ Santorio (2012) recovers data which suggest that the semantic values of deictic pronouns *are* sometimes shifted within the scope of epistemic modals (and indicative conditional antecedents). In that case, their semantic values cannot be determined prior to the work of intensional operators. Rather they must be expressions whose values are assigned postsemantically:

[Just as we must let] the initial coordinate of the [point of evaluation] be set systematically at the time of the context itself, [...] I claim that the [interpretation] of indexicals exploits an analogous mechanism. We let the values of indexicals be

³⁸ For further discussions of monsters in natural language see Anand and Nevins (2004), and Schlenker (2003).

set to features of the context itself, like the speaker, the hearer, or the time of utterance, via the definition of truth at a context (2012: 385–6).

Once the job of assigning values to expressions like ‘I’ and ‘now’ becomes a postsemantic process, the claim has to be that a relevant parameter of the point of evaluation is initialized at the context of use. Santorio (2012) suggests that it is possible to accomplish this in a way which mirrors the work of Kaplanian character. We can guide the postsemantic process by imbuing the free variables occupying the syntactic position of the relevant terms with additional syntactic qualities (2012: 386). Free variables are theoretical artefacts, so there is no harm in attributing theoretically expedient characteristics to them. We specify explicit constraints on what can so much as count as the variable assignment of any context by attributing special indices to the free variables in question. For any context of use c , an assignment g is the assignment initialized at c only if:

$$g(I[+c]) = \text{the speaker of } c$$

$$g(Now[+c]) = \text{the time of } c$$

...

An occurrence of a putative *i*-referential expression in a sentence is to be semantically represented by a free variable of the type associated with that expression. Santorio’s (2012) semantic theory appears to posit, for English, precisely the sort of content assignable to our Egocentric language: “The interaction between meaning and context happens at a single point, namely, at the postsemantic level. No input from context is necessary to run the compositional semantics” (2012: 387).

To summarise, this section has shown that the bearing of Egocentric content on the argument from the ANCHORING desideratum to singular content does not rely on the

identification of sentential semantic value and content. Indeed, Egocentric content may have application to natural languages (and other non-fictional representational systems) *because* of the possibility of drawing this distinction. The Egocentric *language* introduced in §2.3.1 is a useful but dispensable way of illustrating the point that for languages quite generally, the question as to whether that language deserves a semantics of a certain sort is separable from the question as to whether that language *expresses content* of a certain sort. Whether a representational system can accommodate ANCHORING therefore has no direct bearing on whether that system expresses the kinds of content widely thought demanded by that desideratum.

2.7 Other-representation

The second limitation considered at the end of §2.5 was that Egocentric assumes that all representation is self-representation. To this extent it bears a clear resemblance to Lewis' (1979a) account of mental content, on which to believe the proposition that cyanoacrylate glue dissolves in acetone is to *self-ascribe* the *property* of being located within the set of worlds at which cyanoacrylate glue dissolves in acetone (1979a: 518); i.e. $\lambda x \cdot x \text{ inhabits some } w \in w'$ where $\{w': \text{cyanoacrylate glue dissolves in acetone at } w'\}$.

Lewis' picture inherits serious deficits from its descriptivist outlook. According to Lewis (1979a: 539), a subject S believes (at w) that x is F iff:

- (i) there is some acquaintance relation R such that S bears R to x uniquely (at w)
- (ii) the subject self-ascribes (at w) the property of bearing R uniquely to something which is F (at w).

This analysis has at least two unfortunate consequences. First, it is impossible to be wrong about how one is acquainted with something.³⁹ Second, it is impossible to imagine (*de re*) of some thing *o* that one does not bear the acquaintance relation to *o* that one in fact bears (and believes oneself to bear) to *o*.⁴⁰

If we are to avoid these sorts of consequences in accommodating the representation of things other than oneself, we must allow the objects of thought and talk to be determined not satisfactorily by means of a description entertained by the subject but directly and on the basis of the subject's acquaintance relations to those objects. It is possible to do just this by extending an Egocentric representational system to recognise devices which are assigned appropriate values postsemantically.⁴¹ It is essential, that is, to not only acknowledge representations of the form 'Sitting', but also

(15) Sitting(*x*)

where *x* is a free variable awaiting the assignment of a value at the stage of postsemantics. In the case of non-*de se* singular thoughts, content is to be evaluated for truth against an *acquaintance set*, where an acquaintance set is a set of objects with which a subject is acquainted.⁴² For example, Alice's perceptual-demonstrative judgment about Leonard the cat to the effect that he is sitting, representable as something like the form in (15), will be true at *c*

³⁹ A version of TRANSPARENCY (§0.2.5) is therefore implicit in Lewis' (1979a) account. While I set his account aside in Chapters 3–4, it will also be subject to the complaints raised about TRANSPARENCY principles.

⁴⁰ For discussion of the latter complaint see Ninan (2013). Holton (2015) and Magidor (2015: 266–71) provide further objections to Lewis' (1979a) descriptivism. Openshaw (2018a) responds to some of these on Lewis' behalf.

⁴¹ This extension no longer warrants the 'Egocentric' moniker and may well be of less philosophical interest.

⁴² I owe the idea (and name) for acquaintance sets to Ninan (2013: 318).

just in case x is assigned an appropriate value by the variable assignment of the context of use whose domain is the acquaintance set of the subject of c and the value of x is sitting.⁴³

This is highly schematic and incomplete as it stands. The picture could be fleshed out in a variety of ways. For example, perhaps we could say that singular representations are information-storing vehicles which *only* carry content of the form $\langle \Phi_x \rangle$, $\langle \Psi_x \rangle$, When the subject becomes acquainted with an object, the informational contents of that representation may be evaluated for truth *at* a singleton acquaintance set determined by the representation in which it is stored. Something like this story seems to bring out what Burge (1977) may have had in mind:

In the formalizations of the representational contents of the relevant *de re* beliefs [in his (1977)], I formalized the demonstrative or indexical elements as free variables. [...] I was *not* thinking of the contents as having objects ‘in the proposition’, in what is thought, *à la* Russell. [...] My idea was that in actual *de re* beliefs the free variables, the formal counterparts of demonstratives and indexicals, are contextually applied, or ‘assigned’, to an object by the believer (Burge 2007: 75–7).⁴⁴

In sum, this all suggests that theorizing about singular thought, insofar as it is conceived as that phenomenon which is to accommodate ANCHORING, is not constitutively tied to the expression of singular content. There may well be fruitful ways of theorizing about aboutness which do not assume there is any distinctive kind of intentional content.

⁴³ There is no requirement that the members of the acquaintance set at a context be located at the situation of the context. By analogy, consider the ordinary appeal to the world of the context of use. This does not entail that we must think of the situation of the context of use as being the whole actual world.

⁴⁴ See also Burge (1977: 352; 1979: 431) and Récanati (2007). In a similar sort of vein, Peacocke (1983) characterises singular thoughts in terms of mode of presentation types ‘indexed’ with an object, where only objects with which S is acquainted may feature as indices.

2.8 Conclusion

This chapter has shown that it is a contingent fact whether a representational system which accommodates ANCHORING contains devices which suffice for the expression of singular content. This suggests that the expression of singular content need not, and arguably should not, be viewed in itself as the core phenomenon and explanandum. What is fundamentally wrong with a wholly qualitative-descriptive conception of how our thoughts gets to be about things in the world is that it fails to provide a story about how our thoughts are *anchored* to our environment. An intentional theory which, at best, underdetermines the objects of our thoughts at a world at which massive duplication obtains is a bad theory. To the extent that our focus is ANCHORING, the project must be to locate something which is in some way relevant to the determination of the truth-values of representations which takes account of acquaintance relations held to one's environment. The project is then perhaps better characterised by the following question. There are certain relations and dispositions which enable us to have thoughts whose truth-values are determined by objects which, if they are anywhere, are within the scope of our acquaintance. *How* do those relations perform this aboutness-fixing work?

Chapters 3–4 explore the prospects for an acquaintance-theoretic account of singular representation which brings out to the epistemic flavour of RUSSELL'S PRINCIPLE, and which does justice to our thoughts about ordinary, mind-independent objects like Leonard the cat. These chapters will return to theorizing about singular thought in a way which takes off from the characteristic traits recovered in the Introduction. I will therefore assume that the achievement and maintenance of a singular representation does constitutively involve the expression of singular content. This will not only make for more digestible reading, it will also ensure that the positive proposal in Chapter 4 is an account of aboutness proper, associated with the hallmark features from §§0.2–3.

Chapter three

Evans (1982) on Singular Representation

In the Introduction I presented a cluster of themes at the heart of Russell's thinking about aboutness. A key bridge principle between these themes was the following:

RUSSELL'S PRINCIPLE: We cannot make a judgment or supposition without knowing what it is that we are making a judgment or supposition about (1910/51: 160).

Epistemic principles of this sort have remained influential.¹ Nowhere is RUSSELL'S PRINCIPLE more influential than in Evans' *The Varieties of Reference* (1982). And Evans' treatment of singular thought arguably remains the most systematic and ambitious. A critical examination of Evans' discussion offers a promising way forward on the conclusion of the previous chapters. The presence of acquaintance constraints has been shown to be compatible with natural principles connecting *de re* attitude-reports and singular thoughts. However, preserving this compatibility led us to deny that the truth of a *de re* attitude report is a context-invariant beacon for the presence of a singular thought. With that move, considerable guidance on the scope of singular thought and acquaintance is lost. That guidance may be regained with a theory of mind which motivates the identification of an acquaintance condition on singular

¹ Other endorsements include Burge (1977: 347–8), Goodman (2013), Kaplan (1989b: 606–7), Récanati (1993; 2010; 2012: 19), Soames (1995: 518, n. 5), and Strawson (1974: 47).

representations. This chapter lays out the key components of Evans' (1982) theory. While it faces serious objections, these objections are instructive. There is promise for a treatment which reconceptualises certain components of Evans' treatment of singular thought, and which preserves core Russellian themes from the Introduction.

3.1 Evans' Project

At its heart, Evans' (1982) is an investigation into what understanding a *Russellian singular term* consists in.

...a term is a Russellian singular term if and only if it is a member of a category of singular terms such that nothing is said by someone who utters a sentence containing such a term unless the term has a referent [...]. [...] [T]hat nothing has been said [...] is, quite generally, to say that nothing constitutes *understanding* the utterance (71).²

Russellian singular terms and Russellian singular thoughts are intimately related. Both are *object-dependent for contentfulness*, in the sense of §0.3.1. And understanding a use of a Russellian singular term requires that one have a Russellian singular thought. A deictic pronoun (on an occasion of use), for example, requires for its understanding that one have a thought with a content of such a type that “no thought with a content of this type is available when there is no object” (1982: 73). As a neo-Fregean, Evans thinks that such contents are partly

² “Why does the investigation of the requirements for thought and judgement about particular individuals matter? It matters because the concept of thought about an individual is tied to the concept of *understanding* a statement about an individual” (1982: 92). The final occurrence of ‘about’ here corresponds to a sentence’s embedding a (Russellian) singular term.

constituted by an object-dependent sense. In the case of Russellian singular thoughts, “[i]f there is no [thing] thought about, there is no thought at all—no intelligible proposition will have been entertained” (1982: 169).

Evans (1982) introduces the modifier ‘Russellian’ to acknowledge the possibility of noun phrases which, while deserving of something more than a purely quantificational treatment, may be used to make truth-evaluable claims in the absence of referential success. Descriptive names such as ‘Julius’ and ‘Pearl Poet’ were encountered in §0.3.1. Evans’ claim is that non-Russellian singular terms like ‘Julius’ are referential but that their semantic interpretation must be undertaken not in the following, existentially-committing manner

- (1) The referent of ‘ a ’ = α

but with the use of *free logical* resources, as follows:

- (2) $\forall x$ (The referent of ‘ a ’ = x iff $[\alpha] (x = \alpha)$).³

(2) is to be understood in the context of negative free logic, where quantifier rules are restricted and simple sentences containing names without referents are false. This permits the truth of (2) even if $x = \alpha$ fails to be satisfied by any object.⁴

My concerns are with aboutness at the level of thought, however. And here, it seems, Evans is much less hospitable to the possibility of non-Russellian aboutness:

³ (Evans 1982: 35; 38). See also Evans (1979: 166). The bracketed ‘ α ’ in (2) is a scope-indicating device (originating in Burge (1973: 433)). It is significant in this context since existential generalization is permissible only where ‘ α ’ has wide scope. This means that the truth of (2), and the success of a semantic theory in which (2) appears, is not committed to the existence of α .

⁴ For discussion of free logic in the context of descriptive names, see Sainsbury (2005).

Belief states are distinguished by the evidence which gives rise to them, and the expectations, behaviour, and further beliefs which may be derived from them [...]; and in all these respects, the belief states associated with the two sentences ['Julius is *F*' and 'The inventor of the zip is *F*'] are indistinguishable. We do not produce new thoughts [...] by a 'stroke of the pen' (1982: 50).⁵

I will generally include the 'Russellian' modifier for precision in what follows, but with our focus being on thought these modifications should be unnecessary.

Throughout his (1982), Evans appeals to several basic principles with familiar Russellian analogues. Part of his task is to provide a precise, theoretical characterisation of singular thought which preserves and explains their intuitive plausibility.

UNDERSTANDING: I hold that it is in general a necessary condition for understanding an utterance of a sentence containing a Russellian referring expression, say '*a* is *F*', that one have a [Russellian singular] thought [...] about the referent, to the effect that it is being said to be *F* (1982: 92).

RUSSELL'S PRINCIPLE #2: ...in order to be thinking about an object or to make a judgment about an object, one must *know which* object is in question—one must *know which* object it is that one is thinking about (1982: 65).

What is involved in thinking a Russellian singular thought for Evans (1982)? What is it to *know which* object one is thinking about? §3.1 explores the former question, §§3.2–3 the latter.

⁵ See also Evans (1982: 135). For further discussion, see (iv) of §0.3.1.

3.1.1 Ideas

Evans' (1982) account of (Russellian) singular thoughts is an account of a certain sort of *representation*: namely, an *Idea* (104). We are familiar with talk of *concepts* of properties. The concept of an object's being blue, for example, is the sort of thing employed by a subject when she entertains the thought that some thing is blue, or which she employs when she recognises the colour of a painting (for example, Yves Klein's *IKB79*) to her left as being the same colour as that of a painting to her right (say, Joan Miró's *Blue II*). A singular thought of the form *a is F*, Evans thinks, requires for its understanding not only possession of the concept of being *F* but also of an *Idea* of the thing, *a*. An Idea, in short, is an object-concept: a way of thinking of an object (1982: 104). Explaining what is involved in understanding a sentence containing a Russellian singular term—in having a (Russellian) singular thought—is therefore the project of identifying a special kind of representation.⁶

3.1.2 The Generality Constraint

For Evans (1982), to possess a concept or Idea it is both necessary and sufficient that the subject possess a set of abilities. This is not to say that concepts *just are* clusters of abilities. There is a distinction between the possession-conditions of a concept and that concept's identity. Evans' claim is that the possession-conditions of a concept exhaust its identity

⁶ As a neo-Fregean, Evans might prefer a reconstruction of his project as that of identifying a certain kind of sense. However, it is a mere convenience for us to focus on the cognitive vehicles which serve to express the relevant senses: "We cannot *equate* an Idea (a particular person's capacity) with a Fregean sense [...]. But there is a very close relation between them. Two people exercising their [...] Ideas of an object may thereby 'grasp' the same Fregean sense. What this means is that they may think of the object in the same way" (1982: 104, n. 24).

criteria.⁷

Thought is structured. If a subject is capable of having the thought that a is F (where a is an Idea of an object and F a concept of some property), this is something which must be explained, according to Evans (1982), by appeal to the subject's exercise of abilities also involved in having the thought that a is G or the thought that b is F .

[There is] a common partial explanation for a subject's having the thought that a is F and his having the thought that a is G : there is a single state whose possession is a necessary condition for the occurrence of both thoughts (1982: 102).

A condition on concept-possession which results from this characterisation is that for S to have an Idea of an object, S must have a capacity to apply that Idea to all of the (first-order) properties of which she possesses concepts. Evans (1982: 104) calls this the *generality constraint*.

GENERALITY CONSTRAINT: ...if a subject can be credited with the thought that a is F , then he must have the conceptual resources for entertaining the thought that a is G , for every property of being G of which he has a conception (1982: 104).⁸

Given its centrality to the notion of an Idea, and the centrality of an Idea to the phenomenon of singular thought, one might think of Evans' (1982) project as an investigation of what it is that makes fulfilment of the GENERALITY CONSTRAINT possible. This brings us to RUSSELL'S PRINCIPLE, and to the second part of the twofold story about how subjects' cognitive

⁷ Peacocke (1992: 71) has called this principle 'DEPENDENCE'. I will sometimes talk of a subject's grasp of an Idea as consisting in x , where x is typically a range of dispositions. What is meant is that the Idea's possession-conditions are exhausted by x . Given DEPENDENCE, this is merely a convenience.

⁸ Dickie (2015), Peacocke (1992), and Récanati (2012) endorse this in various diluted forms.

capacities enable them to have (Russellian) singular thoughts.

...this general capacity to think of an object, and grasp indefinitely many hypotheses about it, can be possessed [only in virtue of a subject's] discriminating conception of the object (Evans 1982: 75).

To have an Idea of an object one must have *discriminating knowledge* of that object. §3.2 introduces some conceptual background to Evans' account of discriminating knowledge. As he concedes, "[t]he difficulty with Russell's Principle has always been to explain what it means" (1982: 89).

3.2 Discrimination and the fundamental level of thought

Evans (1982) accounts for the productive capacity of Ideas by individuating them in terms of discriminating knowledge. On paper, discriminating knowledge is as demanding as in Russell's notorious treatment (§0.2.5):

[A subject who is] in a position to think of an object must have a *discriminating conception* of that object—a conception which would enable the subject to distinguish that object from all other things (1982: 65).

The section explains the implications of this view on aboutness and why Evans (1982) held it. One dimension of the 'varieties of reference' alluded to in the title of Evans' (1982) consists of the various *modes of identification*—ways of achieving discriminating knowledge. These modes

of identification include *demonstrative*, *recognitional*, and *self-identification*...⁹ While these types are unified by their faithfulness to RUSSELL'S PRINCIPLE, their heterogeneity raises important issues. We will meet with some of these modes of identification in the course of this chapter, but to achieve the right level of focus I will be setting many of the subtleties aside.

Evans' (1982) characterization of discriminating knowledge comes along with some heavy-duty metaphysics. For each thing, there is a canonical specification of what makes it different from every other thing of its kind (at a time). A property specified in this way is a thing's *fundamental ground of difference* (1982: 107).¹⁰ A *fundamental Idea* of an object is a way of thinking about that object which correctly identifies it *as* the unique thing falling under a particular sortal and instantiating its fundamental ground of difference.¹¹ For example, in the case of the sort *material object*, an object's fundamental ground of difference is its spatiotemporal location (1982: 107). And in the case of the sort *number*, an object's fundamental ground of difference is its place in the number series (*ibid.*). In order to have an Idea of a material object, *o*, which *straightforwardly* satisfies RUSSELL'S PRINCIPLE, one's Idea of *o* will consist in one's knowledge of *o*'s sortal and of *o*'s spatiotemporal location.

⁹ These modes should not be thought of as mutually exclusive and jointly exhaustive kinds of discriminating knowledge, but as a philosophically representative set of basic kinds of discriminating knowledge. Demonstrative identification shades off into recognitional identification (1982: 176), recognitional into descriptive (1982: 269), and even demonstrative into descriptive (1982: 177). There are, moreover, mixed cases.

¹⁰ It is important not to let the semantic nomenclature distract from the nature of this claim. Evans' thesis is that it is part of the fundamental nature of each thing that there is something in which its distinctness from every other thing is grounded.

¹¹ Since objects fall under a variety of sorts, Evans (1982) recognises that there must be a 'ranking' system involved. "As Trinculo goes along the beach and spies Caliban for the first time, he asks 'What is this?' It must be presumed that 'This is a living animal' is (at least) a better answer than 'This is a collection of molecules'" (178). While he is not explicit on how a ranking is determined, it has something to do with the intentions of the thinker. An apparent result, however, is that if the subject has no tacit ranking of sorts, she is incapable of having a singular thought about an object the sort of which she has not yet established.

The reason Evans (1982) thought discriminating knowledge must involve this commitment is that it must explain how the subject's Idea satisfies the GENERALITY CONSTRAINT (1982: 149). This comes out in his account of concept possession, which guarantees that concepts satisfy the GENERALITY CONSTRAINT. Possessing a concept of a (first-order) property, F , requires knowing what it is for propositions of the form $\langle \delta \text{ is } F \rangle$ to be true, where δ is a fundamental Idea of an object (of the relevant sort). Concept-possession amounts to knowledge which, when combined with an arbitrary fundamental Idea (of the relevant sort), suffices for knowledge of what it would be for the resulting thought to be true.

Clearly, the notion of discriminability is crucial in Evans' framework. While Evans says more about what is practically involved in achieving discriminating knowledge of an object (as we will see), he is also relying on a notion of discriminability at the level of truth-conditions. Understanding a sentence or 'grasping' a thought involves knowing what it would be for it to be true. Evans (1982) says little on the positive side to explain what such knowledge amounts to, except that this also involves a capacity (116), and remarks such as that one must know "what would *make* it true" (117) sound as if one might have to be able to verify whether the proposition is true.¹² Instead, Evans' strategy is

to make as precise as possible what notion of knowing what it is for a proposition to be true one is committed to by a denial of Russell's principle; there may be no difference, in respect of what they can do, between a thinker who knows what it is for some proposition to be true, and one who does not (1982: 106).

This lacuna raises obvious worries about the tractability of the notion. However, the key point about discrimination in Evans's framework is that thinking a (Russellian) singular thought

¹² Evans' ideas here seem to be informed by Dummett's constraint that a 'robust' account of the truth-conditions of a sentence be something that subjects must 'manifest' a grasp of (1977: 373–6).

involves the exercise of an Idea. And the Idea exercised need *not* be fundamental. It may instead rest on “knowledge of what it is for an identity proposition involving a fundamental identification to be true” (1982: 149). So the subject must at least know what it would be for a thought made up of her non-fundamental Idea of *o*, an arbitrary fundamental Idea of *o*, and a concept of the identity relation, to be true. For example, in the case of a non-fundamental Idea resting on a demonstrative mode of identification of an object, *o*, the subject must know what it would take for the thought '*that* = the thing *there*' to be true.¹³

While fundamental Ideas may sound odiously descriptive—fundamental identifications of, for example, material objects being of the form <'The G at π , t is...> (1982: 178)—Evans' consolation is that these are only ever achieved in practice with the support of a complex pattern of dispositions towards objects and places, dispositions of the sort which underpin the alignment of one's egocentric cognitive map with the space in which one is situated (1982: 168).¹⁴

It is essential to see that [the special relations of thoughts involving the Idea to certain sorts of evidence and to behaviour (262)]—which connect the subject, via a complex battery of dispositions, to a specific object in the world which is disposed to affect his thinking and to be affected by his actions—can enter into the account of how the subject satisfies the requirement that he *know which* object is at issue. Otherwise we would be liable to an unnecessary worry over whether our singular thoughts are adequately pinned down to a particular set of objects, when we contemplate the possibility of Twin Earth cases. If we suppose [...] that the special dispositional connections are quite *separate* from the subject's possession of an adequate Idea, we shall disqualify ourselves from what seems the

¹³ See Evans (1982: 111–2).

¹⁴ In terms to be introduced in §3.4, Ideas (fundamental or non-fundamental) may be, or be a causal consequence of Ideas which are, *information-based*.

only possible answer to the question what makes it the case that a subject's 'P'-thoughts (say) concern himself rather than his Doppelgänger on Twin Earth (1982: 263).

A subject *S* may have a different Idea, for example of some place, from her duplicate *S'* because *S* is disposed to move to a particular place (to her right) when doing so would fulfil her desires given her beliefs, while *S'* is disposed to move to another place (to *her* right). A second upshot is that satisfying RUSSELL'S PRINCIPLE has much less to do with causal interaction than typically supposed. To be acquainted with an object is to have discriminating knowledge of that object, and one can have discriminating knowledge of things with which one has not causally interacted. Indeed, causal interaction with a thing never on its own suffices for the possibility of a (Russellian) singular thought about that thing. This is where Evans' rival view enters the picture.

3.3 The photograph model of aboutness

If one is faithful to RUSSELL'S PRINCIPLE, one's account of the conditions on Russellian singular thought will diverge from pure causalist accounts according to which a singular thought is about an object only if it played the 'right' kind of causal role (however 'rightness' is fleshed out) in the production of the thought.¹⁵ Evans (1982) refers to this disparagingly as the *photograph model*. Aboutness, on that model, is a property thoughts have just in virtue of their causal ancestry, in the way that a photograph portrait is 'of' its subject. Evans' misgivings

¹⁵ Unless, of course, being 'of the right kind' is specified with the help of epistemic notions involved in RUSSELL'S PRINCIPLE.

about the photograph model can be summarized using the following case studies.¹⁶

Case 1—Spheres 1:

Sam visits an art exhibition in which there are two large, perceptually indistinguishable steel spheres, rotating about the point from which they are suspended. A while later, Sam does not believe anything about one sphere which he does not also believe about the other. Intuition suggests (according to Evans) that Sam is incapable of entertaining a singular thought about either of *just one* of these spheres. If he attempts to speculate about one of the spheres, in a judgment of the form *<That sphere may now be in Warsaw>*, he will fail.¹⁷

Case 2—Spheres 2:

Sam visits an art exhibition in which there are two large, perceptually indistinguishable steel spheres, rotating about the point from which they are suspended. Soon after the experience, Sam suffers a localized amnesia caused by a blow to the head, with the consequence that he loses all memory of having visited the exhibition and encountering the sphere. Sam returns to the exhibition the next day (his desire to visit it, he believes, unfulfilled) and encounters a distinct but perceptually indistinguishable sphere, rotating about the same point. A while later, he reminisces about *that steel sphere* he once saw.¹⁸ Intuition suggests (according to Evans) that Sam ‘has a thought about’ the sphere which he encountered on the second day (but not the sphere he encountered on the first day).¹⁹

¹⁶ See Evans (1982: 90; 114–20) and the similar example of the two grocers (1982: 78).

¹⁷ What Evans would think about the possibility of a *plural* singular thought about *those spheres* is less clear. For all his (1982) says, he is committed to denying the thought here, too. Intuitively, this is beyond the pale.

¹⁸ Sam does not think to distinguish the sphere he has ‘in mind’ as *the one from which my current memory causally derives*. If he did, the scenario would cease to be a problem case for Evans’ reading of RUSSELL’S PRINCIPLE.

¹⁹ For present purposes, I will take Evans’ intuitions at face value.

Evans' (1982) characterization of discriminating knowledge supports the intuitive verdict in Case 1 but clashes with the intuitive verdict in Case 2. Commenting on the clash:

We have reduced the question whether he has an adequate Idea of the ball to this: can he be said to know what it is for an arbitrary proposition of the form $\langle \delta = \text{that ball} \rangle$ to be true? Thus we envisage him contemplating some object (a ball) as the occupant, at a given time, of some position in space; and we envisage him raising the question, of some object thus fundamentally identified, 'Is this ball *that* ball?' [...] The reason we find a certain amount of difficulty with this question is that [t]here is no question of his recognizing the ball; and there is nothing else he can do which will show that his thought is really about one of the two balls (Evans 1982: 115).

Our intuitions to the contrary (in Case 2), Evans claims, must be explained away. For a theory which seeks to extend the class of singular thoughts without the application of RUSSELL'S PRINCIPLE in the hope of securing aboutness in Case 2 is hopelessly misguided:

[The photograph model] purports to free us from any obligation to respect Russell's Principle when we seek to extend the class of Russellian thoughts beyond Russell's model of acquaintance. [But] it is quite obscure how [...] sheer difference between [...] causal relations could generate a difference in *content* between [...] mental states, given that it need not in any way impinge on the subject's awareness (1982: 83).²⁰

²⁰ Evans appears to equate 'awareness' with the possession of information (1982: 177), so this claim is perhaps less demanding than it first appears. (We will see that Evans has a specific conception of information in mind.)

Evans concludes that there must be a way of fleshing out RUSSELL'S PRINCIPLE which, while disagreeing with our intuitions in Case 2, provides an overall satisfying theory.²¹ (In §3.6.3 I consider an example analogous to Case 2 where Evans is similarly incapable of accommodating the intuition that the subject has a singular thought about the object.)

The previous sections have explained, in the abstract, Evans' (1982) story about what Ideas and the discriminating knowledge to which they are subject amount to—of what entertaining a (Russellian) singular thought consists in. We now turn to the matter of how this is *accomplished* in a particular case of, say, perceptual-demonstrative thought or recognition-based thought. How do the various relations and dispositions in which we stand to objects play their role in supporting grasp of an Idea—in securing aboutness?

3.4 Information-based thought

Suppose that, perceptually attending to Leonard the cat, veridically and in optimal conditions, Alice makes a judgment of the sort she would express by saying 'He is hungry'. This representation takes place on the back of a more basic cognitive architecture. Alice's thought about a particular cat in her surroundings is made available through the marshalling of information she receives from Leonard and from other objects. This marshalling of information into a unified system which evolves upon the receipt of new information is a foundational process undertaken to achieve knowledge about the world.

²¹ Were the adherent of the photograph model to seek conformity with RUSSELL'S PRINCIPLE by claiming that "identification depends not on anything [the subject] *could* or *would* do but on what he *did*" (Devitt 1974: 295; quoted in Evans 1982: 116, n. 42), she would find herself with a proposal which "...entirely subverts the very logic or grammar of the concept of knowing what it is for it to be true that *p* (or for an object to be *F*). The concept is one of a *capacity*, and the proof of its being possessed at a given time must surely reside in facts about what the subject can or cannot do at that time" (1982: 116).

People are, in short and among other things, gatherers, transmitters and storers of information. These platitudes locate perception, communication, and memory in a system—the informational system—which constitutes the substratum of our cognitive lives (Evans 1982: 122).

Judgments like Alice’s above, being a direct causal consequence of the acquisition and retention of information, are what Evans calls *information-based* thoughts (1982: 122).

3.4.1 Information-based Ideas

Ideas, as well as object-concepts which do not (yet) fulfil the conditions for Idea-status, are characteristically associated with a unique, dedicated “controlling conception” (1982: 122): an evolving body of (mis)information to which the subject’s thinking involving the Idea is rationally sensitive. In the case of an information-based object-concept/Idea, for example of the sort exercised in the demonstrative judgment *<He is hungry>*, this controlling conception changes in accordance with (mis)information received via an *information channel* (such as an attentional-perceptual channel or a stream of testimony by a conversational partner). If the channel does deliver information about a unique object, we can call it an *information link* (to that object). Here, the subject is “so disposed that bits of information delivered by the link will enter the conception that controls thoughts involving the Idea” (147, n. 10). The link mainlines information into the controlling conception, and does so without an explicit ‘identification’ inference on the part of the subject, because the subject is treating information received from this source as being from a single, unique thing. She is engaging in an

information-clustering practice motivated by a desire to ‘tune in’ to an object in the world.²²

The contents of these information-processing states are purely general in form: for example, “Red(*x*) & Ball(*x*) & Yellow(*y*) & Square(*y*) & On Top Of(*x*, *y*)” (Evans 1982: 125). At this level, the photograph model is rather apt: an informational state “is *of* the objects that were the input to the mechanism when the [state] was produced” (125). It is an important feature of informational states that they may be of an object despite the predicative material being somewhat inaccurate. Moreover, an informational state “may be of *nothing*”, as when there was no object which served as input (1982: 128). The reason objects should not be mentioned is, presumably, that informational states are not the kind of thing which can satisfy RUSSELL’S PRINCIPLE.²³ Since these clusters of information are candidate beliefs, we cannot maintain RUSSELL’S PRINCIPLE if we allow that the information associated with candidate singular representations is singular. Else it would be possible upon receipt of any old strand of information to think a singular thought by authoring a judgment with that content. Thinking a singular thought cannot be so easy while we are committed to the GENERALITY CONSTRAINT and to RUSSELL’S PRINCIPLE.

However, while these states do not constitute identifications and so are not yet *about* objects in the world, they are fully objective seemings as opposed to mere feature-placing representations. Their content is akin to that expressed by an open sentence. They become *bona fide* singular representations when the variables are ‘linked up’ with an Idea of an object in accordance with RUSSELL’S PRINCIPLE; or, when the subject’s controlling conception becomes sufficiently rich that, on the basis of the information-link, she satisfies RUSSELL’S PRINCIPLE. This may be, for example in the case of a perceptual demonstrative object-concept (as we will see), because she is able to locate the object and to discover its sortal. Her object-concept will

²² This overriding intention to ‘tune in’ to a unique thing in one’s environment is an ascription of an ‘interpretational’ sort (see Evans (1982: 138)). A similar notion, of motivation by a need to achieve ‘cognitive focus’, is employed to by Dickie (2015).

²³ See Evans (1982: 125, n. 10; 268, n. 2).

thereby satisfy the GENERALITY CONSTRAINT and constitute an *Idea*. When an Idea is so-associated with a unique and dedicated controlling conception, we can say that it is *information-based*. Judgments which exercise information-based Ideas are of first-rate importance for Evans:

[Such judgments] have an epistemological priority over judgments involving all other Ideas of objects: were there no such judgments or Ideas, no singular knowledge would be possible (Evans 1982: 181).

3.4.2 Case study: demonstrative identification

Of the sample species of discriminating knowledge Evans (1982) discusses, that which individuates demonstrative Ideas of material objects is both the most straightforward and (arguably) the paradigm from which other modes of identification deviate.²⁴ This section briefly outlines what demonstrative identification involves as both a case study and a primer for the final pieces of Evans' treatment of aboutness.

For Evans, information-based Ideas which rest upon a continuing information link to an object are eligible to be exercised in the production of demonstrative judgments of the form <*That* is ginger> or <*He* is hungry> iff the following three conditions are met.²⁵

- (i) The previous and present deliverances of the information-link saturate the subject's controlling conception of the object.

²⁴ According to Evans (1982), perceptual-demonstrative judgments—i.e. those employing an Idea associated with a controlling conception which evolves in accordance with current perceptual information—are “the mother and father of all information-based thoughts” (145).

²⁵ See Evans (1982: 174).

- (ii) The subject remains ‘in contact’ with the object, being unmediatedly disposed to update his controlling conception in response to certain future information received via the link.
- (iii) The subject is able, upon the basis of the link, to *locate* the object in egocentric space, and thereby in objective space.²⁶

This tripartite account of demonstrative identification features conditions on (i) the *controlling conception* associated with the Idea or object-concept; (ii) the *functional characterization* of the Idea or object-concept (that is, the disposition to both update the associated controlling conception in line with the receipt of future information and direct one’s actions upon the source of the information link when one’s desires indicate, in line with beliefs involving the Idea, that this would be a good thing to do) (1982: 262); (iii) the *discriminating knowledge* which individuates that Idea.²⁷ Meeting these conditions is compatible with one’s controlling conception containing misinformation (1982: 179).

Demonstrative Ideas may often result in fundamental Ideas (of the form $\langle \text{The } G \text{ at } \pi, \iota \rangle$), since it is a necessary condition on their possession that one have a capacity to locate the object, and a material object’s spatiotemporal location is, among things of its sort, its fundamental ground of difference. One will often have a capacity to locate the object because one *knows* its location, and where the subject also knows the sortal to which the object belongs a fundamental Idea will be within reach. However, discriminating knowledge might also be

²⁶ Austin (1962) and Strawson (1974) propose similar conditions on perceptual-demonstrative thought.

²⁷ In the case of thought about *places*, condition (i) drops out and the discriminating knowledge is constituted by the condition on the functional characterization in (ii): “provided that the subject does maintain a stable dispositional connection with a place, there is just one proposition of the form $[\pi = p]$ (where p is an egocentric spatial Idea) that is true, and the subject knows what it is for it to be true” (1982: 164). A thought’s being information-based, then, does not entail that it is based upon the actual receipt of certain information; sensitivity to the receipt of such information may suffice. A similar point applies to Evans’ (1982) account of self-representation. For reasons of space, I am unable to discuss this here.

more or less dispositional: “a subject may make a demonstrative identification of an object without *actually* knowing where it is” (1982: 172).²⁸ For example, condition (iii) may be satisfied in a case where a subject homes in on a beetle eating away in a beam, even though, at the time of the judgment <I shall track down *that*>, the information link provides imprecise information as to its location (1982: 172).

We said in §3.2.1 that a material object’s fundamental ground of difference was not merely its spatiotemporal location, and examples of co-located statue and clay threaten that claim. Must subjects not also have knowledge of an object’s sortal in order to grasp an Idea?

- (iv*) The subject’s controlling conception contains a correct ascription of the object’s sortal.

Evans (1982) denies condition (iv*). A subject may possess a non-fundamental Idea, individuated by a demonstrative identification of its object (may know what makes a proposition of the form <*This = The G* at π , t > true), “provided there is such a thing as *discovering* the sort of a thing, and he knows how to do it” (1982: 178):

- (iv) The subject must know how to discover the sortal of the object.²⁹

²⁸ “The information-link places the subject in a position rather like that of the man who feels something tugging at the end of his fishing line. [...] we have the *practical ability* to locate the object” (1982: 172)

²⁹ What should we say in cases of incorrect sortal-attribution? This matter is discussed in §4.2.3. A related open question concerns the limits of demonstrative identification. According to Evans: “Sitting in a room in a house, a subject is not in information contact with a *vivy*...” (1982: 177). Again, however, it is unclear what the real grounds for this judgment are. It seems that criteria (i)–(iv) are met.

3.4.3 Well-groundedness

It is important to recognise the following corollary of §3.4.2. Which object an information-based Idea is about is determined not merely by the source of its controlling conception's information-link (as per the photograph model). There are *two separate* conditions on successful reference: informational and discriminatory. The latter, generated by the requirements of RUSSELL'S PRINCIPLE, means that the subject's discriminating knowledge must converge upon a unique object. And if the information-based Idea is to be successful, these two conditions must *match*.

...the thinker's overriding intention is that [...] the mode of identification employed does in fact identify the object from which the information was derived. This secures that the thinking, if it nets an object at all, nets the object which is the source of the information; so that one cannot intelligibly wonder whether it is the object netted by this thinking to which the information relates (1982: 197).³⁰

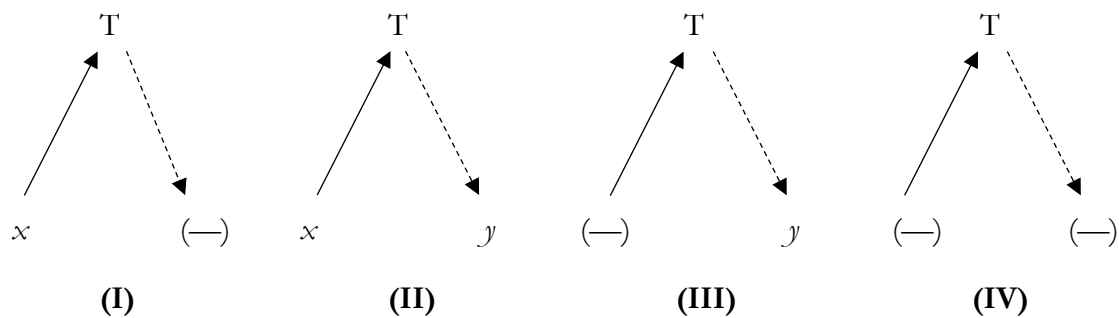
The source of the information link upon which the controlling conception of the Idea rests must be the very object picked out by the subject's mode of identification. We can call the former the *target* of the Idea and the latter the *object* of the Idea. Thinking a successful information-based thought, then, requires that the thought's target be its object. In Evans' (1982) phrase, a successful information-based thought must be *well-grounded*.

Someone essaying an information-based particular-thought will employ some purported mode of identification of an object; and his attempt at a thought will

³⁰ “[Such an] Idea tolerates no gap between the deliverances of the relevant information channel and thoughts employing the Idea” (Evans 1982: 180).

[...] not be well-grounded unless the object (if any) which that mode of identification would identify is the object (if any) from which the information derives (1982: 132).

One of the key features of (attempted) information-based thoughts, then, is their capacity to be *ill-grounded*. It is possible to entertain an information-based thought which goes awry not because there is no object which falls under the mode of identification employed by the subject, but because the object which *does* fall under this mode of identification is not the same object that is at the end of an information-link on the basis of which the subject intends to ‘tune in’ on some worldly object. The possible instances of this distinctive failure of information-based thoughts can be illustrated as follows.



— Figure 6.³¹

3.5 The Russellian status of information-based thoughts

...to which features of [the myriad ways we have] of thinking about objects are we to appeal in order to defend the claim that where there is no object referred to, no thought is expressed? (Evans 1982: 39)

³¹ (Evans 1982: 133).

We began §3.4 with our case of Alice perceptually attending to Leonard the cat and authoring the judgment *<He is hungry>*. We are now in a position to see Evans' explanation of the object-dependent (Russellian) quality of such thoughts. Alice's thought is information-based. On the assumption that Alice has never (and does not believe herself to have) encountered Leonard in the past, so that her identification of Leonard is purely demonstrative rather than partly recognitional, the attentional-perceptual channel established by Alice constitutes an information link in virtue of which she is in a position to fulfil Evans' four criteria for demonstrative identification (see (i)–(iv) in §3.4.2). Without this information-link to *Leonard*, Alice would be in no position to fulfil the criteria for the possession of an Idea of Leonard. In the case of thoughts which employ an Idea (with mode of identification *m*) based upon an information-link, in the sense that the subject means (tacitly) to have a thought which, if it is about anything at all, is about the source of the information which saturates the controlling conception associated with her Idea, there being an object of *m* is only half the battle. If Alice is paying insufficient attention and is gathering information on many small, ginger cats, she “may essay a thought and literally think nothing at all” (1982: 45). For it will not be possible to ‘excogitate out of’ her dispositions (those in virtue of which she satisfies criteria (i)–(iv)) any descriptive content for the *<He>*-thoughts she essays (1982: 170).³² The Russellian quality of information-based singular thoughts is a consequence of the tacit pursuit of well-groundedness. What else could rationalize typing successful and unsuccessful singular thought-attempts differently if not because the successful case constitutively involves bearing a relation or dispositional connection to an object?³³

³² See Evans (1982: 173; 284–5).

³³ In §3.2 I said that fundamental Ideas may be information-based. There is therefore a possibility of *descriptive* information-based thoughts. The description used in place of a (non-fundamental) mode of identification need not, however, be a specification of the target object's fundamental ground of difference. It may be something of the form *the Russian I met yesterday*. The fact that descriptive information-based thoughts are governed by the requirement that they be well-grounded has the effect that they are no less Russellian than information-based thoughts employing a non-descriptive mode of identification (see Evans

3.6 Objections

This section raises serious worries for Evans' treatment of singular thought. Circumventing these worries will be part of the motive for the positive treatment presented in Chapter 4.

3.6.1 The overdemandingness of RUSSELL'S PRINCIPLE

According to the picture presented by Evans (1982), information-based representation is subject to the condition that it be well-grounded: the information-link to the object which saturates the subject's controlling conception (and, in the demonstrative case by means of which the subject is unmediatedly disposed to update her controlling conception upon receipt of certain future information), must be a link to the *same* object as that to which her discriminating knowledge uniquely corresponds (for example, the object which she is disposed to locate, or the object which she is disposed to recognise). The bipartite character of this constraint on successful information-based thought—the constraint that the subject's thought be well-grounded—has the consequence that failures of alignment result in systematic failure to have a thought of the kind the subject takes herself to have.

Consider the following case.

Case 3—Restaurant mirror:

Entering a restaurant, you look across to your left at potential tables and see a waiter in a white shirt cleaning up a suitable-looking table. You wonder whether *he* is cleaning up the table for another customer or whether it will soon be free. A glance to your right has you

(1982: 135; 139–41; 169; 268)). In general, if an Idea *i* is employable in an information-based thought, then that fact partly individuates *i* in the following sense: *i* cannot be used to grasp contents if the information-link on which *i*'s associated controlling conception is based fails to have as its source the object which is identified by *i*'s mode of identification, whether demonstrative, recognitional, or descriptive.

quickly realise that you were just now looking in a mirrored section of the wall to your left, and the waiter in the white shirt is in fact to your right.

According to Evans' (1982) account of demonstrative singular thought, you did not have the demonstrative thought you took yourself to have as you entered the restaurant. For there is no such object at the location to which you would be disposed to direct your action were you to ask whether the table is free.³⁴

This verdict is deeply unappealing, and the problem quite general. Other things being equal, knowledge of the location of a material object, or the capacity to recognise an object as the object of which you intend to be thinking, etc., often do play key roles in securing the availability of singular thoughts. However, while such 'modes of identification' no doubt play an important role in securing aboutness for singular representations, they do not in general inherit this role by being invariable necessary conditions on the aboutness of those representations.

This is just one dimension of the overdemandingness of Evans' (1982) account of singular thought. The objection is that Evans' demands are often too high. Denying that the subject in Case 3 has a thought about the waiter is intuitively implausible. In the next subsection I emphasise a second dimension of this overdemandingness. Evans' demands are insensitive to epistemically relevant features of subjects' situations. Once both of these criticisms are on the table, and a further, final objection is drawn out in §3.6.3, Chapter 4 will present and motivate a characterization of RUSSELL'S PRINCIPLE on which its distinctive demands are *situation-dependent* in the way Evans' requirements (such as the 'ability to locate' an object) are not.

³⁴ It might seem possible for Evans to respond that the subject in this scenario merely gets the sortal incorrect (perhaps disastrously), mistaking a *reflection* for a *man*. But at least often, one does not think that the purported object is where the mirror is, one takes it to be 'through the looking glass', as it were: one would not at that moment be able to locate even the reflection.

3.6.2 The situation-insensitivity of RUSSELL'S PRINCIPLE

One of the virtues of Evan's (1982) is that he takes singular thoughts beyond the perceptual-demonstrative paradigm seriously. Memory-based singular thought, for instance, involves an Idea whose mode of identification is *recognitional*.

...if a subject is disposed to identify a particular object as the object of his thought, and in so doing is exercising a genuine recognitional capacity stemming from the encounter or encounters from which the memory-information that saturates his thought derives, [...] that object is the object of his thought (269).

Suppose that some time after perceptually attending to Leonard the cat, Alice remembers the encounter and essays a range of thoughts about *that_M cat* ('_M' here signalling the memory-based nature of the demonstrative). What would it be for her to think *about* Leonard in this way in conformity with RUSSELL'S PRINCIPLE? It is not enough, Evans rightly notes, that she have once been able to think perceptual-demonstrative thoughts of the form $\langle \textit{That}_D \textit{ is ginger} \rangle$ and to have retained (as a consequence of (i)–(ii)) some information from the encounter. For the way she formerly satisfied RUSSELL'S PRINCIPLE also made further demands, some of which she may no longer fulfil. For example, she may no longer be in a position to locate Leonard, at least not with any degree of accuracy. Alice must now avail herself of a different mode of identification.

Recognizing a thing involves more than its striking one as familiar. Being able to recognize a thing involves appreciating that this is *that*, so to speak: it involves, upon presentation of the thing in felicitous conditions, being able to entertain a thought of the form $\langle \textit{This}_D = \textit{That}_M \rangle$. As Evans cashes this out, it involves the disposition to associate certain sorts of new information from the object with "the appropriate dossier of information" (276).

A *dossier* is what a controlling conception can become when it is the result of the merged controlling conceptions of several Ideas treated by the subject as Ideas of the same thing. This involves a process of *re-identification*: a series of occurrences in which Ideas acquired by the subject are presupposed, or deemed by the subject (through the triggering of a recognitional capacity), to be Ideas of the same thing. When this ‘treating as of the same thing’ also has a personal-level explanation, the dossier will be associated with a recognitional capacity. It will be thanks to this capacity that the subject was able to acquire new information, and exploit existing information, on the object.³⁵ An important constraint on a recognitional capacity’s being associated with a dossier, for Evans (1982), is that it be a causal consequence of some past encounter(s), $e_1, \dots e_n$, with the object which is the dominant source of the information in that dossier (at least some of which was gathered in encounter e_1 , or $\dots e_n$).³⁶ So if a subject were to inherit, out of the blue (perhaps by divine intervention), a capacity to recognise o across a range of circumstances, this capacity would not set the subject up for thinking singular thoughts.

Once again, of course, we must also remember RUSSELL’S PRINCIPLE:

...it is essential for [the subject] to have an adequate Idea of a particular object that there be one, and only one, object which he is disposed to pick out in this way [namely, *as* the object of his thought] (Evans 1982: 271).

³⁵ “...perhaps the central feature of our system of gathering information from individuals [...] [is] the fact that we group pieces of information together, as being from the same object—that we collect information lines into bundles. [...] I shall call [this process] *re-identification*” (Evans 1982: 126). These “evolving clusters of information” (1982: 277), are the rich and detailed singular representations we maintain and exercise in thinking about the world of ordinary, mind-independent objects like Leonard the cat.

³⁶ This, at least, is the most plausible way of understanding the remarks at (1982: 269; 271), despite comments at (1982: 282).

Evans' account may now look beyond the pale. If Alice must be able to distinguish Leonard the cat from all other things (or even all things of his sort) in order that she possess a memory-based Idea, when would Alice *ever* get to think about Leonard in this way?

Evans (1982) concedes that it would be “fanciful [...] to suppose that an ordinary recognitional capacity is proof against all that science may contrive, or nature provide, in the way of duplicates” (271–2). His response is to allow that discriminability is a *location-specific* property: a subject can have the capacity to discriminate an object from all others in a way which satisfies RUSSELL'S PRINCIPLE because she can discriminate it from all other things in an ‘area of search’—an egocentrically identified region meeting certain conditions which the subject has a disposition to search. To help make all this more concrete, consider the following case:

Case 4—The sheep:

...a subject is watching a group of sheep on the side of a mountain, and sees one of them cough. [...] the appearance of the relevant sheep may be sufficiently distinctive for him to be able to distinguish it from all the other sheep *in this restricted spatio-temporal setting*. The fact that he could not tell it apart from a sheep across the valley does not prevent him from having a capacity to *re-identify* it—i.e. to know it when he is confronted with it again. He would not be considering sheep on the other side of the valley (1982: 279).

Evans concludes by offering the following constraints on recognitional identification:

...the subject does have a capacity to recognize a particular sheep x , provided that
 (i) he is disposed to identify x as the relevant sheep upon the basis of its appearance, (ii) there is no other sheep within the area of search which he is

disposed to identify as the relevant sheep [...]; (iii) x is the *right* sheep, i.e. is the sheep from which the information saturating his thought was derived (279–80).

Put this way, Evans' account may remind the reader of characterisations of knowledge—for example, those employing a *sensitivity* (Nozick 1981) or *safety* (Sosa 1999) condition—which allow that a thinker who is not in Fake Barn County (Goldman 1976) can know that she is looking at a barn even though if she had been looking at a mere barn facade she would have formed the very same belief. Just as knowledge for such a thinker is not vitiated by the possibility that she is viewing a series of barn facades, the subject in Case 4 satisfies RUSSELL'S PRINCIPLE because, even though there is *somewhere* a lookalike whose presence in the area would have constituted the existence of a defeater for her satisfaction of RUSSELL'S PRINCIPLE, no such lookalike is relevantly close.

This is not Evans' (1982) story, however. Evans' story is that the subject in Case 4 may have a recognition-based Idea of the sheep so long as, if the lookalike sheep were presented to the subject along with information about its location (for example, if she had demonstratively identified the lookalike), she would possess “the resources for rebutting, on spatio-temporal grounds, [a] provisional *re*-identification” (1982: 279). Once again, descriptive information of a thing's location is a fundamental part of the story about how thought gets to home in on an object (see §3.2). The story is not one according to which the lookalike sheep is excluded from relevance (from being a defeater the subject's discriminating knowledge) by its distance from the area of search. The lookalike sheep is excluded from relevance, rather, because of something the subject has a capacity to do *given descriptive information about* the sheep's spatiotemporal distance from the ‘area of search’.

This may bring to mind Strawson's (1959) response to the massive duplication thought-experiment discussed in §2.1. Strawson's (1959) solution to the threat posed by massive duplication was to insist on the impurity of descriptions we use to represent objects

by non-perceptual means. While one cannot know there to be exactly one Φ , according to Strawson, one can know there to be exactly one Φ *in one's spatiotemporal vicinity*—more accurately, exactly one Φ spatiotemporally proximal to objects which *are* within perceptual reach. All non-perceptual ‘aboutness’ is descriptively mediated, secured only by a demonstrative element acting as an anchor. The rationale behind Strawson’s solution involves a commitment to the principle that *S*’s thinking a singular thought involves the exercise of a capacity to distinguish the object from all other objects whose existence is an open question for *S*. This is why Strawson is worried that pure descriptions will never suffice so long as massive duplication is an open question.

An analogous point applies to Evans’ (1982) account of recognition-based identification. Because RUSSELL’S PRINCIPLE, on Evans’ characterisation, demands absolute discrimination, being able to distinguish a sheep by its appearance from all other things in one’s vicinity is never enough. Only if one can, further, distinguish it from all other things not in the area by recourse to spatiotemporal considerations, is the required discrimination attainable. The ‘area of search’ appealed to in Evans’ (1982) conditions is “a function of the subject’s estimate of the probability and speed of movement, and the time that has elapsed since the last sighting, and [centres] upon the estimated position of the last sighting” (1982: 279). So the subject must know the location of the object to a degree of accuracy sufficient to rule out the proximity of defeaters, so that any indistinguishable things there may be within the range of accuracy would not fool the subject so long as she also knew where they were. The area of search is not something partly determined by external factors.

This Strawsonian story is masked by the conditions Evans cites in the quotes above at (1982: 269; 279–80; 282), which make the account sound correspondingly more plausible. The object may have strayed much further than the subject assumes. Surely she can nevertheless author successful memory-demonstrative thoughts about the object. Evans (1982) is unable to explain this possibility for essentially the same reason he is unable to explain aboutness in

Case 3 (§3.6.1). Insofar as recognitional capacities involve discrimination against a limited domain of objects, then, this domain does not, contra Evans, appear to be something which is limited by an area the subject herself estimates the object could have got to since the last sighting.

3.6.3 Transparency and understanding

The mind can always intend, and know when it intends, to think of the Same. This *sense of sameness* is the very keel and backbone of our thinking.

— James (1890: 459).

The two dimensions of overdemandingness in Evans' (1982) characterization of RUSSELL'S PRINCIPLE are arguably required by his claim that the level of psychological reality implicated in *understanding*, and thus the level of sense, must conform to the following principle:

TRUTH-CONDITIONS: For S to understand a sentence (to 'grasp' the thought expressed),
 S must know what it would be for the thought expressed to be
 true.³⁷

Although Evans is undecided as to what knowledge of truth-conditions consists in, whatever it is, it will have as a consequence that, for pairs of propositions p, p' , if S is to grasp the thought that p , she must be in a position to know that $p \neq p'$. More precisely, he endorses the following:

³⁷ "...the notion of thought-content, as it is used in this book, is anchored to the notion of the subject's knowledge of what it is that he is entertaining—his knowledge of what it would be for the proposition in question to be true" (1982: 140).

TRANSPARENCY #2: If at t S understands a proposition p partly constituted by an object-dependent sense s , then if a proposition p' partly constituted by some object-dependent sense s' is understood by S at t , S is in a position to know whether p and p' are identical or distinct.

Understanding two distinct propositions and understanding two identical propositions (in two presentations) are luminous conditions.³⁸ This commitment is ultimately responsible for the concerns in §§3.6.1–2. The present sub-section therefore illustrates the heart of the problem.

Evans' (1982) rationale for TRANSPARENCY #2 was as follows. Understanding a sentence about a thing requires the possession of an Idea of that thing, an Idea which comprises one's 'way of thinking' about it and by means of which one grasps the relevant sense-constituent of the proposition. All such 'ways of thinking' are to be individuated, in accordance with the Fregean model of sense, as follows.³⁹

SENSE: If it is possible for a minimally rational thinker to take conflicting attitudes—e.g. rejection and acceptance, agnosticism and rejection—toward two propositions (or two sentences she understands) at a given time, the propositions (expressed) *differ* in respect of some constituent sense; and, if it is not possible for her to take conflicting attitudes (toward

³⁸ The term 'transparency' comes from Dummett (1978): "It is an undeniable feature of [...] meaning [that it] is *transparent* in the sense that, if someone attaches a meaning to each of two words, he must know whether these meanings are the same" (131).

³⁹ Frege himself endorsed opposing criteria for sameness of sense. In addition to the criterion here, a 1906 letter to Husserl sees him take sameness of sense for sentences to consist in the possibility of proving their material equivalence by appeal to logical laws alone. (See Beaney (1996: 225–34) for discussion and references.)

two different sentences she understands) at a time, the *same* proposition is concerned.⁴⁰

A consequence of SENSE is that *if* S understands two propositions p and p' , S is in a position to know by reflection whether the Idea(s) implicated in her understanding of p and p' are the same or whether two distinct Ideas are involved.

Serious problems emerge when one remembers that, given Evans' construal of RUSSELL'S PRINCIPLE, Ideas are distinguished from one another not merely by the cognitive significance encapsulated in SENSE but by means of their associated *discriminating knowledge* (mode of identification).

...the notion of a 'way of thinking about an object' [...] can be explained in terms of the notion of an account of what makes it the case that a subject's thought is a thought about the object in question (1982: 20).

This dual explanatory role of Ideas leads to a tension because it is not always plausible that a subject with a good claim to possessing two Ideas (having two singular thoughts) must be in a position to know whether they are about the same thing (and so whether they must employ a different discriminating knowledge). Yet TRANSPARENCY #2 entails that one would need to do so. Failures of either sort will arise if discriminating knowledge does not itself satisfy a TRANSPARENCY-like principle to the effect that one always knows when two Ideas employ or fail to employ the same discriminating knowledge. Such a principle will be satisfied only if reference-determination were a wholly transparent matter. This ambition is what underlies the overdemandingness of Evans' treatment of singular thought, as brought out in §§3.6.1–2.

⁴⁰ See Evans (1982: 18–9). The addition of the 'minimally rational' condition is due to Schiffer's (1978: 180) formulation of *Frege's Constraint*.

In this sub-section I will argue that aboutness can only conform to TRANSPARENCY #2 if we impose limitations on the scope of aboutness. Of course, this is a slippery slope which threatens to lead us back to Russell's prison and the adoption of REVELATION (§0.2.5). To illustrate this tension, I will consider two cases where TRANSPARENCY #2 fails. The first and most simple case is due to an example from Hawthorne and Manley (2012). I take this first case to suffice to make the point. However, the second case involves fewer assumptions and sheds light on Evans' discussion of the steel ball thought-experiments (§3.3), by which it is natural to feel dissatisfied. It also requires further introduction, however, which will be easier to digest after getting a sense of the first case.

The following example threatens TRANSPARENCY #2 given Evans' claims about the recognitional capacities involved in achieving observational Ideas and about what it takes to achieve understanding of linguistic expressions.

Case 5—The bilingual tribe member:

Suppose there are two tribes *A* and *B*. *A* has a word 'warm', while *B* has a word 'chaud'. And the terms have ever-so-slightly different extensions and ever-so-slightly different associated recognitional capacities. Consider a bilingual person who acquires both capacities, and as a result acquires slightly different dispositions for 'warm' and 'chaud'. Must that person be capable of recognizing the difference between thoughts expressed by 'chaud' from those expressed by 'warm'? (Hawthorne and Manley 2012: 82).

As they suggest, there is no *a priori* reason to expect that such a subject's dispositions will correspond, for instance, to the reflective judgments she might make were she to run through possible scenarios in imagination and consider whether 'chaud' applies while 'warm' does not (and vice-versa). While their example concerns the ability to understand a predicate in a public

language, it strongly suggests that discrimination of the kind required by TRANSPARENCY #2 is not in general necessary for a subject to have a full-fledged concept of a given sort. While Evans might insist that *mastery* or *full grasp* of ‘warm’ and ‘chaud’ would come with the relevant reflective guarantees, one wonders what role such ‘mastery’ would really play in our cognitive lives.

It should be granted, however, that Hawthorne and Manley’s (2012) case turns on assumptions about the nature of understanding and the link between concepts of properties and Ideas of objects.⁴¹ While I think Case 5 suffices to highlight the problems for Evans—specifically, for his commitment to TRANSPARENCY #2—it is worth making a separate case. The provision of a separate case is not too difficult, however, for Evans accepts that recognitional capacities like those appealed to in Case 5 can suffice for discriminating knowledge.

Let us consider again the case of memory-based singular thought, recapitulated in §3.6.2. A general worry facing any story which ties such thought to recognitional capacities is that objects often change in their appearance in a way which can undermine one’s ability to recognise the object upon its reappearance. This can happen even when one’s memory image, as it were, is sufficiently vivid to intuitively allow for thought about it. Evans considers a case involving such mutability of appearance shortly before presenting his account of recognitional identification (1982: 272–3). I will show that his desire to preserve the intuition of aboutness runs contrary to TRANSPARENCY #2. Once again, the identity or distinctness of the relevant capacities need not be transparent. The upshot is that one might understand ‘ $a = b$ ’ (know what it is for it to be true) without being in a position to know whether it is the same

⁴¹ Hawthorne and Manley (2012: 82, n. 28) also consider a case involving demonstrative thought about places. However, the referentiality of complex demonstratives such as *that place* could be questioned. While Evans would again endorse the assumption (see for example (1982: 46)), others may reject it in the hope of retaining much else of his account.

proposition as ' $a = a$ '. This consequence, or at least its significance, is something which seems not to occur to Evans.

I will not here reconstruct the intricacies of Evans' (1982) discussion. What is important for our purposes is simply that he wishes to deny that "change in an object's appearance 'beyond recognition' [...] need deprive the subject of a knowledge of what it is for propositions of the form ' a is F ' to be true, when a is an Idea [for example, a memory-demonstrative] of an object *which rests upon a capacity to recognize it*" (1982: 273; emphasis added).

Now we were told that a subject has a capacity to recognize an object x , for instance a sheep, just in case "(i) he is disposed to identify x as the relevant sheep upon the basis of its appearance, (ii) there is no other sheep within the area of search which he is disposed to identify as the relevant sheep [...]; (iii) x [...] is the sheep from which the information saturating his thought was derived" (1982: 279–80). In the kind of case where the object has superficially changed 'beyond recognition', (i) will no longer be satisfied. We can suppose that there is no putative 'lookalike' in the area of search so that (ii) is satisfied. Condition (iii) is also satisfied: the memory image the subject has derives from an encounter with x . Notice, however, that conditions (ii) and (iii) do not alone make demands of the appropriate kind on the subject. Discussing Case 2 (see §3.3), Evans told us that Sam is unable to author a singular thought about the steel sphere which he encountered the day after his unfortunate accident because regardless of what the subject '*did*' (see n. 21 above), the concept of discriminating knowledge "is one of a *capacity*, and [...] its being possessed at a given time must surely reside in facts about what the subject can or cannot do *at that time*" (1982: 116; emphasis added):

We have reduced the question whether he has an adequate Idea of the ball to this: can he be said to know what it is for an arbitrary proposition of the form $\langle \delta = \text{that ball} \rangle$ to be true? [...] The reason we find a certain amount of difficulty with this question is that *[t]here is no question of his recognizing the ball; and there is nothing else*

he can do which will show that his thought is really about one of the two balls (1982: 115; emphasis added).

Unfortunately, the same evaluation appears to hold in the kind of case we are now envisaging, given that condition (i) is not satisfied by the subject's recognitional capacity.⁴²

In response, Evans proposes an ability in which the subject's possession of a memory-based Idea may still be grounded. The subject will, he suggests, have a grasp of the property *being recognizably x* (1982: 273). While there is a good sense in which she is now wrong about what it is to be recognizably *x*, since *x* has *ex hypothesi* changed 'beyond recognition', "[w]e may have every reason to believe that a subject is such that, had he been presented with *x* before *x*'s change in appearance, he *would* have identified *x* as the object of his thought" (1982: 273, n. 8).

Unfortunately, even if Evans' suggestion is right about what such singular thought consists in, such a capacity is not the sort of thing which can plausibly underpin TRANSPARENCY #2. Consider the following case.

Case 6—Two *Varieties of Reference*:

Akira has two copies of *The Varieties of Reference*, one in her office and one at home. Their indistinguishability does not prevent Akira from authoring recognition-based judgments about either of the copies for she is able, upon being presented with either copy along with information about (or egocentric representation of) its location, 'to rebut, on spatiotemporal grounds', a provisional 're-identification' of an incorrect copy.

But now suppose that both copies are damaged beyond recognition in two unfortunate, simultaneous fires. What must Akira be able to do in order to have memory-

⁴² We might also wonder why the presence of a lookalike in the vicinity must, in contrast, *always* destroy one's recognition-based Idea... This (i.e. condition (ii)) is not obviously any less important a condition than (i).

based singular thoughts about either of her beloved copies of the book? She must be able to grasp the property of *being recognizably x* for each copy *x*. However, it seems this is something she must be incapable of doing, for the copies were indistinguishable. If, then, she does grasp the two properties, she does so while being unable to know whether '*that = that*' expresses the same proposition as '*that = that*', where *that* and *that*' are her putative memory-demonstrative Ideas of the two copies.⁴³

Evans may reply that his account should be elaborated. Perhaps the relevant properties to which Akira must be sensitive are the location-specific *being recognizably x at my office* and *being recognizably x at my home*. In that case, the reply would go, Akira will be capable of grasping the relevant property which underpins her capacity to think singular thoughts about each copy.

However, a further problem arises if we suppose that after the fire Akira replaces the two copies (and repairs her office and home) with two new copies, again indistinguishable from one another (and from the first two copies prior to the fire, now disposed of). Now the property of *being recognizably x at my office* is shared by the old office-copy and the new office-copy... It may be supposed that we need only include specification of a time to remove this new difficulty—*being recognizably x at my office at t*. However, since *t* must be a past time before the old office-copy was damaged beyond recognition, Akira will *not* be in a position to think a singular thought about that copy: she is no longer sensitive to this property in the operative sense for Evans. Remember that regardless of what a subject '*did*', the concept of discriminating knowledge "is one of a *capacity*, and [...] its being possessed at a given time

⁴³ A further implication here is that, given TRUTH-CONDITIONS, a subject may 'know what it would be' for the thoughts '*that = that*' and '*that = that*' to be true—where *that* and *that*' are recognition-based memory-demonstratives of an object—"even though [s]he cannot *decide* whether or not [they] are true" (273). In what sense, then, does Akira know the conditions under which the propositions are true? If Akira can understand '*that = that*' and '*that = that*', she must be in a position to know whether or not they are the same proposition, and if they are, both must be true.

must surely reside in facts about what the subject can or cannot do *at that time*" (1982: 116; emphasis added). Akira might have a perfectly clear memory image of the old office-copy on her desk prior to the fire. The subject in Case 2 might have a perfectly clear memory image of the second steel sphere they encountered. The fact remains, "[t]here is no question of his recognizing the ball; and there is nothing else he can do which will show that his thought is really about one of the two balls" (Evans 1982: 115). Just as he explicitly opposes the possibility of aboutness in Case 2, Evans is in no position to explain how Akira's memory-demonstrative thoughts about her old office-copy of *The Varieties of Reference* are about that copy. And if he were, of course, he would violate TRANSPARENCY #2.

It might be supposed that what Evans has in mind is not so much that the subject be sensitive *at t* to the property of *being recognizably x at my office*, which would indeed not be the right sort of consideration for him. Perhaps the idea is that the subject be sensitive to the property of *being recognizably x-at-t at my office*. One problem here, however, is that the new office-copy of the book, being indistinguishable from the old office-copy prior to the fire, has the effect that condition (ii) on recognition-based thought is no longer satisfied: there *is* 'another sheep', as it were, within the area of search which Akira is disposed to identify as the object of her thought.

So much the worse for TRANSPARENCY #2, then. RUSSELL'S PRINCIPLE cannot support TRANSPARENCY-like principles unless we impose unmotivated restrictions on the scope of aboutness. The literature on singular thought has given TRANSPARENCY principles their time in the sun. Chapter 4 will illustrate the plausibility of RUSSELL'S PRINCIPLE severed from any form of TRANSPARENCY.

3.7 Conclusion

The problems illustrated in §3.6 should be familiar from our discussion of Russell in §0.2. While Evans (1982) is keen to disagree with Russell’s “Cartesian theory of the mind” (1982: 45) in claiming that the mind is not “a repository whose contents are unmistakably accessible to us” (since for a subject who essays a judgment, say, on the basis of a hallucination by which he is taken in, there may be “literally nothing before his mind”) (199–200), he is nonetheless keen to secure an analogue of Russell’s claim that identities flanked by logically proper names one understands cannot be both true and cognitively significant (LPN 2, in §0.2.5).

What are Evans’ options? One response is to give up on TRUTH-CONDITIONS. After all, Evans has very little to say about what knowledge of truth-conditions amounts to. However, if Idea-possession involves some capacity to discriminate the object, and something similar can be said about the possession of concepts of (first-order) properties like *redness*, would it not be surprising if subjects were not in a position, on the basis of possessing some such Idea and some such concept, to come to know, in *some* good sense, what it would be for the proposition that *o* is red, for example, to be true? Without a clearer idea of what knowledge of truth-conditions involves, it is difficult to adjudicate the matter.

Another line of response is to give up on the ‘thick’ notion of understanding Evans (1982) is keen to preserve. According to Hawthorne and Manley (2012), “if the thick conception of understanding is being employed largely to save discriminability principles for thought, then we suspect the project is misguided because the goal is unachievable” (2012: 82). Insofar as Hawthorne and Manley (2012) are taking the discriminability principles in question to be those which can underwrite TRANSPARENCY, we can agree that the goal is unachievable if we wish to avoid Russell’s prison. If the ‘thick’ conception of understanding is wedded to TRANSPARENCY, it is worthless. However, Chapter 4 will soon suggest that there is life in RUSSELL’S PRINCIPLE beyond principles like TRANSPARENCY. And Chapter 1

encouraged us to seek some ‘thick’ level of representation at which RUSSELL’S PRINCIPLE applies. Without it, the very distinction between singular and descriptive intentionality seems liable to collapse (§1.1).

The best general resolution to the objection in §3.6.3, and to the resulting issues in §§3.6.1–2, is to reject the alleged connection between Ideas *qua singular representations* and Ideas *qua vehicles of sense*. Evans should reply that Ideas *qua singular representations* are individuated by means of discriminating knowledge alone: there is no constraint on Ideas *qua singular representations* being identical or distinct that this fact be transparent to the subject. The cognitive vehicles which play the role of mode of presentation *à la* Frege (if there are any) are not the vehicles which play the role of Ideas *qua singular representations*. Singular representations are individuated in a way which cannot conform to the demands of a level of sense. The pursuit of a plausible story about singular representation which conforms to a principle like TRANSPARENCY #2 is the pursuit of a chimaera.

In the final chapter, we will pursue an alternative way of clarifying and safeguarding a conception of acquaintance and singular thought tied to RUSSELL’S PRINCIPLE. The epistemic notions used in precisifying RUSSELL’S PRINCIPLE in Chapter 4 will display a situation-sensitive character. With this assumption to hand, and with a clearer articulation of the notion of singular representations, we will be in a position to sketch an acquaintance-condition which does justice to the heterogeneity of aboutness. This account will not answer every question which might be asked of the nature, scope, and requirements of singular thought. However, it will suggest that we should be optimistic about the prospects for RUSSELL’S PRINCIPLE.

Chapter four

Russell's Principle Revived

Russell's (1913/84) conclusion that "the experience of each moment must be a prison for the knowledge of that moment" (10) is deeply unattractive. We must develop a theory of aboutness, and an account of its scope, motivated by something other than TRANSPARENCY and the conception of the mind it requires. We must identify distinctive conditions on aboutness which preserve both our capacity to think about ordinary objects and, I suggest, the sense in which aboutness involves a kind of knowledge:

RUSSELL'S PRINCIPLE: We cannot make a judgment or supposition without knowing what it is that we are making a judgment or supposition about (1910/51: 160).

Chapter 3 concluded that Evans' (1982) attempt to execute precisely this project is mired by its commitment to an analogous TRANSPARENCY principle. The resulting differences between cases of putative aboutness Evans may embrace versus those he must reject align poorly with our intuitions. Cases 2 and 3 seem to involve aboutness, and Evans' diagnosis to the contrary is unconvincing. Case 6 also intuitively involves aboutness, yet Evans is unable to explain this.

In light of what has been shown so far, the prospects for a theory of aboutness which vindicates RUSSELL'S PRINCIPLE do not look especially promising. Indeed the consensus appears to be that if singular thought is subject to an acquaintance-like constraint, it is not one which

preserves the spirit of RUSSELL'S PRINCIPLE. This chapter undermines this suspicion and also restores a more general sense of optimism. I provide a precisification of RUSSELL'S PRINCIPLE which yields intuitive verdicts for both paradigm cases and a variety of problem cases. By rehabilitating RUSSELL'S PRINCIPLE, connecting aboutness to a kind of knowledge, this proposal will break the deadlock we reached at the end of Chapter 1. The framework presented there undermined the argument from attitude reports but simultaneously introduced a worry that there may be little besides those very attitude reports to inform our investigation. The proposal in this chapter will justify the application of an acquaintance condition on aboutness not only by appeal to its plausible handling of cases, but by appeal to the "obvious" status of RUSSELL'S PRINCIPLE (Russell 1913/84: 10). Russell did not think his PRINCIPLE had this status because it was true on some deflationary reading (reducing the requirements on discriminating knowledge to the promiscuously context-dependent requirements on the truth of a 'knows which' report). Rather, it is a "fundamental epistemological principle" which theory is tasked to refine (1910/51: 159).¹ If an account of aboutness can clarify and explain what is compelling about RUSSELL'S PRINCIPLE, incorporating this insight as part of a plausible overarching theory of mind, we have good reason to endorse it. Given the current climate of scepticism about acquaintance-theoretic conceptions of singular thought (see Chapter 1), this chapter makes an important contribution.

According to the account I shall propose, aboutness involves a kind of epistemic focus. Traditional descriptivist theories claim that if a thinker is to be in a position to have a singular thought about an object *o*, she must have a particular (set of) true belief(s) concerning *o*. The role of Evans' (1982) fundamental level of thought involves a descriptivism of this kind: in the

¹ Récanati (1993) calls the constraint that a subject must "identify" the object a "basic intuition" about singular thought (40). Perhaps Evans agrees, though he accepts it must earn its place in our theory (see 1982: 91), not least because "[t]he difficulty with Russell's Principle has always been to explain what it means" (Evans 1982: 89). Other supporters of epistemic acquaintance principles include Burge (1977: 347–8), Chalmers (2010), Goodman (2013), Kaplan (1989b: 606–7), Récanati (2012: 19), Soames (1995: 518, n. 5), and Strawson (1974: 47). Schiffer (1988) suggests "*Russell's principle* [...] has a reading on which it is true and important" (36).

case of demonstrative thoughts about ordinary objects, one must have a true belief as to that object's location (or at least, in some good sense, have an ability to discover its location) and sortal (or at least, in some good sense, have in mind an implicit ranking of sorts) (see §3.4). §3.6 argued that Evans' requirement is implausible. However, there is a kernel of truth to the descriptivist idea. Being in a position to think singular thoughts about an object entails that one has some epistemically rewarding connection to it. In a sense to be clarified, one must have a singular representation of the object which is associated with belief-forming dispositions that are *generally* focused on that object. One must have a particular kind of representation which 'locks on' to *o*: should the associated belief-forming dispositions give rise to beliefs which correctly characterise *o* the subject will be more than fortunate. (Perhaps the truth in the vicinity of Evans' claim, then, is that if one is disposed to form false beliefs concerning an object's location or sortal, much else of what one is disposed to believe about it is likely false, too.) A crucial feature of the proposal is its emphasis on the situation-sensitive character of aboutness. This feature lends it a power and plausibility absent from the treatments explored so far.

This rough guiding idea is adapted from Dickie's (2015) recent "acquaintance-theoretic proposal" (143) of what aboutness with respect to ordinary objects consists in, though she does not characterise it as a way of vindicating RUSSELL'S PRINCIPLE. My contribution in this chapter owes much to Dickie's discussion (and other debts will become clear as we proceed). Unfortunately, while Dickie intends her proposal to be ecumenical, neutrality is lost early on in the book and the commitments incurred are seriously problematic. There is also an overriding dissonance between Dickie's intuitive gloss on what aboutness consists in and her official treatment. I present a framework which, if less neutral, is explicit and appealing, and does justice to the insights of the guiding idea. Due to the difficulties—interpretive and philosophical—with Dickie's treatment, I reserve discussion for §4.3 after introducing the treatment I shall propose in §4.2. To set the stage for each of these components of the chapter, however, I shall first broadly outline the sort of project which we are both attempting to carry out (§4.1).

A brief note on my ambitions in this final chapter. I offer a framework for reinstating an epistemic acquaintance condition faithful to RUSSELL'S PRINCIPLE. RUSSELL'S PRINCIPLE being a necessary condition, this will not constitute full analysis of aboutness. My core thesis is that the myriad ways we have of achieving singular thought are unified by their conformity to the precisification of RUSSELL'S PRINCIPLE I propose. What differentiates these ways is the heterogeneity of the epistemically rewarding links in virtue of which subjects may satisfy that principle. A full story of aboutness would explore the idiosyncrasies of perceptual-demonstrative singular thought, recognition-based singular thought, testimony-based singular thought, *inter alia*, and elucidate how the relevant epistemically rewarding links in each kind of case constitute a basis for the reliable formation of true beliefs. A full treatment would therefore resemble chapters 6–11 of Evans' (1982). We would need to specify what makes something a perceptual link or recognitional capacity etc. I am unable to attempt this broader inquiry in the present chapter. However, the precisification of RUSSELL'S PRINCIPLE I offer is not trivial or uninformative with respect to that broader inquiry. A number of concrete examples are discussed, and the precisification offered puts certain constraints on how such an inquiry would proceed. It also has implications for structural features of aboutness, such as the status of TRANSPARENCY (§4.4). With this in mind (though it should go without saying), what I present here is not the last word on the matter. It is, though, an important contribution which provides new directions for further, focused work on singular thought.²

² By way of contrast, recall that Evans (1982) does not give this sort of precise, general explication of RUSSELL'S PRINCIPLE, and then show how various modes of identification suffice to meet it. He instead shows what notion of understanding a (singular) proposition one is committed to by *rejecting* RUSSELL'S PRINCIPLE, concluding that it commits one to "the idea that there may be no difference, in respect of what they can do, between a thinker who knows what it is for some proposition to be true, and one who does not" (106). Without a clear sense of what it is to 'know what would *make* a proposition true' (117), much of Evans' (1982) is difficult to evaluate.

4.1 Knowing which

RUSSELL'S PRINCIPLE says that a necessary condition on aboutness is that one *know what it is* one is thinking about. In the context of Russell's theory of mind, the relevant notion of discrimination is much too strong (see §0.4). What might such discrimination more plausibly consist in?

In an early discussion of aboutness, Evans (1973/85) suggests that it can suffice for a cluster of S 's beliefs B to be about X that there have been “an episode which caused [some beliefs in B] in which X and S were causally related in a type of situation apt for producing knowledge” (15).³ One way of expanding on Evans' suggestion is to think of it as requiring the kind of reliability often associated with (propositional) knowledge. The subject must have put herself in a kind of relationship apt for reliably producing true beliefs to the effect that a given thing is $\Phi_1 \dots \Phi_n$ for some range of properties $\Phi_1 \dots \Phi_n$.⁴

Dickie (2015) introduces her account of aboutness by telling us that aboutness involves just this kind of focus. Ignoring some of the subtleties for now, her account says:

...a body of beliefs is about an object iff [...] given how the beliefs are [formed], the subject will be unlucky if they do not match the object and not merely lucky if they do (2015: 2).⁵

³ This is similar to at least two other views on (necessary) conditions for aboutness. According to Récanati (2016), aboutness involves the obtaining of ‘epistemically rewarding relations’; “relations to entities which make information flow possible between the subject and these entities” (71). Lewis suggests, more narrowly (in part since Récanati does not specify the direction of information flow), that a relation of “acquaintance” holds between S and o when there is “an extensive causal dependence of [S 's] states upon [o 's, such that] this causal dependence is apt for the reliable transmission of information” (1979a: 542). See also Lewis (1986: 33).

⁴ Montague (2013) proposes a ‘matching’ condition on seeing (and, indirectly, on perceptual-demonstrative aboutness), so that one sees an object o only if one correctly represents enough of that object's properties.

⁵ As this quote indicates, Dickie pursues a biconditional in her discussion of aboutness.

...an aboutness-fixing relation does its aboutness-fixing work by putting in place a [means of forming beliefs for] a body of $\langle \alpha \rangle$ beliefs such that if the subject *were* to form $\langle \alpha \text{ is } \Phi \rangle$ beliefs [...] by this means, these beliefs *would* tend to get *o*'s properties right (2015: 57).

Here, too, the claim is that aboutness involves a general sensitivity to the states of an object, so that *it* is the unique thing concerning which one will reliably cluster true beliefs. Dickie's (2015) talk of luck and what would have been the case were a subject to realize a range of belief-forming dispositions is highly reminiscent of the *safety*-theoretic tradition in epistemology.⁶ According to those who think propositional knowledge can be usefully characterised in terms of safety, if *S* knows that *p* then "not easily would *S* believe that *p* without it being the case that *p*" (Sosa 1999: 142). When this condition is met, *S*'s belief that *p* is safe. If we believe that in her general remarks Dickie is expressing an insight, we will be interested in exploring the connection between safe belief-forming practices and aboutness. This is what I shall do in §4.2. Though I appeal to safety principles in reconstructing what it is for a subject to satisfy RUSSELL'S PRINCIPLE, it is possible to substitute the use made of safety principles with other resources. Indeed §4.3 evaluates Dickie's own alternative. It is argued that there is an overriding dissonance between her intuitive gloss and her official treatment; moreover, the latter faces serious philosophical concerns.

To the extent that aboutness requires a capacity to reliably get some range of an object's properties right (in a sense to be fleshed out in due course), which range of properties this is seems not to be something which is set in stone. In an Appendix, Dickie (2015) uses an illuminating example to bring out this situation-sensitivity. We are to imagine two people forming beliefs via the same stream of testimony, putatively about a single mathematician. In fact, however, 'Nicolas Bourbaki' is a pseudonym used by a *collective* of mathematicians—its

⁶ Talk of "situation[s] apt for producing knowledge" (Evans 1973/85: 15), 'epistemically rewarding relations' (Récanati 2012), and "reliable transmission of information" (Lewis 1979a: 542) may also suggest this.

members shifting over time—who, historically, have met to develop rigorous proofs in mathematics, publishing various works under this pseudonym including the 1939 *Éléments de mathématique*.

Case 7—Bourbaki:

The single-minded mathematician takes no interest in even the broadest details of the lives of other people in the profession. [...] the beliefs she would express using names she comes across in [...] mathematical journals are almost all beliefs like <NN proved X>; <NN’s proof of Y is more elegant than MM’s>; <‘This is a typical NN-style mistake’>; and so on. The single-minded mathematician has not realized that ‘Nicolas Bourbaki’ is not a name for a single person.

[...] The mathematical biographer is writing a book of essays on lives of mathematicians. He has access to the same stream of ‘Bourbaki’ testimony as the single-minded mathematician does (articles, books, and correspondence published under the name ‘Bourbaki’; mentions of Bourbaki in well-known mathematicians’ articles, books, and correspondence). [...] he has built up a body of <Bourbaki> beliefs which weave together into a life of Bourbaki: <Bourbaki was born in 1910 in Lyons>; [...] <He married seven times> (Dickie 2015: 168).

The intuition, I agree, is that while the biographer’s beliefs suffer aboutness-failure, the single-minded mathematician’s do not. This suggests that variation in what we might call narrative agenda, and to the range of beliefs in the representation maintained on a thing, can lead to variation in the availability of aboutness. In safety-theoretic terms, a subject forming beliefs by uptake from the relevant stream of testimony *will* be merely lucky to get the collective’s properties right if they are disposed to form various beliefs like < α was married seven times> in addition to < α proved X>. Intuitively, to have a singular thought about an object, one must

not only be in a type of situation apt for producing the true belief that some thing is Φ via some epistemically rewarding link for some *specific* Φ . The biographer in Case 7 might have all of the single-minded mathematician's beliefs and then some, his downfall being his indiscriminability. Rather, one must be in a type of situation apt to produce true beliefs that some thing is Φ for a *range* of relevant properties Φ . Notice that the difference between the single-minded mathematician and the biographer is not the quality of the testimonial link but their belief-forming dispositions. This feature of the phenomenon will be clarified and incorporated into the account of aboutness I propose in §4.2.

A final preliminary remark is needed. Dickie (2015) is explicit that her explanandum is “*ordinary* aboutness” (50): “commonplace thoughts about tables, trees, dogs, and people” (34). This is both a methodological and a theoretical claim. The theoretical claim is that our everyday thoughts about tables, trees, dogs, people and the like form a class of “paradigm thoughts about particulars” (23). Once this theoretical claim is accepted, the methodological claim that our account of aboutness should start by attempting to give an account of these thoughts follows naturally. However, we may grant the methodological claim without granting the theoretical claim.⁷ Indeed, as I suggested in the Introduction (§0.4), that we should begin with thoughts about what metaphysicians call ordinary objects seems almost inescapable, if not because they occupy some fundamental place in our thinking then because philosophers have a poor track record of accommodating them. If it turns out that our account has no application to thought about sets or properties, it should be revised. But we must start somewhere.⁸

⁷ Austin emphasised some time ago that there is no one ‘kind’ of thing the folk take themselves to perceive (and presumably think about, too): “think [of] flames, rainbows, shadows, pictures on the screen at the cinema [...]—all of which people say that they [...] ‘perceive’” (1947/62: 8).

⁸ The appendix to this chapter considers the threat posed by the notorious problem of the many to assumptions I make about ordinary objects (n. 9 there explains why Dickie’s (2015) response is inadequate.)

4.2 **Precisifying RUSSELL'S PRINCIPLE**

This section presents an epistemic acquaintance condition on aboutness which fleshes out the intuitive story in §4.1. By specifying a clear necessary condition faithful to RUSSELL'S PRINCIPLE we are able to accomplish the outstanding tasks mentioned in the introduction to this chapter. §4.2.1 lays some ground by explaining the notion of a singular representation. §§4.2.2–4 present the proposed acquaintance condition. We shall then in §4.3 examine Dickie's (2015) alternative implementation of the intuitive story sketched in §4.1. §4.4 concludes by exploring some structural implications of the proposal I endorse.

4.2.1 **Singular representations**

Singular representations are cognitive structures which have achieved aboutness. The distinctive function of candidate singular representations is to store clusters of beliefs formed on the basis of epistemically rewarding relations and dispositions with respect to some object in the world (the kinds of relations and dispositions apt to produce knowledge concerning ordinary objects).⁹ When successful, such representations constitute the vehicles of aboutness: it is by exercising these vehicles that one entertains singular thoughts.

This section precisifies RUSSELL'S PRINCIPLE; the present sub-section clarifies and motivates a package of claims about the vehicles of aboutness and their role in the cognitive economy. Allow me to preface this clarification by emphasising that all that is essential for the precisification of RUSSELL'S PRINCIPLE below is that there are conceptual representations associated with clusters of beliefs presupposed to concern a unique object; representations which are the vehicles of singular thought. While I say enough to render this proposal

⁹ Once again, this is not to rule out singular representations of pluralities, places, abstracta, and other phenomena, but these cases raise distinctive issues which I am unable to discuss here.

comprehensible, certain details may be modified according to the reader's broader theory of mind.¹⁰

To the extent that singular representations are object-concepts, they are not shareable. As in Chapter 1, they are “agent-bound like headaches” (Crimmins 1995: 495). This does not mean *thoughts* are not shareable. On the Russellian picture it is clear how the contents of mental states are shareable and mind-independent. This is no throwback to PSYCHOLOGISM (§0.2).

I shall assume that the content of these belief clusters is always content of the sort expressed by an open sentence: ‘ $\Phi x \ \& \ \Psi x \dots$ ’. So long as there are in some sense clusters of beliefs presupposed to concern a unique object (in a sense to be clarified), they will have internal logical complexity in the way an image or a bundle of predicates might and they may be assessed against an object for veridicality on that basis (Crimmins 1992: 79). I shall write ‘ $\langle \Phi x \rangle^{\langle \alpha \rangle}$ ’ to express the belief that α is Φ , illustrating that this is a matter of the predicate representation $\langle \Phi x \rangle$ being stored in $\langle \alpha \rangle$.¹¹

It is the function of a candidate singular representation storing these predicate representations to determine an object which they are *about*. Is this determined by whether the object satisfies the open sentence corresponding to the predicate representations? If this were the case, aboutness would require total infallibility, and it would be unattainable were there massive duplication. This is not a constraint. Crucially, what a singular representation is about is instead (partly) a matter of her fulfilling the proposed requirements of RUSSELL’S PRINCIPLE.

¹⁰ That there are object-representations which play the relevant roles is not especially controversial. It is with this in mind that Peacocke (2014: 28–9) says there is something inevitable about the appeal to ‘mental files’. (In light of the remarks in §3.6.4, however, §4.4 emphasises a crucial way in which the project of this chapter diverges from those working under the ‘mental files’ banner. As Goodsell (2013) notes, “all who use files-talk agree or assume that mental files play the MOP [mode of presentation] role” (25).)

¹¹ I am unable to offer an account of predicate representations here. While an account of the representation of particulars makes demands on an account of predicate representation, these can be used as constraints to be abandoned if necessary (and the account of singular representations modified by reflection, and so on).

While I assume that the beliefs stored in representations are monadic, restricted to predicate representations of the form ...*is red*, we could accommodate relational predicates like ...*is loved by*... in several ways. Most straightforwardly, we might posit ‘linked’ predicate representations stored in each of the subject’s $\langle\alpha\rangle$ and $\langle\alpha'\rangle$ representations (see Strawson (1974: 56) and Récanati (2012: 50–1)). In the special case of identities, at least those in which the subject outright believes, we may instead think of the operation as one of merging two representations.

How can singular representations be both the vehicles used to think about particulars and cognitive structures which store beliefs? As Fodor has put this worry “you don’t think everything you believe about John when you think [about John]” (2008: 95 n. 64). There is no entailment from saying that a representation is a means of thinking about John to having to entertain all of the predicate representations stored in one’s $\langle\text{JOHN}\rangle$ -representation when one exercises it, however. There is a distinction to be drawn between accessing what is stored by a representation and exercising that representation.¹²

How are singular representations individuated? What is it for two beliefs to be stored in the *same* representation? Perhaps it is for the subject to be disposed to ‘trade on identity’ (Campbell 1987: 275; 1994: 73–5), so that if $\langle\alpha\rangle$ stores both $\langle\Phi x\rangle$ and $\langle\Psi x\rangle$, the subject will be disposed to endorse (believe etc.) thoughts of the form $\langle\Phi x \ \& \ \Psi x\rangle^{\langle\alpha\rangle}$, and to move from $\langle\Phi x\rangle^{\langle\alpha\rangle}$ and $\langle\Psi x\rangle^{\langle\alpha\rangle}$ to $\langle\exists x (\Phi x \ \& \ \Psi x)\rangle$. It is widely acknowledged that the disposition to engage in these unmediated transitions is essential to an account of our cognitive practices. To insist that these moves rest on a level at which it is specified that two representations $\langle\alpha\rangle$ (which stores $\langle\Phi x\rangle$) and $\langle\alpha'\rangle$ (which stores $\langle\Psi x\rangle$) co-refer is to embark on an infinite

¹² See also Récanati (2012: 39, n. 12). If the reader prefers to think of the vehicle as a ‘tag’ for the representation, insubstantial changes to what I say throughout may be made. (Evans’ (1982) distinction between Ideas and their controlling conceptions places him in the latter camp, along with Jeshion (2010).)

regress. For it would then need to be specified at *that* level, in turn, that the two symbols for $\langle \alpha \rangle$ co-refer...

[The regress] stops only if at some point we *can* take it for granted that two singular tokens refer to the same thing, and can simply trade upon the *fact* of their being co-referring, rather than having in our reasoning to rely upon a new identity-proposition as a suppressed premise (Campbell 1987: 276).

In any case, I take these distinctive transitions to be symptomatic of clustering, not what explains it. What explains why $\langle \Phi x \rangle$ and $\langle \Phi 'x \rangle$ occur in the same representation is just that the subject *presupposes* that they concern the same thing. Representations embody a presupposition of univocality. In light of the looming regress above, this presupposition need not be encoded at any level.¹³ As Stalnaker has put it, in a different context: “Most of what we presuppose is presupposed simply by not recognizing the possibilities in which the presuppositions are false” (Stalnaker 2008: 127). That the subject is in a state of presupposing the univocality of $\langle \Phi x \rangle$ and $\langle \Phi 'x \rangle$ is what explains that her $\langle \alpha \rangle$ representation stores both $\langle \Phi x \rangle$ and $\langle \Phi 'x \rangle$, which in turn explains the subject’s ability to trade on identity. This presupposition will have one of two kinds of source.

Most obviously, it may be the result of an explicit judgment of identity—a merging of two representations. For example, if I learn that Paderewski the musician is Paderewski the politician, I collapse the two singular representations I formerly used to author judgments about the one man into one representation. Merging the two representations will involve making decisions about which information to dispense with and which to keep. If I believed Paderewski the politician spent the greater part of his life living in Warsaw but the musician by the same

¹³ As Sainsbury puts it: “there is no evading unthinking reliance on sameness of reference” (2002: 135).

name in Krakow, I will have to decide which if either of these beliefs to retain. This is a reflective project. If the identity is sufficiently surprising and important to me, I may have to put many of my beliefs on hold. If the identity is not very important, perhaps because I believed little in the first place, I might simply reject much of what I believed.

Most fundamentally, however, the presupposition of univocality might be inherited from operations at the subpersonal level. Such presupposition is ultimately an architectural fact. We are, as Evans (1982) noted, “gatherers, transmitters and storers of information” (122). It is common practice in the cognitive sciences to posit the transduction of information at our sensory receptors, the processing and carrying of information by neural mechanisms, and the use of information in determining action (Neander 2017: 83). ‘Information’ is ambiguous in this context, however. The rings of a tree might carry the information that it is 103 years old in a sense which requires that it be 103 years old; dark clouds on the horizon might ‘mean’ that it is about to rain. This basic, ‘natural-factive’ notion of information is the one to which I will be appealing in this sub-section.¹⁴ (The other sense of ‘information’ allows for the possibility of misinformation and so already constitutes a kind of representation.) Exactly how natural-factive information is to be characterized is an open question. In the cognitive sciences ‘information’ (in this sense) is really just a placeholder for whatever kind of relation perceptual systems are supposed to bring about between the mind and its environment.¹⁵ States carrying natural-factive information $\langle \Phi x \rangle$ may be *of* objects in the environment even if something else satisfies $\langle \Phi x \rangle$.

¹⁴ What sort of content is involved here? I will assume that “what is being described when we describe a signal’s informational content is a relation between what is expressed by an open sentence ($\dots$ is F) and some individual x [...]. [...] it is *only* the descriptive or conceptual elements embodied in the *predicate* expression ($\dots$ is F) that reflect the informational content” (Dretske 1981: 66–7). This sort of predicative conception of information is also used by Evans (1982), Neander (2006), and Schulte (2012). Nothing I say rules out the import of ‘affordance’-style content, among other varieties, however.

¹⁵ Neander (2017: 83). Dretske’s (1981) influential notion of information is analysed in terms of conditional probabilities. For the purposes of this chapter, I have in mind a simpler, causal conception of information of the sort appealed to by Evans (1982) (see §3.4.1), and, more recently, theorists like Neander (2017).

This intentional character of information is not yet aboutness, though it is the first step along the way. Consider two communication systems, $A-B$ and $C-D$.

A transmits to B and C transmits to D. Quite by chance, and at exactly the same time, A pecks out the same message (sequence of dots and dashes) to B that C does to D. [...] despite this correlation, D receives *no* information from A. [...] [For] there is a *nomic dependence* between what occurs at A and B, but not between what occurs at A and D (Dretske 1981: 74–5).

It is in virtue of something like a relation of nomic dependence that an informational state is ‘of’ its source.¹⁶ To make a long and complex story short and simple, the cognitive system exploits information in order to represent. (As I allowed earlier, some of these mental representations, such as those distinctive of spatial perception and action-awareness, are imagistic, and it may be best to think of these as carriers of something akin to what Peacocke (1992) calls *scenario* content: “ways of filling out the space around the perceiver [...] consistent with the representational content’s being correct” (1992: 61)—similar to the centered worlds of Lewis (1979a) and Quine (1968).)

Even at this subpersonal level, something akin to the clustering of beliefs described above takes place. Consider Pylyshyn’s (1989; *inter alia*) *visual indexing theory*, one explanation of how subpersonal visual representations track a distal object. *FINSTs* (‘fingers of instantiation’)

¹⁶ Dretske (1981) speaks of information being “about” its source (67), but his use of ‘about’ is equivalent to my ‘of’. (Similarly Gibson (1966): “*information about* something means only *specificity to* something. [...] a property of the stimulus is univocally related to a property of the object by virtue of physical laws” (187).) In contrast, Neander (2017) takes herself to be answering “what *is* the aboutness relation?” (16), despite her inquiry being immediately concerned with ‘original intentionality’: “preconceptual sensory-perceptual representations” (10). The questions are of course not unrelated, and her informational teleosemantic story may very well be insightful concerning this ‘of’ relation, but the notion of aboutness I am concerned with is not Neander’s.

are ‘pointers’ used by the cognitive system to ‘lock on’ to an object. There is a kind of subpersonal information-clustering involved in this tracking. I will call primitive clustering structures of this sort, whatever the final theory, *proto-representations*.¹⁷ Pylyshyn’s specific theory, then, is that FINSTs are the proto-representations which explain, in the case of visual perception, the informational clustering that gives rise to this second kind of presupposition.¹⁸ While it is controversial at which level it is exactly that representation proper occurs (cf. Burge (2010) and Neander (2017)), it is standard to think of there being a subpersonal kind of informational clustering which can explain how subsequent belief-like representations might emerge in a personal-level singular representation in lieu of the first kind of presupposition. It may be helpful to think of the system’s general structure in the following picturesque way:

At the top level are detached files [i.e. singular representations], such as my beliefs about Dretske. At the bottom level are perceptions and perceptual buffers. Buffers are new notions [i.e. proto-representations] used to temporarily store ideas we gain from the perceptions until we can identify the individual [...]. The middle level is full of informational wiring. Sockets dangle down from above, and plugs stick up from below (Perry 2001b: 120–1).

4.2.2 Aboutness and safety

¹⁷ Here I follow Récanati’s (2012) notion of *proto-files*, where “[i]dentity is presupposed [by being] built into the way the information is (subpersonally) packaged” (98). See also Perry (2001a) on ‘perceptual buffers’.

¹⁸ While proto-representations are not *about* objects, they store more than mere feature-placements or proximal information. The information delivered in early stages of visual perception, for instance, depends on constancies in size, shape, and colour, and on the detection of higher-order invariants (rates of change etc.).

This sub-section explores the connection between safe belief-forming practices and aboutness in the context of singular representations as a way of fleshing out the intuitive gloss presented in §4.1. According to that gloss, a singular representation will be *about* *o* only if it is based on some epistemically rewarding link(s) which provide a basis for the reliable formation of a relevant range of true beliefs concerning *o*. To echo Evans' (1973/85: 15) insight, one must be in a type of situation apt to produce true beliefs that some thing is Φ for a range of relevant properties Φ .

Before clarifying the details of the proposed acquaintance condition, expectations must be managed. The situation-sensitive character of the proposal—built into the explanations of relevance and reliability—means that verdicts about the scope of aboutness that are both general and precise are difficult to give. This is not cheating, however. First, Case 7 independently suggests that aboutness itself exhibits this kind of sensitivity. An account which explains this away is unlikely to harmonize with our intuitions. Second, consider accounts of (propositional) knowledge according to which what it takes for Henry to know that he is looking at a barn depends on the proximity of deceptive barn facades to his situation. It is no constraint on a satisfying account of such knowledge that it rule how many miles away the fake barns must be for Henry to know (or to fulfil the relevant necessary condition on knowing). It should not be expected of any account that it deliver a general verdict on exactly where the line comes between cases of knowledge (or indeed aboutness) and cases which violate the situation-sensitive condition in question, particularly when our intuitions about the presence of knowledge (or of aboutness) exhibit a corresponding hesitance. Neither should we demand that it impose generalized rules about the relative importance of situation-sensitive notions. This is not, of course, to say that such notions can remain totally in the dark, unexplained and unexamined.¹⁹

¹⁹ See Dretske (1981: 129–34) and Williamson (2009b: 307–8) who echo these methodological claims.

What we want, then, is an account of the connection between safe belief-forming practices and aboutness, of a sort which lays the basis for a necessary condition in the spirit of RUSSELL'S PRINCIPLE. The distinctive representations of §4.2.1 play a crucial role here, for they can suffice for a kind of discrimination or 'knowing which'. In paradigm cases they are based on some epistemically rewarding links which provide a means of reliably forming certain true beliefs. Somewhat more precisely:

ABOUTNESS AND SAFETY: S 's candidate singular representation $\langle \alpha \rangle$ is about o only if for a range of relevant predicate representations $\langle \Phi_1 \rangle \dots \langle \Phi_n \rangle$, were S to form the belief $\langle \Phi_i \rangle^{\langle \alpha \rangle}$, not easily would o have failed to instantiate Φ_i while S believed $\langle \Phi_i \rangle^{\langle \alpha \rangle}$.²⁰

ABOUTNESS AND SAFETY says that if $\langle \alpha \rangle$ is about o then the belief-forming dispositions associated with $\langle \alpha \rangle$ lock on to o : for a range of relevant predicate representations $\langle \Phi_1 \rangle \dots \langle \Phi_n \rangle$, were S to form the belief $\langle \Phi_i \rangle^{\langle \alpha \rangle}$ then o would be Φ_i .

This provisional attempt at precisifying RUSSELL'S PRINCIPLE requires some finessing and clarification. First, ABOUTNESS AND SAFETY says that aboutness involves being in a position to form certain true beliefs about the object. Does this amount to a kind of infallibility? Is a major lesson of 20th Century work on aboutness not that false beliefs about a thing are compatible with aboutness? It is here that the situation-sensitive notion of 'a range of relevant predicate representations $\langle \Phi_1 \rangle \dots \langle \Phi_n \rangle$ ' plays a crucial role. This will be elucidated in the next sub-section.

²⁰ This principle and its descendant below is restricted to contingent, everyday properties of ordinary objects.

Second, while ABOUTNESS AND SAFETY is only a necessary condition, it seems to overgenerate in an important way. There is nothing to prevent a subject from satisfying the condition without yet having *established* an epistemically rewarding link to the object, provided that *were* she to form the belief that $\langle \Phi_i \rangle^{<\alpha>}$ she would have *there* established a link of the appropriate sort. Roughly speaking, it makes one acquainted with an object if one is acquainted with it at the closest world(s) at which one has formed certain relevant beliefs. This clearly cannot be right. The next sub-section introduces the notion of a *basis* needed to supplement ABOUTNESS AND SAFETY, as well as the notion of closeness needed to elucidate the safety-theoretic counterfactual and the notion of a range of relevant predicate representations.

4.2.3 **RUSSELL'S PRINCIPLE precisified**

A basis for a belief is the specific causal process by which that belief is formed—to a greater or lesser degree of specificity, the causal-historical route by which the subject formed the belief. The notion is often appealed to by reliabilist theories in epistemology. One influential way of characterizing a reliability condition, for example on knowing that p , is in terms of the safety condition introduced in §4.1: S knows that p only if S would not easily have falsely believed that p . What is it to say that something would not easily have been the case? According to the classic analysis it is, in short, for there to be no *close* world at which that thing is the case, where a world is close to w iff it is qualitatively similar to w , and where what respects and degree of similarity suffice to merit relevance depends on features of the subject's situation. More precisely, then, in the case of knowledge, the safety condition says:

If at world w S knows that p then at any world close to w in which S believes that p , p .

Bases are appealed to by safety theorists when presented with some scenario in which a subject forms a belief in a way which intuitively suffices for knowledge despite there being a close world at which the belief is false.²¹ Consider the following example.

Case 8—The Sore Loser:

Robin is drinking a glass of water which would have been maliciously polluted with an undetectable toxin had Sarah lost the lottery. Fortunately for both, Sarah (remarkably) won the lottery. But she very nearly lost. Robin judges, truly and knowingly, that the substance she drinks is pure, unadulterated water, even though the toxin would have made no difference to its taste, odour, or colour, and that she would, in that case, have falsely believed that she was drinking pure water.²²

If safety is to be upheld as a necessary condition on knowledge, one plausible response is to cite the external differences in the belief-forming processes between the actual and envisaged counterfactual worlds. Although the basis for Robin's belief that she is drinking pure water in the counterfactual world is subjectively indistinguishable from her basis at the actual world, the processes differ enough, we might claim, to constitute a difference (and a sufficiently significant difference) in the basis for her belief (Williamson 2009b: 307). Case 8 will then not succeed as a counterexample to safety, construed as the following thesis:

If at world w S knows that p on a basis b , then at any world close to w in which S believes that p on a basis close to b , p .²³

²¹ A similar move is made by Nozick (1981: 179) in defence of his *sensitivity* condition.

²² This example is paraphrased from Neta and Rohrbaugh (2004: 399–400).

²³ A similar though more nuanced form of safety is made explicit in Williamson (2009b: 325).

On the conception to which I appeal here, bases are partly external, specific causal-informational links to one's environment.²⁴ Singular representations are typically associated with myriad bases. My singular representation of Roger Federer, for instance, opportunistically stores beliefs formed via all sorts of bases: television broadcasts, news articles, and perceptual encounters at matches. The bases associated with a given singular representation are at least those of each belief stored by that representation. But since there will also typically be unrealized belief-forming dispositions (for instance a disposition to form beliefs by taking the deliverances of some attentional-perceptual link to *o* at face value), I include such dispositions among a representation's bases.

What does any of this have to do with RUSSELL'S PRINCIPLE? Where is the talk of discriminating knowledge in ABOUTNESS AND SAFETY? Due to the condition that there be a range of predicate representations $\langle \Phi \rangle$ with respect to which one satisfies a safety condition, merely standing in some causal relation or other to a thing is not enough. The basis must be (relevantly) epistemically rewarding: it must put the subject in a position to reliably form certain true beliefs concerning that object. Conforming to ABOUTNESS AND SAFETY is not merely a matter of the thinker's states being causally dependent on the states of the object (cf. Lewis 1979a), or a matter of information flow between the two (cf. Récanati 2012). The thinker must be able to use the relations and dispositions which comprise the basis to form beliefs which generally and relevantly match that object. So if $\langle \alpha \rangle$ is to be about *o*, it must be that for a range of relevant predicate representations $\langle \Phi \rangle$, were *S* to store $\langle \Phi \rangle$ in $\langle \alpha \rangle$, not easily would *o* fail

²⁴ See also Williamson (2009b: 307). Insofar as safety is used to characterize knowledge this externalist conception of bases has independent support (in light of the response to Case 8 above). Williamson (2000) suggests that bases for beliefs cannot in general be individuated in an internalist-friendly way so as to respect something like subjective indiscriminability. A case in which someone knows that *p* can change in very gradual ways so that a reliable (i.e. safe) basis can become unreliable (unsafe) without this impinging on the subject's awareness. One might then fail to know because there is a close world—one reachable by such a small difference—at which the belief formed on that very basis (individuated by its phenomenal character, say) is false.

to be $\langle \Phi \rangle$. More precisely, and integrating the notions of closeness and bases into ABOUTNESS AND SAFETY, we get our final acquaintance condition, and our completed precisification of RUSSELL'S PRINCIPLE.

RUSSELL'S PRINCIPLE #3: S 's candidate singular representation $\langle \alpha \rangle$ is about o only if for a range of relevant predicate representations $\langle \Phi_1 \rangle \dots \langle \Phi_n \rangle$, there are bases for $\langle \alpha \rangle$ such that were S to form the belief $\langle \Phi_i \rangle^{<a>}$ via some basis b there would be no close world w' at which o was not Φ_i while S believed $\langle \Phi_i \rangle^{<a>}$ via b .

RUSSELL'S PRINCIPLE #3 (henceforth, RP3) tells us that the myriad bases associated with a singular representation $\langle \alpha \rangle$ put in place belief-forming dispositions which 'lock on' to an object o in the following sense: at the closest world(s) where the subject stores some relevant predicate representation $\langle \Phi_i \rangle$ in $\langle \alpha \rangle$ via some basis b , there is no close world at which o fails to instantiate Φ_i while S stores $\langle \Phi_i \rangle$ in $\langle \alpha \rangle$ via b .²⁵ In short, thinking about an object involves satisfying a safety condition for a relevant range of properties of that object. We might call this a *relevant discrimination* conception of acquaintance. I suggest that RP3 is a plausible acquaintance condition on aboutness; one which offers a faithful articulation of the guiding story in §4.1 and the best characterization of RUSSELL'S PRINCIPLE; a condition which, if correct, provides a foundation for progress in the study of singular thought.

A crucial component of RP3 has yet to be explained. Notice that since each world is at least as close to itself as it is to any other (being at least as similar to itself as any other), the

²⁵ Since bases are specific causal routes we ought to extend the notion of closeness to bases, too, so that the counterfactual bases (e.g. at w') in RP3 need not be strictly identical to any actual basis for $\langle \alpha \rangle$. Since these fine details of basis-individuation would distract us from the substance of RP3 I set this complexity aside here to focus on more pressing points of clarification.

principle entails that the relevant beliefs in $\langle \alpha \rangle$ at the corresponding worlds must be *true*. This consequence may seem disastrous. Does it not amount to a kind of infallibility? The notion of ‘a range of relevant predicate representations $\langle \Phi_1 \rangle \dots \langle \Phi_n \rangle$ ’ now requires elucidation.

Recall our discussion of Case 7, which involved the mathematical collective Nicolas Bourbaki. This case shows that whether a potential predicate representation is relevant is partly determined by the subject’s interest in or disposition to store it in $\langle \alpha \rangle$.²⁶ Despite sameness of the testimonial basis, and despite the single-minded mathematician being no more enlightened as to the status of Nicolas Bourbaki as a collective than the biographer, her $\langle \text{Bourbaki} \rangle$ representation is about the collective whereas the biographer’s (who may have all of the mathematician’s beliefs alongside his many others) is not. Whether some $\langle \Phi \rangle$ is relevant is partly determined by the subject’s disposition to store it in $\langle \alpha \rangle$, and the mathematician has no interest in reports putatively about Bourbaki’s life.

However, a predicate representation’s being relevant does not entail that ϕ must satisfy $\langle \Phi_x \rangle$ for $\langle \alpha \rangle$ to be about ϕ . The situation-sensitive *range* of relevant predicate representations $\langle \Phi_1 \rangle \dots \langle \Phi_n \rangle$ in RP3 need not and typically will not be all relevant predicate representations. This captures the sense in which aboutness requires that the subject be *generally* focused on the object (§4.1). Mistakes are possible, even for those properties of ϕ which are of great interest to the subject. The single-minded mathematician may believe that Bourbaki’s proof on page 52 contains a silly error when in fact there is none, or that Bourbaki created the symbol Z (flagging that a passage or step in a proof is tricky and demands attention) despite its being imported from the European road sign indicating a (literal) dangerous bend. What goes wrong for the biographer is that he is insufficiently discriminating: he forms beliefs too readily. The belief-forming dispositions of the single-minded mathematician, by contrast, are generally accurate,

²⁶ The picture suggested by Evans (1973/85)—that a representation $\langle \alpha \rangle$ is about ϕ if ϕ is the dominant causal source of information in $\langle \alpha \rangle$ —appears to appreciate this sensitivity: “[d]ominance is not simply a function of *amount* of information [...]. Also the believer’s reasons for being interested in the item at all weigh” (16).

and accurate enough. This conforms to the intuitive diagnosis provided by the guiding ideas in §4.1.

What exactly does ‘general accuracy’ involve? How expansive must the range of relevant predicate representations for which one satisfies the safety condition in RP3 be? How many of one’s beliefs must be true, and how few can be false? Must at least half of one’s beliefs be accurate? What if most of one’s beliefs are false but one’s dispositions to form further beliefs would result exclusively in true beliefs? What if one has very few beliefs concerning the object, all true, but that one’s dispositions would lead one wildly astray? Scenarios can easily be constructed for each of these patterns. In many of these cases it will be unclear whether the subject satisfies RP3. Perhaps this is a flaw in the proposal, for any general constraint we are forced to draw is bound to exclude some scenarios in which there is an intuitive case to be made for the presence of singular thought? However, it will be *equally* unclear, consulting our intuitions, whether these same cases involve singular thought. The proposal should not be held hostage to a general answer to such questions for the same reason that exactly how reliable a belief-forming process must be, in any possible case, to constitute knowledge is not a demand we do or should make of reliabilist epistemological theories; nor do we demand that we be told just how many miles away Henry must be from a fake barn to count as knowing that what he sees is a barn. Such views respect the sensitivity of an answer to these questions on specific features of the subjects’ situations. And just as these epistemological theories bear fruits in other ways, RP3 promises to do the same. §4.4 begins to explore some implications RP3 has for structural features of aboutness, in particular the status of TRANSPARENCY.

Perhaps this seems an unsatisfying response, however. Perhaps more guidance on the scope of aboutness is needed in order for RP3 to be properly evaluable. I shall now suggest that this can be given.

Evans (1982) agreed that there “is some degree of incorrectness in a subject’s conception of an object that makes it pointless to ascribe thoughts about it to him” (134, n.

21).²⁷ What degree of incorrectness is this? In Chapter 3 we encountered Evans' claim that perceptual-demonstrative singular thought requires at least a capacity to determine both the location and sortal of the object. "The information-link places the subject in a position rather like [one] who feels something tugging at the end of his fishing line" (Evans 1982: 172). Mistakes of either kind, however, are grave. I used Case 3 to argue that Evans is wrong about the location claim. The sortal claim is also difficult to justify. If *S* points to an inanimate object in dim light and judges <She must be the new Classics Professor> the error "deprives the attempted thought of content" (1982: 196). If *S* were to have misperceived a *man* as a woman the thought would merely be false (ibid.).²⁸ The truth in the vicinity, I propose, is that if a subject disposed to form beliefs on the basis of a perceptual-demonstrative link is (or would be) sufficiently off the mark concerning the location or sortal of *o*, she is likely to be wrong about much else too. And in that case she will not be in a position to satisfy RP3 with respect to *o*.

There is reason to think that there must be something more general to say about the range of relevant predicate representations with respect to which one must satisfy the safety condition in RP3 (other than that it is sensitive to the subject's interests and belief-forming dispositions). Suppose a subject has established, say, a perceptual-demonstrative link with an object, but is so uninterested in worldly goings-on, perhaps in some drug-induced catatonic stupor, that she has no dispositions to form beliefs by uptake from that link. For all that has been said so far, the range of relevant predicate representations $\langle \Phi_1 \rangle \dots \langle \Phi_n \rangle$ is therefore empty, and in that case the counterfactual in RP3 is trivially true. So the stupefied subject is acquainted with *o*; she *knows which* thing *o* is. This is a bad consequence. The guiding idea in §4.1 was that a mere causal link does not suffice for a subject to be acquainted with an object; the

²⁷ It is clear from the context that Evans is not talking about the truth of attitude reports in this remark.

²⁸ Evans also elsewhere adds: "our conditions for demonstrative identification do not require that the subject's information link be functioning well—so long as it provides an effective route to the object. He can misperceive its colour, or its shape, or get altogether quite a wrong view of the thing, while still having a perfectly clear Idea of which thing is in question" (1982: 179).

link must be epistemically rewarding in the sense that the subject must be disposed to put it to good use, and reliably so...

RP3 provides a foundation for an acquaintance-theoretic account of aboutness. Evans was keen to emphasise that we have thoughts about objects by means of myriad epistemically rewarding links—"objects which we can currently perceive, or which we can remember, however faintly; or of whose existence we are aware by the testimony of others; or in whose existence we have reason to believe in other ways" (1982: 39). The various 'modes of identification' Evans (1982) discusses are unified by their faithfulness to his precisification of RUSSELL'S PRINCIPLE, but their heterogeneity is equally important to recognise. This sort of heterogeneity, I suggest, impacts on the specific way in which a subject must satisfy RP3. And this provides both the resolution to the worry about the stupefied subject and a firmer grip on what the general demands of RP3 are.

Each *kind* of epistemically rewarding link makes demands on which predicate representations are relevant. In the case of a perceptual-demonstrative link, one must be at least *disposed* to form beliefs about the object's location (and, perhaps, its sortal). So long as enough of what else one relevantly believes about the object is true, a mistake as to its location (or sortal) is not catastrophic. Our stupefied subject would no longer satisfy RP3, however, for she lacks this dispositional capacity. It is still a consequence that if a peculiar sort of subject, with a perceptual-demonstrative link to an object *o*, were only disposed to form beliefs about *o*'s location and nothing else, then were she to get its location wrong she would not be in a position to have a singular thought about it. However, it seems that our intuitions—to the extent that we have any here—bear out the prediction. Perhaps in the case of thought about an object via recognitional capacity, one must be at least *disposed* to form beliefs about one's past encounters with that object upon its appearance (in suitable conditions), placing those encounters within

one's past to some degree of accuracy.²⁹ A detailed study of each of these ways of satisfying RP3—considering the idiosyncrasies of perceptual-demonstrative, recognition-based, and testimony-based singular thought *inter alia* and elucidating how the relevant epistemically rewarding links in each case constitute a basis for the reliable formation of certain true beliefs—is outside the scope of this chapter. As I explained at the outset, I am offering a necessary condition which precisifies RUSSELL'S PRINCIPLE, not an exhaustive analysis of aboutness. My core thesis is that the myriad ways we have of achieving aboutness are unified by their conformity to RP3. What differentiates these ways is the heterogeneity of the epistemically rewarding links in virtue of which one may satisfy RP3. What I have offered here is an important start to this systematic investigation. §4.4 will conclude with a brief reflection on some structural implications of the proposal put forward so far.

While RP3 is a necessary condition, there are two crucial ways in which it might overgenerate as an acquaintance constraint, making some singular representation $\langle \alpha \rangle$ about some o' as well as the object o which it is intuitively about. The first concerns Strawson's (1959) massive duplication thought experiment (presented here in Chapter 2). If, somewhere in space or time, there are regions of reality which contain perfect qualitative duplicates of ourselves and our surroundings, how does RP3 privilege the objects we know and love over their cosmic duplicates? Will S not equally satisfy a safety condition with respect to the properties of those objects, given that they are perfect duplicates?

RP3 incorporates the notion of a basis for each of the relevant beliefs. A basis for a belief is a partly external, causal-historical route to the formation of that belief. In the case of perceptual-demonstrative thought, recognition-based thought, or testimony-based thought, for instance, the basis will be a link to or disposition with respect to one's environment. In the scenario Strawson envisaged, there would not be any such basis with respect to the duplicate

²⁹ See McDowell's remarks in Evans (1982: 299–301).

regions of reality. As a result, it will not be the case that for some relevant range of predicate representations $\langle \Phi_1 \rangle \dots \langle \Phi_n \rangle$ there are bases such that were S to form the belief $\langle \Phi_i \rangle^{<a>}$ via a given basis b there would be no close world w' at which *some duplicate* o' is not Φ_i while S believes $\langle \Phi_i \rangle^{<a>}$ via b . At some close worlds o' will fail to be Φ_i . S 's forming the belief $\langle \Phi_i \rangle^{<a>}$ via b is not a reliable way of determining the (relevant) properties of o' .

However, a nearby worry for RP3 concerns the possibility of duplication in our midst. For almost coincident with any microphysically precise specification of the lump of matter of which Leonard the cat (say) is made is a distinct lump of matter which resembles it extremely closely in cat-respects. The following question presents itself: in virtue of what does this first lump of matter constitute a cat and the second not? Unger's (1980) infamous Problem of the Many suggests that we are systematically wrong in our numerical judgments about ordinary objects under their ordinary sortals; for there are many cats on Leonard's mat. As Unger was aware, this appears to raise difficulties for any plausible explanation of how we get to have singular thoughts about cats and other ordinary objects. (Unger himself concluded that there are no cats.) In the context of the present account, the threat is that it seems there will be *many* α s for which S satisfies the condition in RP3. This worry requires more attention than can be given at this point in the chapter, and so I treat it in separately in the Appendix. In the meantime, however, it is worth bearing in mind that this is a problem for all acquaintance-theoretic accounts of singular thought. Independent of the success of the response mooted in the Appendix, the present treatment of acquaintance is at least competitive.

With the positive proposal now on the table, we shall consider an alternative way of implementing the guiding story from §4.1, one which will serve as a useful contrast.

4.3 Dickie's (2015) account

This section examines Dickie's (2015) implementation of the intuitive story introduced in §4.1. After highlighting the key elements of her account and the salient differences to that proposed in §4.2, I shall raise two sorts of concern. First, there is a dissonance between the intuitive story in §4.1—which appears in some form or another at the introduction of her book and at various places throughout (2015: 2, 37, 47, 57)—and the official account Dickie proposes as an implementation of this story (§4.3.2). This lends *prima facie* support to the proposal offered in §4.2. Second, there are myriad indicators that Dickie is committed to the aboutness-fixing element ('means of justification') being transparent, respecting cognitive significance in the way of Fregean sense, and (as §3.6.3 illustrated) this leads to serious problems concerning the scope of aboutness (§4.3.4).

4.3.1 Bodies of beliefs

Dickie (2015) explains 'ordinary' aboutness in terms of a *body of beliefs* being *cognitively focused* on an object. To be cognitively focused on an object is, roughly, for certain of one's belief-forming activities to be truth-conducive with respect to just that object's properties. We will see how this is cashed out by Dickie in §4.3.2. Before then, the notion of a body of beliefs requires elucidation.

For Dickie, the fundamental unit of aboutness is not particular beliefs but bodies of beliefs. The purpose of a body of beliefs is to 'tune in' to an ordinary object in the world. There are analogies here between bodies of beliefs on an object and the 'singular representations' of §4.2. In crucial ways, however, the two notions differ.

A body of beliefs has a special kind of unity, to which there are two dimensions. First, it is a set of beliefs *treated as* beliefs about the same ordinary object. The subject will 'trade on

identity' and use beliefs within that body in an integrated way, eliciting a preparedness to transition, for example, from representations of the form $\langle \alpha \text{ is } \Phi \rangle$ and $\langle \alpha \text{ is } \Psi \rangle$, to $\langle \text{Something is both } \Phi \text{ and } \Psi \rangle$. Second a body of beliefs has a single *proprietary means of justification*. While a body of beliefs may (perhaps entirely) contain information delivered by any of a variety of means, it will be "associated with a specific 'trumping' route to justification" (2015: 51). Beliefs formed in this way are privileged in that the subject is disposed to revise beliefs in that body formed by other means according to the deliverances of this proprietary means. This speculative empirical claim is introduced as a generalization from the case of perceptual-demonstrative bodies of beliefs. Attentional perception leads to the formation of bodies of beliefs, and to the possibility of the distinctive transitions of the previous paragraph, because they share a proprietary means of justification. Trading on identity is "an artefact of the way these beliefs are formed" (2015: 83). Whether this claim holds for bodies of beliefs quite generally is in fact a significant assumption, for it is the proprietary means of justification which determines what each body of beliefs is about.

One immediate consequence of this setup, since trading on identity is enabled only within a body of beliefs and since a body of beliefs shares its aboutness-determining proprietary means of justification, is that it is not possible to trade on identity and refer to two distinct objects. Insofar as bodies of beliefs are individuated so as to respect cognitive significance, then, a form of TRANSPARENCY is already within reach. We will return to this feature of the view in §4.3.4.

4.3.2 Cognitive focus

Dickie (2015) explains aboutness in terms of a body of beliefs being *cognitively focused* on an object. Cognitive focus is summarised as follows:

...an aboutness-fixing relation does its aboutness-fixing work by putting in place a route to justification for a body of $\langle \alpha \rangle$ beliefs such that if the subject *were* to form $\langle \alpha \text{ is } \Phi \rangle$ beliefs justified by this means, these beliefs *would* tend to get *o*'s properties right.³⁰

The claim is that aboutness involves a general sensitivity to the properties of an object, so that *it* is the unique thing concerning which one will reliably form true beliefs. As I suggested in §4.1, this talk of reliability and what would have been the case were a subject to realize some relevant belief-forming dispositions is highly reminiscent of safety-theoretic epistemology. §4.2 explored the potential connections between safe belief-forming practices and aboutness. Despite what appear to be Dickie's intentions in providing a theoretical implementation of this story, however, the principle at the heart of Dickie's account of aboutness is instead reminiscent of the 'relevant alternatives' framework used by Lewis (1996) in giving the truth-conditions of 'knows'-ascriptions. This gives rise to a dissonance between the two presentations, which sometimes appear on the same page (see for example (2015: 57)).

To briefly summarise Lewis' (1996) framework, '*S* knows that *p*' is true if and only if *p* is true at all 'not-properly-ignored' worlds 'uneliminated' by *S*'s evidence. A world *w* is not-properly-ignored if and only if *w* satisfies the various 'rules of relevance' Lewis describes. And a world *w* is uneliminated if and only if the subject's evidence (her perceptual experience and memory) at *w* is the same as her evidence in actuality (1996: 553).³¹

³⁰ (2015: 57). See Dickie (2015: 57, n. 22) for a slightly more precise characterization.

³¹ As Holton (2003), Williamson (2001; 2009a: 23, n. 16), and others have noted, Lewis (1996) appears to be committed to implausible iteration principles for knowledge. Where $w \rightarrow v$ says that *v* is an uneliminated possibility for the agent at *w*, Lewis appears to think that $\rightarrow$ is an equivalence relation. One of the things this would entail is that if one knows that *p* then one knows that one knows that *p*. Dutant (ms.), Holliday (2015), and Salow (2016) have argued that Lewis is not best interpreted as being committed to such principles, however. Lewis calls his account 'externalist' and says that "the subject himself may not be able to tell what is properly ignored" (1996: 554), but if $\rightarrow$ were an equivalence relation this would be possible, for she could

Dickie (2015) observes that *justified* belief-forming activities are truth-conducive: “if a subject’s belief is justified, the subject will be unlucky if the belief is not true and not merely lucky if it is” (43)). Unusually, she cashes out this truth-conducive character using Lewisian resources:

...whether a belief is justified depends on how it is formed, and [...] a path to belief formation confers justification [...] only if it rules out a reasonably wide range of ways the belief might fail to be true (2015: 40).

Since cognitive focus is also explained in terms of truth-conduciveness, it, too, is characterized in Lewisian fashion. Roughly, one is cognitively focused on an object when one’s belief-forming activities ‘eliminate’ a relevant range of possibilities where the beliefs are false (2015: 43–4).

If justification must be something which rules out a relevant range of circumstances, what determines whether a circumstance is relevant?³² According to Dickie, justification is ‘rationality-securing’ (2015: 43–4): what one must do in order to form a belief in a justified way is typically something falling short of guaranteeing the belief’s truth, but something more than mere luck or wishful thinking. So if one’s belief-forming activities are justified throughout an interval, the subject acts rationally, in this respect, throughout that interval. This connection between justification and rationality means that the range of circumstances which must be eliminated are (at least) those the ignoring of which would amount to irrationality. And so, she suggests:

use her knowledge of what she knows to work out what is properly ignored. Holliday and Salow argue that the key to rendering Lewis’ account compatible with the denial of certain iteration principles is to keep track of the distinction between the contributions of the context of the ‘knows’-attributor and of the subject’s situation.

³² Dickie (2015) tends to speak of ‘circumstances’ though she is explicit that these are possible worlds (40; 65). I shall follow her for consistency.

RELEVANCE: ...circumstance σ is ‘rationally relevant’ to S ’s belief-forming activities over a time interval iff, for some belief S forms in the interval, the belief counts as rational only if formed by a route that eliminates σ (2015: 42).

(There is a wrinkle here. Since RELEVANCE is a biconditional, only circumstances where the relevant beliefs are false will count as rationally relevant. I take it that Dickie’s intention is to have formulated the quoted passage in RELEVANCE using ‘if’ in place of ‘iff’.)

Since justification is truth-conducive but not truth-entailing for Dickie (2015), the actual world cannot always be a rationally relevant circumstance.³³ This is how a way of forming (a body of) justified beliefs may deliver misinformation without infringing on aboutness. For example, it is claimed that a thinker like the unfortunate subject in Case 3 (§3.6.1) who is fooled by a mirror into thinking that the waiter is to his left may, I take it, essay singular thoughts about the waiter because actuality is not rationally relevant:

...a rationally relevant circumstance is just a circumstance that a subject is rationally required to take into account in forming a belief. We are not rationally required to be on the lookout for disguised mirrors (2015: 139).

What is it to ‘rule out’ or ‘eliminate’ a circumstance, according to this conception of justification? For Dickie (2015), while the other relatum of elimination is a ‘means of justification’ as opposed to the subject’s evidence, the notion of elimination is Lewisian:

³³ ‘Rationally relevant circumstance’ may be read as ‘relevant circumstance’ and ‘rationality-securing justification’ as ‘justification’, on the understanding that what circumstances are relevant are those not-*p* possibilities which the subject *ought*, in some sense, to guard against. The slides from a belief’s being ‘justified’ to being ‘rational’ (and vice-versa) at (2015: 142–7) support this.

ELIMINATION: A means of justification *eliminates* a circumstance σ “iff the fact that the belief is formed by this route [...] entails that σ is not actual” (2015: 41).

In other words, σ is eliminated by the ‘means’ or ‘route’ m by which a subject forms some (body of) belief(s) just in case m entails that σ is not actual. Dickie’s (2015) conception of justification is a species of *process reliabilism*.³⁴ How these processes (or ‘means’) are individuated will be discussed at length shortly, for this is a source of considerable problems.

It is worth pausing here to summarize and to observe a dissonance between the intuitive gloss presented in §4.1 and the formal implementation we see Dickie using. While not inherently objectionable, this dissonance is one of the features which leads Dickie away from the kind of safety-based view presented in §4.2. Dickie has described cognitive focus (which “*just is*” aboutness (2015: 1)) in reliabilist terms: “given how the beliefs are justified, the subject will be unlucky if they do not match the object and not merely lucky if they do” (2015: 2). Since the truth-conducive notion of justification is used to explicate cognitive focus, it is no surprise to find Dickie saying things like: “in general and allowing exceptions, if a subject’s belief is justified, the subject will be unlucky if the belief is not true and not merely lucky if it is” (2015: 43). Despite the association of anti-luck claims of this sort with safety theories in epistemology, which explain this in terms of the nearest belief-formation-worlds being belief-true-worlds, Dickie is quick to cash them out by saying that *justification* “[eliminates] a range of the circumstances in which the belief is not true that is sufficiently wide and varied that any ‘belief not true’ circumstance left standing may be ignored without undue risk” (2015: 43). This is a very different way of capturing the truth-conducive character of reliable belief-forming activities, one which does not seem to guarantee that any of the relevant beliefs are actually even close to being true. Here is one way of bringing out the difference. Consider a brain in a vat

³⁴ See, for example, Goldman (1979).

whose experiences are subjectively indistinguishable from those of a person walking in Port Meadow. This subject forms beliefs like those a person would express by saying things like ‘I can see a bullfinch’. It seems that the subject’s way of forming these beliefs eliminates a range of circumstances where the belief is false which is sufficiently wide that any ‘belief not true’ circumstance may be ignored without undue risk; the subject’s actual circumstance is one they are intuitively “not rationally required to anticipate” (2015: 43). Yet virtually all of the subject’s beliefs are false. There is at least *one* good sense in which this subject’s beliefs-forming activities are not reliable.

While I have no objection as such to this way of characterising reliable belief-forming activities, it meshes with the guiding story in §4.1 less naturally than the safety characterisation. On the most natural implementation of that view, the brain in a vat’s beliefs are not safe and her epistemic practices not reliable.³⁵ More important than the mere sense of dissonance, however, we will see in §4.3.4 that Dickie’s (2015) account of aboutness is otherwise seriously problematic.

4.3.3 Aboutness and justification

While there are one or two expository details left to unpack, I present Dickie’s (2015) analysis of aboutness at this stage to highlight where we are heading. ‘ $\langle\alpha\rangle$ ’ and ‘ $\langle\Phi\rangle$ ’ will be used for the relevant kind of conceptual representation of object and monadic property, respectively (315).³⁶

³⁵ They may still be normatively good in some sense of course (though Williamson (forthcoming) provides an interesting case against this temptation).

³⁶ In a sense, Dickie (2015) does not discuss the nature of these conceptual representations. In the case of $\langle\Phi\rangle$ this is because she sets aside the issue of aboutness with respect to properties. In the case of an object-representation $\langle\alpha\rangle$, are we to think of the body of beliefs itself as the representational vehicle (as in §4.2.1;

ABOUTNESS AND JUSTIFICATION: A body of ordinary $\langle \alpha \rangle$ beliefs is about o iff [...] for all $\langle \Phi \rangle$, if S has proprietary rationality-securing justification for the belief that $\langle \alpha$ is $\Phi \rangle$, this justification eliminates every rationally relevant circumstance where o is not Φ (Dickie 2015: 57).

The conditional on the right-hand side of ABOUTNESS AND JUSTIFICATION is a counterfactual: *were* the subject to form the belief that $\langle \alpha$ is $\Phi \rangle$ via the means of justification proprietary to $\langle \alpha \rangle$, this justification would eliminate every rationally relevant circumstance where o is not Φ . The beliefs actually formed by the proprietary means of justification in the body of beliefs in question “may be thin or even empty” (2015: 58).

As we saw from Case 7 (§4.1), Dickie intends that there be a degree of situation-sensitivity in ABOUTNESS AND JUSTIFICATION. This sensitivity enters in through the variable domain of the quantifier over $\langle \Phi \rangle$. This is already to be restricted to conceptual representations of properties “for which believing $\langle \alpha$ is $\Phi \rangle$ *can* be justified by the means proprietary to $\langle \alpha \rangle$ ” (2015: 59). In particular, Dickie takes this to impose restrictions in the case of perceptual-demonstrative bodies of beliefs to ‘observational’ properties: for example, *red*, *round*, and *rolling*. This restriction is not imposed more generally, however. (One can be told by a reliable informant that Fido weighs 12lb 4.8847oz, and this property fits into no privileged category.) The *general* rule is that “the ‘for all $\langle \Phi \rangle$ ’ quantifier ranges over the $\langle \Phi \rangle$ such that the subject is [...] ‘in the business’ of forming $\langle \alpha$ is $\Phi \rangle$ or $\langle \alpha$ is not- $\Phi \rangle$ beliefs” (2015: 59). What beliefs one is ‘in the business’ of forming about a thing is clearly something which will vary with the interests of subjects.

and in Récanati (2012: 38–41))? Or is $\langle \alpha \rangle$ a referential ‘tag’ for the body of beliefs (as in Jeshion (2010))? I will assume the former in what follows.

In sum, Dickie (2015) proposes that a body of beliefs $\langle \alpha \rangle$ is about o iff, were the subject to form the belief that $\langle \alpha \text{ is } \Phi \rangle$ via the means of justification proprietary to $\langle \alpha \rangle$ (for all $\langle \Phi \rangle$ she is most centrally disposed to update $\langle \alpha \rangle$), this means of justification would eliminate every rationally relevant circumstance where o is not Φ .

4.3.4 Problems

Unfortunately, Dickie's (2015) implementation of the guiding story in §4.1 is beset with difficulties. To begin, note that ELIMINATION entails that the actual world cannot be eliminated.

ELIMINATION: A means of justification *eliminates* a circumstance σ “iff the fact that the belief is formed by this route [...] entails that σ is not actual” (2015: 41).

We are told that a circumstance σ is eliminated by the means or route m by which a subject forms some body of beliefs if and only if m entails that σ is not actual. But since m is the actual means, actuality is not a circumstance which may be eliminated. For every way of forming a belief by m at a circumstance σ , it is *at least compatible* with m that σ is actual.³⁷

This first issue has implications for the individuation of means of justification. Which circumstances *can* be eliminated?

To find out whether a means of justification for a belief B eliminates a circumstance σ^* , we must ask whether “if B had been formed in σ^* at t by the same route that generates it in σ , B

³⁷ This feature is inherited from Lewis' (1996) elimination-based story. There, it is not a problem, since he is analysing (ascriptions of) knowledge. Indeed, his *Rule of Actuality* also specifies that the world corresponding to the situation of the subject may not be properly ignored (1996: 554).

would not have been true” (2015: 44, n. 10; emphasis added).³⁸ This means that, unless every non-actual circumstance is to be eliminated by default, we must make sense of a means of justification or route being used at different circumstances. Consider again our unfortunate brain in a vat, attempting to form beliefs like ‘That’s a bullfinch’. According to Dickie (2015: 147) these belief-attempts are justified, for the subject’s actual circumstance is one they are not rationally required to anticipate. Now let us ask which circumstances the means of justification eliminates. I take it that we would not want it to eliminate circumstances where things are just as the subject *takes* them to be—a circumstance where she is indeed walking through Port Meadow and looking at a bullfinch. This is one kind of case she precisely cannot rule out. If we individuate means of justification in any remotely externalist way, however, it seems that it *will* eliminate such a circumstance. For at every circumstance σ^* where the belief is essayed in the *same* way it is in actuality, it will fail to be true: the subject will not be in a position to refer to a bullfinch.

In general, if means of justification are individuated externally, as specific causal chains, like the ‘bases’ of §4.2, then a subject’s means of justification is liable to overeliminate. For the account to be adequate, then, Dickie (2015) must individuate means of justification in a more internalist-friendly way.³⁹ The brain in a vat example suggests that if we individuate means of justification in any other way than as to respect nothing more than subjective indiscriminability, we will eliminate more circumstances than ought to be eliminated. (Indeed, that our ordinary way of forming perceptual beliefs would then eliminate sceptical scenarios such as those wherein

³⁸ This is another place where the Lewisian framework makes sense on Lewis’ (1996) conception of evidence as one’s total phenomenal state, but which is more difficult to make sense of when one expands the notion of evidence or applies the framework to ‘means of justification’.

³⁹ It is worth remarking that this result does not sit well with some of Dickie’s (2015) examples of means of justification. I take it that the perceptual belief formation via “the standard route” (121) is distinct but subjectively indistinguishable from vivid hallucinations.

the subject is a brain in a vat is why the notion of elimination attracts Lewis (1996) to a strongly internalist conception of evidence.)

How internalist-friendly must Dickie (2015) go in individuating means of justification? It turns out that Dickie faces two additional kinds of pressure in individuating means of justification. Given that these also suggest that means of justification are individuated only as finely as subjective indiscriminability, these pressures will ultimately have serious implications for the scope of aboutness.⁴⁰

First, justification must ‘secure rationality’. This is taken to mean that justification for a perceptual-demonstrative body of beliefs is present in a case of full-blown hallucination (2015: 147). Consider the following case.

Case 9—The Thickening:

It seems to you that you are looking at something roundish moving slowly in the shadows. You think <It’s roundish and slow-moving; maybe it’s a hedgehog>. In fact there is nothing there—the visual object you are attending to is just a thickening in the general pattern of light and dark (Dickie 2015: 142).

Dickie (2015) claims that the subject who forms beliefs by “uptake from an attentional-perceptual channel” (144) obtains justification for the belief-attempt <That is a creature of some sort>. The case is a little puzzling because we are told both that ‘nothing’ is there and that there is a ‘thickening’ there. The important point, I take it, is that if anything *is* there it is not an ordinary object. Since the object, if any, to which the subject attends is ‘extra-ordinary’—i.e. is not the sort of thing upon which human perceptual-demonstrative belief-forming processes are

⁴⁰ If a body of beliefs is meant to *share* a (proprietary) means of justification, this also puts some restrictions on how finely individuated means of justification can be.

trained—she *will* be merely lucky if the <That is Φ > beliefs she essays get its properties right (2015: 143).

Nevertheless, Dickie suggests, justification for these belief-attempts is preserved because “uptake from an attentional-perceptual channel” is a means of justification which “almost always results in beliefs that are about some mind-independent thing” (2015: 144).

In assessing whether a belief is rational, we are assessing whether a subject has done all that a rational subject should have to try to ensure its truth. But it looks like unwarranted harshness to insist that *a situation indiscriminable by you* from many where you have done all that you should might, nevertheless, be one where you should have done something more (2015: 147; emphasis added).

In her argument for the claim that the subject is justified in forming beliefs to the effect that a ‘thickening’ is a hedgehog, Dickie (2015) talks only about rationality, but her conclusion is that the subject’s beliefs are *justified* (142). The apparent upshot is that means of justification are individuated so as to respect subjective indiscriminability. Uptake from an attentional-perceptual channel is a means available in Case 9, and presumably also in a case of full-blown hallucination.

Perhaps it would be responded that this pressure stems from an inessential feature of Dickie’s (2015) overall account of aboutness; we could deny that the subject in Case 9 is justified. In light of my earlier observations about ELIMINATION, however, this response desperately needs elaboration. If we adopt a conception of rationality and of justification such that the subject in Case 9 does not deploy any ‘means of justification’, what is the missing element, and how could this missing element constitute part of the means of justification without, in other cases, eliminating more circumstances than should be eliminated if we are to obtain the proper scope of aboutness given ABOUTNESS AND JUSTIFICATION?

In any case, these worries are compounded by a final source of pressure to individuate means of justification to no more fine-grained an extent than the subject's discriminative capacities.

While this is not a point on which Dickie (2015) is altogether explicit, it appears that bodies of beliefs play the role of Fregean sense, capturing cognitive significance. This explains a number of features. First, it explains why bodies of beliefs are unified by both the subject's disposition to trade on identity *and* sameness of proprietary means of justification. Remember that proprietary means of justification determine reference. If a subject is in a position to know that she is trading on identity throughout an interval, she can know that bodies of beliefs $\langle \alpha \rangle$ and $\langle \beta \rangle$ co-refer if they refer at all, and in that case she is in a position to know that they have the same proprietary means of justification. So if one can always tell when one is trading on identity, this means that sameness or difference of proprietary means of justification is transparent. That Dickie endorses this Fregean picture of trading on identity is suggested by the remarks that bodies of beliefs are what Récanati (2012) calls 'mental files' (2015: 50; 83; forthcoming), and that understanding "a proposition involves grasp of the conceptual representations [i.e. bodies of beliefs] that are its constituents" (2015: 101).

Second, it would explain why bodies of beliefs must have a *unique* proprietary means of justification. *A priori*, why expect my body of beliefs about Roger Federer to have any 'proprietary' way of gaining information? For Dickie, the pressure is that if bodies of beliefs were associated with several such aboutness-determining means of justification, there could be putative bodies of beliefs $\langle \alpha \rangle$ and $\langle \beta \rangle$ such that $\langle \alpha \rangle$ is associated with $m1$ and $m2$ and $\langle \beta \rangle$ with $m1$ and $m3$. The subject would not be in a position to know that $\langle \alpha \rangle$ and $\langle \beta \rangle$ co-refer if they refer at all because $\langle \alpha \rangle$ might refer by virtue of $m1$ and $m2$ while $\langle \beta \rangle$ suffers aboutness-failure because $m3$ is a way of reliably forming true beliefs about a distinct object.

It is entirely possible, then, that the reason that (proprietary) means of justification are meant to 'secure rationality' by respecting subjective indistinguishability is that they must serve

to individuate bodies of beliefs which respect some form of TRANSPARENCY.⁴¹ Indeed, these ideas about rationality often do go hand in hand with TRANSPARENCY: “[w]ithout transparency, our conceptions of rationality and rational explanation yield absurd results” (Boghossian 1994: 39); “...the level at which the subject’s rationality can be assessed [is] transparent” (Récanati 2016: 13).

So far in this sub-section I have been concerned to show that (aboutness-determining, proprietary) means of justification must be individuated in a coarse-grained way, so as to respect something like subjective indiscriminability. They cannot be fine-grained, partly external, causal links with respect to one’s environment. What exactly is the problem if this is a commitment of Dickie’s (2015) framework?

Given these myriad sources of pressure to individuate means of justification to a degree no more fine-grained than the subject’s discriminative capacities, Dickie’s account drastically undergenerates the range of aboutness. This is best brought out by re-examining the possibility of massive duplication. In an appendix dealing with Strawson’s (1959) thought experiment (presented here in Chapter 2), Dickie (2015) attempts to show how ABOUTNESS AND JUSTIFICATION is able to support aboutness even if there is, in causally isolated regions or ‘sectors’ of actuality, perfect qualitative duplicates of ourselves and our surroundings. What is the guarantee that ABOUTNESS AND JUSTIFICATION will not overgenerate, so that our bodies of beliefs are not uniquely about the objects we know and love? What guarantees that proprietary means of justification will eliminate only all (rationally relevant) circumstances where o is not Φ and not also those where a duplicate o' is not Φ ? Dickie suggests

⁴¹ TRANSPARENCY #3: If at t S has a body of beliefs b , then for any body of beliefs b' which S maintains at t S is in a position to know whether b and b' co-refer (if they refer).

This principle corresponds to what Récanati (2016: 25–7) calls *weak co-reference de jure*.

that forming an ordinary $\langle \alpha \rangle$ belief by a proprietary route is a causal interaction between subject and environment [means that] it is, like every causal interaction, one whose occurrence is independent of whether there are other sectors and what objects in them are like. And in that case, which (whole) circumstances are eliminated by proprietary justification for our $\langle \alpha \rangle$ beliefs depends only on how things are in our own sector (2015: 67).

The idea seems to be that circumstances where these other sectors of reality duplicate our environments—putatively undermining the uniqueness of cognitive focus (and thus of aboutness, given that ABOUTNESS AND JUSTIFICATION says cognitive focus is necessary and sufficient for aboutness)—are eliminated automatically, and this is because of how means of justification are individuated. Since means of justification are, in general, *causal interactions with our environment*, circumstances where those very causal relationships do *not* hold are eliminated immediately (given ELIMINATION). And since the Φ -ness or non- Φ -ness of cosmic duplicate o' at all those eliminated circumstances is left open, duplication at other sectors of reality does not undermine aboutness.

In light of the observations earlier in this sub-section, however, it should be clear that there is a serious tension between the claim that means of justification are individuated so as to respect the causal-informational relationships we have with our environment, and, on the other hand, the myriad pressures which suggest that means of justification are individuated so as to respect something like subjective indistinguishability. If indeed means of justification are individuated in the latter way—which, I have shown, they surely have to be if the framework is to make sense—and there *is* massive duplication in some region of reality, *none of our thoughts are about anything at all*.⁴² Dickie's (2015) account of aboutness holds us hostage to massive

⁴² Assuming that aboutness requires uniqueness of referent, which Dickie (2015) gives no reason to question.

duplication, violating a basic desideratum on a theory of aboutness. The more general worry, of course, is that there is no guarantee from what Dickie tells us about (proprietary) means of justification and elimination that her account is extensionally adequate.

4.3.5 Intermediate conclusion

The worries raised in §4.3.4 for Dickie's (2015) account are serious. It is not clear how the account might be modified to provide responses. However, insofar as the heart of her proposal is the intuitive story she tells in the introduction to the book, articulated here in §4.1, the account I have suggested in §4.2 may be amenable to Dickie as a surrogate. Indeed, Dickie (2015) is keen to stress that her goal is not to provide a story which is committal on controversial issues such as the nature of justification. Instead she says that she will let the notion of aboutness do the driving: "the *aboutness and justification* principle is in itself neutral. [...] [I will be] taking stands on the nature of justification only when it is necessary to the inquiry" (2015: 15). Since she intends her proposal to be ecumenical, the complaints in this section may seem unfair. If I am right, however, they stem from assumptions made very early on in the book; in particular, from the way in which the truth-conduciveness of justification is explained and from the individuation of bodies of beliefs. Perhaps the proper conclusion is that her account is less ecumenical than it appears and that its commitments are unattractive. I hope those who appreciate the Dickie's (2015) contribution see the proposal in §4.2 as a faithful implementation of the guiding ideas.

4.4 Implications

I return now to examine two principal implications of the framework presented in §4.2. Here is a reminder of the central epistemic acquaintance principle.

RP3: S 's candidate singular representation $\langle \alpha \rangle$ is about o only if for a range of relevant predicate representations $\langle \Phi_1 \rangle \dots \langle \Phi_n \rangle$, there are bases for $\langle \alpha \rangle$ such that were S to form the belief $\langle \Phi_i \rangle^{\langle a \rangle}$ via some basis b there would be no close world w' at which o was not Φ_i while S believed $\langle \Phi_i \rangle^{\langle a \rangle}$ via b .

One general implication of RP3 is that while may be said to preserve the Russellian claim that aboutness involves a kind of knowledge it rejects one kind of priority claim associated with Russell's thinking on aboutness:

Knowledge of things, [...] by *acquaintance*, is essentially simpler than any knowledge of truths, and logically independent of knowledge of truths (1912: 46).

'Logical independence' here is taken to imply that we may have knowledge of a thing by acquaintance "even if we know very few propositions about it—theoretically we need not know any propositions about it" (1912: 144). If RP3 is the correct way to capture the insight of RUSSELL'S PRINCIPLE, however, at least one interpretation of this priority thesis is false. On that interpretation, one must be acquainted with a thing before one can have any sort of propositional knowledge which concerns it. RP3, however, requires that one's candidate singular representation store certain beliefs, or at least be disposed to store certain beliefs, and indeed that some of these beliefs be true. There is a weaker interpretation which RP3 preserves, of course: in order to have a *singular* thought about an object one must be acquainted with it.

RP3 also entails the rejection of two other Russellian thematic principles explored in §0.2: REVELATION and its entailment TRANSPARENCY. The remainder of this section explores the failure of the structural principle TRANSPARENCY.

4.4.1 TRANSPARENCY

At the end of Chapter 3 it was concluded that the best general resolution to the objections against Evans (1982) in §§3.6.1–3 is to reject the alleged identity between Ideas *qua* singular representations (determiners of aboutness) and Ideas *qua* vehicles of Fregean sense (modes of presentation). Evans should reply that (Ideas *qua*) singular representations are not subject to the constraint that their sameness or difference be transparent to the subject, in the following sense:

TRANSPARENCY #2 (SHORT): If at t S grasps some object-dependent sense s (via some singular representation r), then, for all object-dependent senses s' grasped by S at t , S is in a position to know whether s and s' are about the same thing (co-refer).

The pursuit of a plausible story about singular representation which conforms to such a constraint, so that singular representations express object-dependent senses, is the pursuit of a chimera unless we impose unmotivated restrictions on the scope of aboutness.⁴³ For TRANSPARENCY principles amount to the requirement that *that which determines reference* be transparent. TRANSPARENCY #2 would involve a commitment to ‘fine-grained’ singular representations which rule out the very possibility of rational doubt as to whether one is thinking

⁴³ Recall §0.4 and §3.6. As Schroeter (2007) has put it, the notion of sense is intended to fulfil three roles in the neo-Fregean framework: “(i) reflecting the subjective appearance of [guaranteed] coreference, (ii) reflecting the subject’s substantive understanding of what it takes to be the reference, and (iii) fully determining the actual reference. [...] If reference externalism is true, then no single entity can perfectly satisfy all three roles” (600).

about two different things.⁴⁴ This is because such vehicles would have both the job of determining aboutness and of capturing cognitive significance.

Descendants of Evans (1982) have predominantly sought to retain TRANSPARENCY #2 by appealing to *mental files*—“concrete, cognitive particulars” (Récanati 2016: ix) which are both “the singular concepts through which we represent particulars” (10) and the vehicles which “play the role of mode of presentation” (ix).⁴⁵ A number of costs are incurred by these theorists. First, the epistemic guarantee is limited to “synchronic deployments of the same file” (2016: 47). This means that the constitutive trains of reasoning—the infallible kind of ‘trading on identity’—must also be synchronic, limiting their interest.⁴⁶ Second, there is a sense of explanatory superfluity. According to Récanati, the best way to account for the kinds of ‘coarse-grained’ or ‘dynamic’ vehicles which I call singular representations is by “analysing them as chained sequences of [...] fine-grained, static files” (2016: 83).⁴⁷ If we can respect everything about the way the subject conceives of the world of objects by tracking only the distinctions they in fact draw, why insist on the presence of further representational distinctions corresponding to what *could* be drawn were she plagued by Cartesian doubts? Finally, it is not obvious that everyone capable of tracking an object in perceptual-demonstrative thought across time is thereby capable of wondering whether *this* (at *t*) is the same object as *that* (a few moments prior to *t*). Asking this sort of question is a reflective project which takes one away from the

⁴⁴ The coarse-grained/fine-grained distinction is due to Campbell (1987), who concludes: “Ways of thinking of objects are intrinsically coarse-grained with respect to the underlying perceptual information. To cut senses as finely as the Cartesian would have us do would shatter the integrity of conceptual thought” (290). Récanati (2016) draws the same distinction but favours the Cartesian model (see also Peacocke (1992: 2)).

⁴⁵ “If it seems to you that two tokens ‘obviously and incontrovertibly’ mean the same, then they do mean the same and co-refer (if they refer at all)” (Récanati 2012: 132).

⁴⁶ This also leads to an awkward account of what it is to change one’s mind. Due to having to construe certain patterns of reasoning as synchronic it involves having contradictory thoughts (see Récanati (2016: 75–6)).

⁴⁷ Millikan (1997) objects that if files are individuated in this way they are not mental representations (517).

basic reliance on one's sensory-cognitive abilities.⁴⁸ Yet it seems they should immediately be capable of this if what it is to think about the same thing is to deploy a series of transient, 'static' files. These files would seem to already provide the conceptual basis for such reflection.

The 'relevant discrimination' view of aboutness presented in §4.2 suggests a different approach. To think about *o* one must satisfy a safety condition for a relevant range of properties of *o*. Aboutness is not merely a matter of forming and being disposed to form some range of relevant beliefs but of satisfying RP3 with respect to those beliefs. A corresponding instance of TRANSPARENCY would involve knowing, for any two singular representations $\langle\alpha\rangle$ and $\langle\beta\rangle$, that one satisfies RP3 with respect to $\langle\alpha\rangle$ if and only if one satisfies RP3 with respect to $\langle\beta\rangle$. However, *how RP3 is satisfied* will not in general be something which is transparent to a thinker. Even if it is supposed that which predicate representations are stored in a singular representation is transparent, *bases* (unlike the proprietary means of justification of Dickie (2015) or the modes of identification of Evans (1982)) are not generally transparent, being partly external and dispositional. *S*'s $\langle\alpha\rangle$ -representation might satisfy RP3 with respect to *o* by virtue of belief-forming dispositions (for $\langle\Phi_1\rangle\dots\langle\Phi_n\rangle$) via bases $b_1\dots b_n$, while *S* has some representation $\langle\beta\rangle$ which satisfies RP3 with respect to *o'* by virtue of indiscernible belief-forming dispositions via bases $b'_1\dots b'_n$. *S* might intelligibly wonder *Is that $\langle\alpha\rangle$ the same thing as that $\langle\beta\rangle$?* Subjects can fail to know how RP3 is satisfied, and they can fail to know whether two singular representations are about the same thing (if they are about anything). If singular representations are to obey our precisification of RUSSELL'S PRINCIPLE, they cannot be modes of presentation.

Consider the following example for illustration. (I should stress that even if the reader disagrees with the diagnosis in the case below, its purpose is simply to make more concrete the general character of the TRANSPARENCY-failures we can expect from RP3, as specified in the previous paragraph.)

⁴⁸ Campbell (1987: 284).

Case 10—Kinds of blue

Lauren is selecting tiles for her new bathroom. A sales representative shows her a range of small sample tiles in various offerings of deep blue. Two catch her eye in particular, one *ultramarine* in colour, one *International Klein Blue* (IKB). Lauren takes the 10 samples home. Naturally they are all very similar, especially ultramarine and IKB, and she remains undecided. In an effort to mock her pickiness, a friend lays out the tiles to test whether Lauren can really tell the objects apart, something Lauren is herself only half-convinced by. Prompted to pick out ultramarine, she does so successfully. Her friend does not reveal the success and rearranges the tiles. Next she is prompted to pick out IKB and does so. Then ultramarine again... After enough rounds of this, it becomes clear that Lauren *is* reliably able to recognize each of the two objects. She does not know this, of course. For all Lauren knows she has been consistently mixing them up after all.

Case 10 suggests that a subject's recognitional capacities for two objects might outstrip her reflective awareness, for instance by running through cases in her imagination, of the difference between them (or indeed the difference between her two recognitional capacities). More generally, the belief-forming dispositions by means of which one might satisfy RP3 for ϕ may be indiscernible at t from those by virtue of which one satisfies RP3 for some ϕ' . In that case one might have two singular representations whose distinctness is opaque to oneself at t . If such cases are possible, singular representations determine aboutness but are not modes of presentation. They are not sufficiently fine-grained to capture what is cognitively significant for a subject. The natural thing to say regarding Case 10 is that Lauren has two singular representations, associated with different bases, but is unsure whether they are about the same tile. She has the cognitive resources to discriminate between the two tiles but is not in the operative sense aware of how or whether she is able to do so. When Lauren reflects via memory *<That was most aesthetically pleasing>*, she *knows which* tile she is thinking of. It is not independently plausible to insist that her inability to satisfy TRANSPARENCY voids her of the

ability to think about the IKB sample tile in this way. It is not independently plausible to insist that the kind of discrimination involved in RUSSELL'S PRINCIPLE must be absolute in the way required by TRANSPARENCY.

4.4.2 Diachronic shifts in aboutness

A further implication of RP3 is that singular representations do not have their semantic properties essentially. The situation-sensitivity of RP3 means that there may be variation in which predicate representations are relevant. In certain cases a singular representation $\langle \alpha \rangle$ might be about o in situation s and about o' in some situation s' . This implication violates a diachronic version of TRANSPARENCY, for the thinker might not be in a position to know that the shift in what is relevant (assuming the shift is itself apparent) leads to a shift in reference. Consider the following case.

Case 11—Twins:

Suppose I get to know a man slightly. Suppose then a suitably primed identical twin takes over his position, and I get to know him fairly well, not noticing the switch. Immediately after the switch my [candidate singular representation] will still be dominantly of the original man, and I falsely believe, as I would acknowledge if it was pointed out, that *he* is in the room. Then I would pass through a period in which neither was dominant; I had not misidentified one as the other, an asymmetrical relation, but rather confused them. Finally the twin could take over the dominant position.⁴⁹

⁴⁹ Evans (1973/85: 16). Since Dickie's (2015) bodies of beliefs are individuated by their proprietary means of justification, it is not clear that she could accommodate the possibility of such cases.

In this kind of case the subject's representation starts out being about one man and ends up being about another. We may explain this phenomenon by emphasising that, according to our theory, which potential predicate representations are relevant at a time is determined by the subject's interests and dispositions *at that time*. It can happen, in certain kinds of case, that one's $\langle \alpha \rangle$ -representation refers to o' when earlier it referred to o while this fact is opaque to oneself. A shift in relevance over time can lead to a shift in aboutness which escapes the subject's awareness.

Once again, at which point exactly the subject in Case 11's candidate singular representation ceases being about the initial person, and at which point exactly the subject's candidate singular representation starts being about the substitute, is not a question to which the present proposal must be expected to provide a situation-insensitive, once-and-for-all answer. If we were to demand this of a generalized acquaintance condition on aboutness it is not clear we would ever get to have a theory of aboutness at all. As explained in §4.2.3, a detailed study of each of the myriad ways of satisfying RP3, and of how the relevant epistemically rewarding links in each case constitute a basis for the reliable formation of certain true beliefs, is outside the scope of this chapter. RP3 is a necessary condition which precisifies Russell's 'knowing which' requirement on aboutness. My core thesis is that the myriad ways we have of achieving aboutness are unified by their conformity to RP3. The proposal defended here provides a new basis for the further systematic work on singular thought which is required if we are to make progress on the foundational questions with which we began at the outset of this thesis. Its adequacy is best judged by the fruit which it ultimately bears.

Conclusion

This thesis has argued that we have singular thoughts about ordinary objects and that we do so by maintaining singular representations in conformity with RUSSELL'S PRINCIPLE #3 (§4.2.3). This proposal provides a way of reinstating core Russellian themes recovered in the Introduction. Russell was right to criticize the assumption that “*if anything is immediately present to me, that thing must be part of my mind*” (1913/84: 22). Our proposal allows us to reconcile the idea that aboutness is a distinctively epistemic achievement with the intuition that we have singular thoughts about ordinary, mind-independent objects like Leonard the cat. These claims must be reconciled if we are to escape the prison in which Russell ultimately found himself, wherein “[s]ense-data at the times when they are data are all that we directly and primitively know of the external world” (1956: 148).

The contextualist framework in Chapter 1 allowed us to reconcile even very demanding conceptions of acquaintance with natural principles connecting propositional attitudes with our ways of reporting them. It thereby threatened to leave us with scant resources for identifying any acquaintance condition on aboutness, however. The truth of a *de re* attitude report is no context-independent beacon for the presence of a singular thought. Chapter 2 then cast some doubt at another level, this time on the essentiality of the notion of singular content for theories of aboutness. Chapters 1 and 2 dismantled some widespread assumptions, then, but left us little closer to the light.

Russell characterised his PRINCIPLE concerning aboutness not merely as “a fundamental epistemological principle” (1910/51: 159) but also as something “obvious” (1913/84: 110), “evident as soon as it is understood” (1910/51: 160). To the extent that Russell is right, we

obtain some guidance for inquiry into the nature of aboutness and its relation to knowledge. Precising RUSSELL'S PRINCIPLE offers an attractive way forward. Russell was willing to admit, after all, that “[i]t is not necessary to assume that acquaintance is unanalysable [...]; it may be found that a further analysis [...] is possible” (1913/84: 45).

Chapter 3 argued that Evans' (1982) influential attempt to execute precisely this project is mired by its commitment to a TRANSPARENCY principle. Despite the interest and subtlety of Evans' investigation, the prospects for a theory which demands absolute discrimination are dim. Once TRANSPARENCY is rejected, however, we have reason to be optimistic. According to the proposal in Chapter 4, aboutness requires relevant discrimination: thinking about an object involves satisfying a safety condition for a relevant range of properties of that object. This proposal sheds light on several features of aboutness: its situation-sensitivity, the failure of TRANSPARENCY, and the possibility of thought about ordinary, mind-independent objects.

Amidst worries that “there remains no contentful, philosophically fruitful distinction between [singular and descriptive thought]” (Jeshion 2014: 84–5) once we move outside of Russell's prison, and amidst claims that acquaintance is “a dispensable relic of a bygone era” (Hawthorne and Manley 2012: 25), the conclusion to be drawn here is encouraging. This thesis is far from the last word on the vertiginous questions with which we began in the Introduction. While earlier chapters closed off certain avenues for inquiry into the nature, scope, and requirements of aboutness, the proposal in Chapter 4 presents a new basis for the further systematic work which is required.

Appendix

The Many

Thoughts authored on the basis of epistemically rewarding relations and dispositions to ordinary objects are the paradigm cases of singular thought.

(ST) We can have singular thoughts about ordinary, mind-independent objects such as Leonard the cat.¹

Ordinary objects possess a particular kind of internal structure and causal profile. They move through space and time in an integrated and uniform way, persisting through non-catastrophic changes. They fall under *sortal* concepts such as *cat*, *person*, and *tree*, which provide criteria of individuation. Such concepts underlie our capacity to count ordinary objects and to distinguish them from one another by characterizing the kind to which they belong. *Thing on my desk*, by way of contrast, is not a sortal concept. The objects to which our most often used common nouns apply are ordinary objects; if I asked what things there are in your current surroundings, and you answered without being facetious, the things you would pick out would be ordinary objects. Though imprecise, this characterisation of ordinary object and sortal concept will suffice for the purposes of this Appendix. The less said, the wider Unger's (1980) Problem of the Many applies, and the more work there is to do in rescuing (ST).

¹ This is ORDINARINESS, from §0.2.5. Here I call it (ST) for brevity.

There have been various challenges to the claim that there are ordinary objects. Perhaps all objects are the mere “material content of any portion of space-time, however scattered and discontinuous” (Quine 1976: 859). Similarly, a metaphysics according to which only mereological simples exist is equally difficult to reconcile with the claim. However, one of the reasons for giving up on the existence of ordinary objects is the Problem of the Many. Solving it will undermine at least part of the motivation for such views. So think of this investigation as conditional. *If* there are ordinary objects (at least, *if* there are things which instantiate ordinary sortal properties), and *if* we have singular thoughts about those things, how is this accomplished? This Appendix shores up the partial answer given in Chapter 4 by showing how the truth of those two antecedents can be squared with the Problem of the Many.²

i The Problem(s) of the Many

Ordinary objects are *made up of* lumps of matter: wood, cells, molecules, etc. The notion of a lump of matter here is compatible with a variety of different views about the fundamental structure of reality.³ Ordinary objects fall under sortal properties which carve microphysical reality in a coarse-grained and imprecise way. For any ordinary object, it seems there are many objects in its vicinity which resemble it very closely. Take Leonard as he sits on his mat. Cats

² I am not wholly unsympathetic to the view that there are no ordinary objects, and that the antecedents do not hold. But exploring singular thought from that angle, though a worthwhile project, raises too many vertiginous issues of its own distinctive kind to be treated in a thesis whose goal is not entirely dedicated to it. My goal here is to simply show one way in which the insights in Chapter 4 can be reconciled with the most immediately relevant issues in metaphysics.

³ Insofar as it need designate something at the fundamental level, the notion may even be reinterpreted as semantically plural talk about collections of simples. The problems below will arise when we ask *which* simples collectively instantiate the sortal property *being a cat*. As Jones (2010: 28–9) observes, this shows that the Problem is not so much one of composition or constitution, but of the instantiation of ordinary sortal properties.

have a certain internal structure and make-up. Say that resemblance in these unifying respects is resemblance in *cat-respects*. Almost coincident with any microphysically precise specification of the lump of matter of which Leonard is made up is a distinct lump of matter which resembles it extremely closely in cat-respects. In virtue of what does this first collection of atoms make up a cat and the second not?

Unger (1980) argues from the following *principle of minute difference* (PMD) to the claim that nothing does (or could) support a divisive answer to this question, and that there are therefore *many* cats on Leonard's mat:

(PMD) If x is a paradigm cat and y differs only minutely in cat-respects from x ,
 y is a cat.

Notice that (PMD) is not a tolerance principle which is objectionable on the grounds that it leads to a Sorites paradox, for it is not claimed that y is a paradigm cat. If this principle holds, Unger (1980) charges, we are systematically wrong in our intuitive judgments about ordinary objects under their ordinary sortals:

(MC) There are many (almost-coincident and macrophysically
 indistinguishable) cats on Leonard's mat.

The use of (PMD) to conclude (MC) assumes that each cat-resembling lump of matter *is* a cat. A natural response is that cats and cat-resembling lumps of matter are different sorts of thing, and so *none* of these could in fact be a cat. The persistence conditions of cats are more mereologically robust, their identity conditions more demanding, and their modal profiles divergent: while Leonard is a cat essentially, no mere lump of matter is. Even if cats are *constituted*

by these lumps of matter, then, no lump *is* a cat. ‘Constitution’ is a philosophical term for a familiar notion. We can now be a little more precise about this ‘making up’ relation by saying:

For all x, y : x *constitutes* y iff x (spatially or materially) coincides with (i.e. fully overlaps) y , x is a lump of matter, and y is not a lump of matter.

Nobody doubts that people and cats are made up of smaller things in some sense. Constitution is the relation which plays this metaphysical ‘making up’ role, and the above principle provides a fairly neutral precisification.⁴ While the way in which (PMD) is used in the argument for (MC) is objectionable, then, there is a harmless truth in the vicinity which does not entail (MC):

If x is a paradigm cat and y differs only minutely in cat-respects from x , *and* y is of *the right kind* (not a mere lump of matter), y is a cat.⁵

Unfortunately, the Problem will not go away so easily. There is a nearby principle which does not assume that cats and the lumps of matter which constitute them are alike in cat-respects:

(PMD*) If x is a paradigm cat, x is constituted by lump of matter l , and some lump of matter l' resembles l very closely in *cat-constituting* respects, then l' constitutes a cat.

⁴ It might help to think of the relation as irreflexive and asymmetric, but nothing substantive turns on this.

⁵ Johnston (1992: 100) endorses this principle.

This principle instead appeals to likeness in cat-*constituting* respects between lumps of matter. In combination with the claim that no two cat-constituting lumps of matter can constitute the *same* cat (since the cat would then plausibly be multiply located, or perhaps not located at all) this argument again leads to (MC).

It seems that whether a lump of matter constitutes a cat does not turn on the sorts of microphysically sensitive differences which distinguish each of the Many, but rather on general, macrophysical differences of the sort which do *not* distinguish each of the Many. So either each of the Many constitute a cat or none do so. Since there is at least one cat—namely, Leonard—(MC) is true.⁶

ii Intentional problems of the many

If (MC) is true, how is Alice to entertain a singular thought about Leonard? To get an analogous problem at the level of intentionality, there must be a sense in which each of the Many is an equally good referential candidate. Of course, one widely endorsed necessary condition on entertaining a singular thought is that one be *acquainted* with the object in question. Whatever one's conception of acquaintance is, it seems that bearing such a relation to any one of the Many will go along with bearing it to *each* of the Many. (Note that even *liberals* who are sceptical of any generalized acquaintance condition on singular thought will agree that in the case of Alice's perceptual-demonstrative judgment, part of what explains her success is that she bears a causal-dispositional relation to Leonard. Having a singular thought about Leonard will still likely bring with it having singular thoughts about each of his Many.)

⁶ There are presentations of other problems very much like this one elsewhere in the literature. For example, Lewis' (1993) setup focuses on the notion of *borderline parts* and the *gradualness* of the properties which unify ordinary objects.

One response is to accept (MC) and conclude that we have far more singular thoughts than we take ourselves to have. After all, there is no obvious ‘psycho-semantic’ feature of Alice’s judgment which could allow it to converge on just one of the Many.⁷ On one version of this view, Alice’s perceptual-demonstrative thought-vehicle expresses many singular contents—one for each of the Many cats.⁸ However, the claim that Alice has thoughts *about each* of the Many on Leonard’s mat when she thinks *He is hungry* is *prima facie* unappealing. A large part of the reason for this is simply that (MC) itself is unappealing. The remainder of this Appendix will proceed on the basis that the ‘Many-thoughts’ line of response is unappealing. A defence of the view(s) offered below against all potential rivals cannot be given for reasons of space. What is articulated, instead, are two neglected routes to solving the *metaphysical* Problem(s), stopping the intentional problems before they even get started.

iii **A metaphysical solution**

Why modify our metaphysics to accommodate so-called singular thoughts about ordinary objects? We have several conflicting theses. (MC), (ST), and RUSSELL’S PRINCIPLE #3 (RP3). Metaphysical theories, like all others, are evaluated on the weighting of costs against benefits. Since respecting intuitions such as that we entertain thoughts which are about Leonard the cat

⁷ Hawthorne and McGonigal (2008) offer an interesting defence of this sort of view. Epistemicists such as Williamson (1994) will insist that Alice’s perceptual-demonstrative judgment is about just one of the Many despite its being *unknowable* which of the Many this is (because such knowledge would violate a ‘psycho-semantic’ safety principle). According to Williamson (1994), even if the relevant psycho-semantic facts at the time of Alice’s judgment were to *underdetermine* which unique cat is the object of her thought, there would be just one object which she thinks about. What is more, this semantic arrangement is (at least nomologically) necessary: at all worlds where Alice has that psycho-semantic profile, her thought is about the same thing. This ‘brute supervenience’ is too much for many, however.

⁸ This sort of view benefits from supplementation with supervaluationist resources. See Dorr and Hawthorne (2014: 330ff) for relevant discussion.

and not his Many have their place on the benefits side of the scale, it is worth exploring alternative routes to solving our tangled semantico-metaphysical problems. More options are needed. It seems that we need more than just the *existence* of trees, cats, and people if we are to succeed in having singular thoughts about them. We need there to be a manageable number of those objects.⁹

As §i began to suggest, the claim that there is only one cat on the mat (despite there being many candidate *cat-constituters*) gets us somewhere: there really is only one cat to have a singular thought about. The nub of Unger's (1980) argument remains, of course. (PMD*) still threatens to saddle us with (MC).

(PMD*) If x is a paradigm cat, x is constituted by lump of matter l , and some lump of matter l' resembles l very closely in *cat-constituting* respects, then l' constitutes a cat.

Even if Leonard *is* the only cat on his mat, we face the question of which candidate cat-constituter he is constituted by. There are two possible answers to this question: (i) just one candidate cat-constituter constitutes Leonard; (ii) each candidate cat-constituter constitutes* Leonard. An answer of type (i) must reconcile itself with the extreme similarity of the many candidate cat-constituters appealed to in (PMD*). An answer of type (ii) must motivate and

⁹ Dickie (2015) has recently defended the view (in response to the Problem of the Many) that singular thoughts about ordinary objects are *about equivalence classes* of the Many “objects which imprecisely fill the imprecise boundaries of a single [cat]” (2015: 33). The reason is that a representational system “can legitimately be said to involve talk about individual members of an equivalence class, rather than just the class itself, only if the predicates it employs are fine-grained enough to distinguish the members of the class” (2015: 30–1). However, this solution seems to abandon the explanandum. We don't have thoughts about ordinary objects, after all. We have thoughts *about equivalence classes*. (Note, too, that an equivalence class with Leonard's Many as its members will have a very different modal profile to Leonard, and the loss of one particle will make for a different class.)

explain a new one-many kind of constitution relation.¹⁰ Jones (2010; 2015) proposes a solution of the second type, §iv a solution of the first. Both represent viable options for those interested in defending the view that Leonard is the only cat on his mat and that Alice's thought is about Leonard and no other in conformity with RP3. In the remainder of this sub-section I briefly elucidate Jones' view and suggest that we may wish to look elsewhere.

According to Jones (2015), for any object, there is a kind to which it belongs which determines its "fundamental nature or essence": "an object *o*'s having a contingent intrinsic, temporal, or constitutional property *F* depends upon, or is grounded in, *o*'s [being of kind] *G*" (2015: 226). In combination with the surrounding, contingent state of the world, an object's kind provides an explanation, of a distinctively metaphysical sort, of that object's life—its path through space and time. Problems of the Many arise because ordinary sortal properties, which provide this sort of explanation for ordinary objects like Leonard, are microphysically coarse-grained. The kind *cat* which determines (in combination with the surrounding, contingent state of the world) for each cat its location and constitution (etc.) at any given time is microphysically coarse-grained.

While this coarse-grainedness is responsible for generating the Problem(s), Jones (2015) suggests that it is also what can provide an explanation as to *why* each of Leonard's Many must constitute him. The question as to which lump of matter constitutes Leonard is one to which only his kind can provide an explanation, and the explanation it does provides is insufficiently precise for anything but macrophysical investigative purposes. Since Leonard's kind does not distinguish between which of his Many he is constituted by, and it is only his kind which can provide that sort of explanation, *each* of Leonard's Many constitute him.

¹⁰ Strictly speaking, the mereological nihilist who thinks of lumps of matter as pluralities of simples will already think of the constitution relation as one-many in structure. However, what is distinctive about the type (ii) response is that the a thing might be constituted by two different pluralities of simples.

This story requires a re-conceptualization of the intuitive notion of constitution introduced in §i. One of the features of the constitution relation is that the constituted inherit various properties from the constituter(s). Leonard has the location and mass he does because that is the mass and location of his constituting lump. But if Leonard has *many* constituters, where is he, and what is his mass?

Not all properties are inheritable. For example, Leonard is not identical to the lump of matter which constitutes him, even though that lump is identical to itself. And many of Leonard's properties are non-inherited. Cats are subjects of experience, intention, and action, and possessors of moral status. Lumps of matter are, intuitively, not. Restricting ourselves to what we might call, following Jones (2015: 244), *directly* inherited properties (properties, such as mass and shape, which a thing must possess if its constituting lump does), how are we to determine Leonard's mass and shape? According to Jones (2015), directly inherited properties accord with the following principle:

- (RI) For all directly inherited properties, F , Leonard is F relative to l iff
 l constitutes* Leonard and l is F .¹¹

Leonard has no mass, shape, or location *simpliciter*. Each of these properties Leonard has only *relative to a constituter*. And he has Many constituters, each of very slightly different mass, shape, and location.

Jones' (2010; 2015) treatment offers one path to solving the Problem which underpins the difficulties for RP3. Of course, it involves denying that mass and shape are intrinsic properties in any familiar sense. Ordinary objects only have mass and shape properties relative to their constituters. There is also a worry that this theoretical notion of constitution abandons

¹¹ Jones (2010: 255).

core features of the ordinary notion of a lump ‘making up’ *o*, without which the appeal to constitution in metaphysics loses some of its intuitive plausibility. We talk of *the* rubber which makes up an eraser, for example.

iv **A better metaphysical solution?**

This section presents a solution of type (i): just one candidate cat-constituter constitutes Leonard. On this view, while (it is metaphysically determinate that) just one candidate cat-constituter constitutes the unique cat, it is *metaphysically indeterminate* which one does.¹²

This view will be at least *as* compatible with the explanation and diagnosis of the Problem(s) offered by Jones (2015). In combination with the surrounding, contingent state of the world, an object’s kind provides an explanation, of a distinctively metaphysical sort, of that object’s life. Ordinary objects possess a particular kind of internal structure and causal profile. They move through space and time in an integrated and uniform way, surviving non-catastrophic changes. Lumps of matter do not. Problem(s) of the Many arise because ordinary sortal properties, which provide this sort of explanation for ordinary objects like Leonard, are microphysically coarse-grained, while the criteria for individuating their constituting lumps of matter are microphysically fine-grained. While this coarse-grainedness is responsible for generating the Problem(s), it is also suggests a solution. Since which lump of matter constitutes Leonard is something only his kind can explain, it will be metaphysically indeterminate which

¹² This sort of view has ancestors in Johnston (1992) and Lowe (1995). (Williams (2006) also suggests, in passing, “...it looks like the relation of constitution supposedly holding between the [...] candidates and the [object] will be a vague one” (415, n. 9).) Neither writer gave the view an especially explicit statement, however. “The problem of the many simply shows that constitution is a vague relation” (Johnston 1992: 100–1). What could it be for the constitution *relation* to be vague? Since their views have complexities, I forgo exegesis and comparison here.

of the Many constitute him. The view I outline, then, is at least as theoretically unified a package as Jones' (2015) solution.

An immediate objection facing this view is why it should be that just *one* of the candidate cat-constituters gets to constitute a cat. This is a problem even after we tell the story above. Even if it is metaphysically indeterminate (henceforth *m-indeterminate*) which candidate cat-constituter constitutes a cat, why think that *just one* does so, as opposed to all of them?¹³

In response to this worry, kinds such as *cat* and *person* satisfy the following exclusion schema:

(EX) For all ordinary kinds *k* and all objects *x*, *y*: if *x* and *y* massively overlap,
neither *x* nor *y* is of kind *k*.

(EX) entails that at most one of the Many candidate cat-constituters constitutes a cat. If more than one candidate were to constitute a cat, the cats would massively overlap. So this principle may be used to support the claim that there is at most one *cat* on the mat and that there must be one unique cat-constituter. The diagnosis above then explains why it should be *m-indeterminate* which candidate cat-constituter that is.

Take one of Leonard's Many—call it Lenny. What does it mean for it to be *metaphysically indeterminate* whether Lenny constitutes Leonard? Barnes and Williams (2011) provide a framework within which to theorise about, and gain an operational understanding of, *m-indeterminacy*.

First, begin with the generic, everyday, theory-neutral concept of *indefiniteness*. This is the generic phenomenon associated with the hedged responses and attitudes distinctive of reflecting on cases of baldness etc. We can say: "it is metaphysically indeterminate whether *p* iff (i) it is

¹³ Jones (2010: 193) levels this sort of objection.

indefinite whether p , and (ii) the source of this indefiniteness is the non-representational world” (Barnes and Williams 2011: 108). This gives the flavour of the proposal, and a compelling response to someone who insists they do not understand indeterminacy that is not reducible to semantic indecision or in-principle unknowability.

The notion of m-(in)determinacy used below is a primitive notion, and where there is m-indeterminacy, this is an *irreducible* and *fundamental* feature of reality. If it is m-indeterminate whether p , the world exhibits a fundamental unsettledness whether p . This should not be thought of as the world’s being determinately ‘fuzzy’; as though Leonard were constituted by some *vague* lump of matter. Rather, when it is m-indeterminate whether p , one of two exclusive and exhaustive possibilities is actualized: one at which p or one at which not- p . On Barnes and Williams’ (2011) presentation, we can put this by taking Ersatz possible worlds as ‘ontic’ precisifications. A world is *precisificationally possible* when “it does not determinately misrepresent reality” (115). If it is m-indeterminate whether p , there are two representations of reality, neither of which is determinately correct, but neither of which is determinately incorrect: the world at which p (with all else held fixed) and the world at which not- p (with all else held fixed).

Once we have precisifications, we can superevaluate in the following way. Truth is truth *at* the unique actualized world. Since for any instance of m-indeterminacy either p or not- p is the case, despite its being m-indeterminate which, the law of excluded middle and bivalence fall out immediately (2011: 116). As we saw in Chapter 2, when it comes to evaluating a sentence on an occasion of use for truth *simpliciter* we must evaluate it for truth at the world of the context of use. On the Barnes and Williams (2011) framework for m-indeterminacy, the fact that which world this is is m-indeterminate has the result that it is indeterminate whether ‘Leonard is

constituted by Lenny' is true or false.¹⁴ It is determinately true or false. However, because it is indeterminate how things are, it is indeterminate which.

This framework clarifies what it means to say that it is m-indeterminate which of the Many Leonard is constituted by. It means that reality is irreducibly unsettled with respect to which candidate cat-constituting lump of matter constitutes Leonard. It is unsettled as far as his microphysical properties goes. But Leonard *is* constituted by just one microphysically precise lump of matter. Reality is such that either Lenny₁ or Lenny₂... constitutes Leonard. It is just indeterminate which. This is because the kind *cat* which determines (in combination with the surrounding, contingent state of the world) many of Leonard's features, including facts about his constitution, is microphysically coarse-grained, yet the criteria for individuating cat-constituting lumps of matter are microphysically fine-grained.

One general worry facing this solution, for our purposes, is that it does not apply to objects under kinds which do not conform to (EX). This suggests that we do not in general satisfy RP3 with respect to, for example, clouds. It is, of course, possible to insist that clouds do satisfy (EX), and so that there *is* one cloud of metaphysically indeterminate mass, size, and shape. I am inclined to think this is unmotivated, however. In any case, it is at least clear that *lumps of matter* do not satisfy (EX). Does this mean, then, that we cannot have singular thoughts about lumps of matter?

How much of a cost would this be? I doubt that it would be too disappointing. Remember, any given lump of matter is almost exactly co-located with some other. Lumps of matter can only be discriminated from one another on an extremely fine-grained, microphysical scale. They come into and go out of existence in the blink of an eye. They do not move through

¹⁴ Or, as Barnes and Williams (2011) put it, truth *simpliciter* is truth on the intended model. " φ is True iff φ is true on m for m the intended model. [...] Either way, ' Fa ' is either true or false. But given the indeterminacy about which model is intended, it will be indeterminate whether it is true, and indeterminate whether it is false" (126).

space and time in an integrated and uniform way. And they do not persist through any changes whatsoever. If *lumps of matter*, then, are not objects of acquaintance, will they be sorely missed?

The principal aim of this thesis has been to argue that we can have singular thoughts about ordinary objects and that this is compatible with reinstating core Russellian themes—not least, a motivated, precise, and plausible precisification of RUSSELL'S PRINCIPLE. If we cannot have thoughts about lumps of matter, we can rest content that we have escaped the Russellian prison which denied us thoughts about cats and one another.

Bibliography

Aristotle. *Metaphysics*. Translated by H. Tredennick, in *Aristotle in 23 Volumes, vols. 17, 18*. London: William Heinemann Ltd., 1993. Reprinted, Cambridge, MA: Harvard University Press, 1989.

Austin, J. L. 1962: *Sense and Sensibilia*, G. J. Warnock (ed.). Oxford: Oxford University Press.

Anand, P. and Nevins, A. 2004: 'Shifty operators in changing contexts', in R. Young (ed.), *Proceedings of SALT XIV*. Cornell University, NY: CLC Publications.

Bach, K. 1994: 'Conversational implicature', *Mind & Language* 9(2), 124–62.

Bach, K. 1997: 'Do belief reports report beliefs?' *Pacific Philosophical Quarterly* 78(3), 215–241.

Bach, K. 2006: 'What does it take to refer?' in E. Lepore & B. Smith (eds.), *The Oxford Handbook of Philosophy of Language*. Oxford: Oxford University Press.

Bach, K. 2010: 'Getting a thing into a thought', in R. Jeshion (ed.), *New Essays on Singular Thought*. Oxford: Oxford University Press.

Bach, K. 2014: 'Consulting *The Reference Book*', *Mind & Language* 29(4), 455–74.

Bar-Hillel, Y. 1954/70: 'Indexical expressions', *Mind* 63(251), 359–379. Reprinted in his *Aspects of Language*. Jerusalem, The Magnes Press: 1970.

Barnes, E. and Williams, J. R. G. 2011: 'A theory of metaphysical indeterminacy', in K. Bennett & D. W. Zimmerman (eds.), *Oxford Studies in Metaphysics, vol. 6*. Oxford: Oxford University Press.

Bauder, R. A. 2016: *Naming Particulars: A Thirteenth-Century Debate on Whether Individuals Have Proper Names*, PhD thesis submitted to the University of Toronto.

Beaney, M. 1997: *The Frege Reader*. Oxford: Blackwell.

- Belnap, N. D., Perloff, M. and Xu, M. 2001: *Facing the Future: Agents and Choices in Our Indeterminist World*. Oxford: Oxford University Press.
- Blackburn, P. 2006: 'Arthur Prior and hybrid logic', *Synthese* 150, 329–372.
- Boer, S. E. and Lycan, W. G. 1986: *Knowing Who*. Cambridge, MA: MIT Press.
- Boghossian, P. 1994: 'The transparency of mental content', *Philosophical Perspectives*, 8, 33–50.
- Borg, E. 2004: *Minimal Semantics*. Oxford: Oxford University Press.
- Borg, E. 2009: 'Must a semantic minimalist be a semantic internalist?', *Aristotelian Society Supplementary Volume* 83(1), 31–51.
- Borges, J. L. 1962: 'Funes the Memorious', in A. Kerrigan (edited and translated), *Ficciones*. New York, NY: Grove Press, pp. 107–15.
- Bostock, D. 1988: *Plato's Theaetetus*. Oxford: Oxford University Press.
- Bradley, F. H. 1883: *The Principles of Logic*. London: Kegan Paul.
- Bradley, F. H. 1893: *Appearance and Reality: A Metaphysical Essay*, London: S. Sonnenschein.
- Bradley, F. H. 1914: *Essays on Truth and Reality*. Oxford: Clarendon Press.
- Bradley, F. H. 1930: *Aphorisms*. Oxford: Clarendon Press.
- Braun, D. 1996: 'Demonstratives and their linguistic meanings', *Noûs* 30(2), 145–173.
- Breckenridge, W. and Magidor, O. 2012: 'Arbitrary reference', *Philosophical Studies* 158(3), 377–400.
- Burge, T. 1973: 'Reference and proper names', *Journal of Philosophy*, 70(14), 425–439.
- Burge, T. 1977: 'Belief *de re*', *Journal of Philosophy*, 74(6), 338–362.
- Burge, T. 1979: 'Sinning against Frege', *Philosophical Review*, 88(3), 398–432.

Burge, T. 2007: 'Postscript to 'Belief *de re*', in his *Foundations of Mind vol. 2*. Oxford: Clarendon Press.

Burge, T. 2010: *Origins of Objectivity*. Oxford: Oxford University Press.

Campbell, J. 1987: 'Is sense transparent?', *Proceedings of the Aristotelian Society* 88, 273–292.

Campbell, J. 1994: *Past, Space, and Self*. Cambridge, MA: MIT Press.

Cappelen, H. and Hawthorne, J. 2009: *Relativism and Monadic Truth*. Oxford: Oxford University Press.

Cappelen, H. and Lepore, E. 2005: *Insensitive Semantics: A Defense of Semantic Minimalism and Speech Act Pluralism*. London: Blackwell.

Case, T. 1888: *Physical Realism Being an Analytical Philosophy from the Physical Objects of Science to the Physical Data of Sense*. London: Longmans, Green, and Co.

Chalmers, D. J. 1996: *The Conscious Mind: In Search of a Fundamental Theory*. Oxford: Oxford University Press.

Chalmers, D. J. 2010: 'The Epistemology of Phenomenal Belief', in his *The Character of Consciousness*. Oxford: Oxford University Press.

Chalmers, D. J. 2011: 'Propositions and attitude ascriptions: a Fregean account', *Notas* 45(4), 595–639.

Chastain, C. 1975: 'Reference and Context', in K. Gunderson (ed.), *Language, Mind, and Knowledge*. Minneapolis: University of Minnesota Press.

Cook Wilson, J. 1926: *Statement and Inference with other Philosophical Papers*. Oxford: Clarendon Press.

Cresswell, M. J. 1972: 'The world is everything that is the case', *Australasian Journal of Philosophy* 50(1), 1–13.

Crimmins, M. 1992: *Talk About Beliefs*. Cambridge, MA: MIT Press.

- Crimmins, M. 1995: 'Notional specificity'. *Mind & Language*, 10(4), 464–477.
- Crimmins, M., and Perry, J. 1989: 'The prince and the phone booth: reporting puzzling beliefs', *Journal of Philosophy*, 86(12), 685–711.
- Cumming, S. 2007: *Proper nouns*. PhD thesis submitted to Rutgers: The State University of New Jersey.
- Cumming, S. 2008: 'Variabilism', *Philosophical Review* 117(4), 525–554.
- Cumming, S. 2013: 'From coordination to content', *Philosopher's Imprint*, 13(4), 1–16.
- Davies, M. 1981: *Meaning, Quantification, Necessity: Themes in Philosophical Logic*. London: Routledge.
- Davies, M. and Humberstone, L. 1980: 'Two notions of necessity', *Philosophical Studies* 38(1), 1–31.
- Dennett, D. 1978: *Brainstorms*. Cambridge, MA: MIT Press.
- Dennett, D. 1987: *The Intentional Stance*. Cambridge, MA: MIT Press.
- Dever, J. 1998: *Variables*, PhD thesis submitted to the University of California, Berkeley.
- Devitt, M. 1974: 'Singular terms', *Journal of Philosophy* 71(7), 183–205.
- Dickie, I. 2010: 'We are acquainted with ordinary things', in Jeshion, R. (ed.), *New Essays on Singular Thought*. Oxford: Oxford University Press.
- Dickie, I. 2015: *Fixing Reference*. Oxford: Oxford University Press.
- Dickie, I. forthcoming: 'Cognitive focus', in Genone, J., Goodman, R., and Kroll, N. (eds.), *Mental Files and Singular Thought*. Oxford: Oxford University Press.
- Donnellan, K. S. 1966: 'Reference and definite descriptions', *Philosophical Review*, 75(3), 281–304.

Dorr, C. 2014: 'Transparency and the context-sensitivity of attitude reports', in García-Carpintero, M. and Martí, G. (eds.), *Empty Representations: Reference and Non-Existence*. Oxford: Oxford University Press.

Dorr, C. and Hawthorne, J. 2014: 'Semantic plasticity and speech reports', *Philosophical Review*, 123(3), 281–338.

Dretske, F. 1981: *Knowledge and the Flow of Information*. Cambridge, MA: MIT Press.

Dummett, M. 1973: *Frege: Philosophy of Language*. Cambridge, MA: Harvard University Press.

Dummett, M. 1977: *Elements of Intuitionism*. Oxford: Clarendon Press.

Dummett, M. 1978: *Truth and Other Enigmas*. London: Duckworth.

Dutant, J. ms: 'Three Lewisian semantics for 'know''. Draft as of 15th June 2013. Available at: http://julien.dutant.free.fr/papers/JDutant_ThreeLewiseanSemanticsforKnow_09_web.pdf

Egan, A. 2009: 'Billboards, bombs, and shotgun weddings', *Synthese* 166(2), 251–79.

Eilan, N. 1988: *Self-Consciousness and Experience*, D.Phil thesis submitted to the University of Oxford.

Elbourne, P. 2002: *Situations and Individuals*, PhD thesis submitted to the Massachusetts Institute of Technology.

Elbourne, P. 2013: *Definite Descriptions*. Oxford: Oxford University Press.

Elbourne, P. 2018: 'Definite descriptions and negative existential quantifiers', *Philosophical Studies* 175(7), 1597–1612.

Evans, G. 1973: 'The causal theory of names', *Aristotelian Society Supplementary Volume* 47(1), 187–208.

Evans, G. 1979: 'Reference and contingency', *The Monist* 62(2), 178–213.

Evans, G. 1982: *The Varieties of Reference*. Oxford: Oxford University Press.

Ferrier, J. F. 1854: *Institutes of Metaphysic: The Theory of Knowing and Being*. Edinburgh: Blackwood and Sons.

Fichte, J. G. 1794: *Ueber den Begriff der Wissenschaftslehre*. Jena und Leipzig: Christian Ernst Gabler.

Fine, K. 2007: *Semantic Relationism*. Oxford: Blackwell.

von Fintel, K., and Heim, I. 2011: *Intensional semantics*. Manuscript, MIT. <http://web.mit.edu/fintel/fintel-heim-intensional.pdf>. Accessed June 2016.

Fodor, J. A. 1990: 'Substitution arguments and the individuation of belief'. In his *A Theory of Content and Other Essays*. Cambridge, MA: MIT Press.

Fodor J. A. 2008: *LOT 2: The Language of Thought Revisited*. Oxford: Oxford University Press.

Fodor, J. D. 1970: *The Linguistic Description of Opaque Contexts*. PhD thesis submitted to the Massachusetts Institute of Technology.

Forbes, G. 1987: 'A dichotomy sustained', *Philosophical Studies* 51, 187–211.

Frege, G. 1893/2013: *Basic Laws of Arithmetic*, P. A. Ebert (ed.). Oxford: Oxford University Press.

Frege, G. 1923/63: 'Compound thoughts', *Mind* 72(285), 1–17.

Fritz, P., Hawthorne, J. and Yli-Vakkuri, J. (ms.) 'Operator arguments revisited'.

Geach, P. 1957: *Mental Acts*. London: Routledge.

Gibson, J. J. 1966: *The Senses Considered as Perceptual Systems*. London: Praeger.

Glanzberg, M. 2011: 'More on operators and tense', *Analysis* 71, 112–123.

Glick, E. forthcoming: 'What is a singular proposition?', *Mind*.

Goldman, A. 1976: 'Discrimination and perceptual knowledge', *Journal of Philosophy* 73, 771–791.

- Goldman, A. 1979: 'What is justified belief?', in G. Pappas (ed.), *Justification and Knowledge*. Boston: D. Reidel.
- Goodman, R. 2013: *Singular Thought: Making the Most of the Notion*. PhD thesis submitted to the University of Chicago.
- Goodman, R. 2018: 'Do acquaintance theorists have an attitude problem?', *Australasian Journal of Philosophy* 96(1), 67–86.
- Goodsell, T. 2013. *Mental Files*, D.Phil thesis submitted to the University of Oxford.
- Grote, J. 1865/1900: *Exploratio Philosophica: Rough Notes on Modern Intellectual Science*. Cambridge: Deighton, Bell, and Co.
- Harman, G. 1977: 'How to use propositions', *American Philosophical Quarterly* 14(2), 173–6.
- Hawthorne, J. and McGonigal, A. 2008: 'The many minds account of vagueness', *Philosophical Studies*, 138(3), 435–440.
- Hawthorne, J. and Manley, D. 2012: *The Reference Book*. Oxford: Oxford University Press.
- Hegel, G. W. F. 1807/1977: *Phenomenology of Spirit*, translated by A.V. Miller. Oxford: Oxford University Press, 1977.
- Heim, I. 1991: 'Artikel und Definitheit', in A. von Stechow and D. Wunderlich (eds.), *Semantik. Ein internationales Handbuch der zeitgenössischen Forschung*. Berlin: Walter de Gruyter.
- Heim, I. and Kratzer, A. 1998: *Semantics in Generative Grammar*. Oxford: Blackwell.
- Hempel, C. G. 1945: 'Studies in the logic of confirmation', *Mind* 54(213): 1–26.
- Hintikka, J. 1962: *Knowledge and Belief: An Introduction to the Logic of the Two Notions*. Ithaca, NY: Cornell University Press.
- Holliday, W. 2015: 'Epistemic closure and epistemic logic I: relevant alternatives and subjunctivism', *Journal of Philosophical Logic* 44: 1–62.
- Holton, R. 2003: 'David Lewis's philosophy of language', *Mind & Language* 18(3): 286–95.

Holton, R. 2015: 'Primitive self-ascription: Lewis on the *de se*', in B. Loewer and J. Schaffer (eds.), *The Blackwell Companion to David Lewis*. Oxford: Blackwell.

Hylton, P. 2015: 'Problems of Philosophy as a stage in the evolution of Russell's views on knowledge', in Wishon, D. and Linsky, B. (eds.), *Acquaintance, Knowledge, and Logic: New Essays on Bertrand Russell's The Problems of Philosophy*. Stanford: CSLI Publications.

James, W. 1890: *Principles of Psychology*. New York: Holt.

Jeshion, R. 2010: 'Singular thought: acquaintance, semantic instrumentalism, and cognitivism', in R. Jeshion (ed.), *New Essays on Singular Thought*. Oxford: Oxford University Press.

Jeshion, R. 2014: 'Two dogmas of Russellianism', in M. Garcia-Carpintero & G. Martí (eds.), *Empty Representations: Reference and Non-Existence*. Oxford: Oxford University Press.

Johnston, M. 1992: 'Constitution is not identity', *Mind* 101(401), 89–105.

Jones, N. 2010: *Too Many Cats: The Problem of the Many and the Metaphysics of Vagueness*. PhD thesis submitted to Birkbeck College, University of London.

Jones, N. 2015: 'Multiple constitution', in Bennett, K. and Zimmerman, D.W. (eds.), *Oxford Studies in Metaphysics vol. 9*. Oxford: Oxford University Press.

Kamp, H. 1971: 'Formal properties of 'now'', *Theoria*, 37(3), 227–273.

Kaplan, D. 1969: 'Quantifying in', in D. Davidson and J. Hintikka (eds.), *Words and Objections*. Dordrecht: Reidel.

Kaplan, D. 1989a. 'Demonstratives', in *Themes From Kaplan*, J. Almog, J. Perry, and H. Wettstein (eds.). Oxford: Oxford University Press.

Kaplan, D. 1989b. 'Afterthoughts', in *Themes From Kaplan*, J. Almog, J. Perry, and H. Wettstein (eds.). Oxford: Oxford University Press.

Karttunen, L. and Peters, S. 1979: 'Conventional implicature', in C. K. Oh and D. Dinneen (eds.), *Syntax and Semantics 11: Presupposition*. New York: Academic Press.

King, P. 2015: 'Thinking about things: singular thought in the middle ages', in G Klima (ed.), *Intentionality, Cognition, and Mental Representation in Medieval Philosophy*. New York: Fordham University Press.

King, J. C and Stanley, J. 2007: 'Semantics, pragmatics, and the role of semantic content', in *Language in Context*. Oxford: Clarendon Press.

Kratzer, A. 1977: 'What 'must' and 'can' must and can mean', *Linguistics and Philosophy*, 1(3), 337–355.

Kripke, S. 1979: 'A puzzle about belief', in A. Margalit (ed.), *Meaning and Use*. Dordrecht: Reidel.

Kripke, S. 1980: *Naming and Necessity*. Cambridge, MA: Harvard University Press.

Larson, R. and Segal, G. 1995: *Knowledge of Meaning: An Introduction to Semantic Theory*. Cambridge, MA: MIT Press.

Lewis, D. 1970: 'General semantics', *Synthese*, 22(1–2), 18–67.

Lewis, D. 1974: 'Radical interpretation', *Synthese* 27: 331–344.

Lewis, D. 1979a. 'Attitudes *de dicto* and *de se*', *Philosophical Review* 88: 513–543.

Lewis, D. 1979b. 'Scorekeeping in a language game', *Journal of Philosophical Logic* 8: 339–359.

Lewis, D. 1980. 'Index, context, and content', in *Philosophy and Grammar*, S. Kanger and S. Öhman (eds.). Dordrecht: Reidel.

Lewis, D. 1983a. 'Individuation by acquaintance and by stipulation', *Philosophical Review* 92: 3–32.

Lewis, D. 1983b. 'Postscripts to 'General semantics'', in his *Philosophical Papers: Volume 1*. Oxford: Oxford University Press.

Lewis, D. 1993: 'Many, but almost one', in K. Campbell, J. Bacon, and L. Reinhardt (eds.), *Ontology, Causality, and Mind: Essays on the Philosophy of D. M. Armstrong*. Cambridge: Cambridge University Press.

- Lewis, D. 1996: 'Elusive knowledge'. *Australian Journal of Philosophy*, 74(4), 549–567.
- Linsky, L. 1966. 'Substitutivity and descriptions'. *Journal of Philosophy*, 63(21): 673–683.
- Lowe, E. J. 1995: 'The problem of the many and the vagueness of constitution', *Analysis*, 55(3), 179–182.
- MacFarlane, J. 2014: *Assessment Sensitivity: Relative Truth and its Applications*. Oxford: Oxford University Press.
- Magidor, O. 2015: 'The myth of the *de se*', *Philosophical Perspectives* 29: 249–283.
- Matushansky, O. 2008: 'On the linguistic complexity of proper names', *Linguistics and Philosophy*, 31(5), 573–627.
- McDowell, J. 2009: *The Engaged Intellect*. Cambridge, MA: Harvard University Press.
- Michael, M. 2010: 'Belief *de re*, knowing who, and singular thought', *The Journal of Philosophy* 107(6), 293–310.
- Millikan, R. 1997: 'Images of identity', *Mind* 106, 499–519.
- Millikan, R. 2000: *On Clear and Confused Ideas: An Essay about Substance Concepts*. Cambridge: Cambridge University Press.
- Montague, M. 2013: 'The access problem', in U. Kriegel (ed.), *Phenomenal Intentionality*. Oxford: Oxford University Press.
- Moore, G. E. 1899: 'The nature of judgment', *Mind* 8, 176–93.
- Moore, G. E. 1903: 'The refutation of idealism', *Mind* 12, 433–53.
- Neale, S. 1990: *Descriptions*. Cambridge, MA: MIT Press.
- Neander, K. 2006: 'Naturalistic theories of reference', in M. Devitt & R. Hanley (eds.), *The Blackwell Guide to the Philosophy of Language*, vol. 1. Oxford: Blackwell.

- Neander, K. 2017: *A Mark of the Mental: in Defense of Informational Teleosemantics*. Cambridge, MA: MIT Press.
- Neta, R. and Rohrbaugh, G. 2004: 'Luminosity and the safety of knowledge', *Pacific Philosophical Quarterly* 85(4), 396–406.
- Ninan, D. 2008: *Imagination, Content, and the Self*. PhD thesis submitted to the Massachusetts Institute of Technology.
- Ninan, D. 2010: 'Semantics and the objects of assertion', *Linguistics and Philosophy* 33(5), 355–380.
- Ninan, D. 2013: 'Self-location and other-location', *Philosophy and Phenomenological Research* 87(2), 301–331.
- Nozick, R. 1981: *Philosophical Explanations*. Cambridge, MA: Harvard University Press.
- Openshaw, J. 2018a: 'Self-ascription and the *de se*', *Synthese*. DOI: 10.1007/s11229-018-1781-0.
- Openshaw, J. 2018b: 'Singular thoughts and *de re* attitude reports', *Mind & Language* 33(4), 415–37.
- Passmore, J. 1957: *A Hundred Years of Philosophy*. London: Duckworth and Co.
- Peacocke, C. 1983: *Sense and Content*. Oxford: Oxford University Press.
- Peacocke, C. 1992: *A Study of Concepts*. Cambridge, MA: MIT Press.
- Peacocke, C. 2014: *The Mirror of the World: Subjects, Consciousness, and Self-Consciousness*. Oxford: Oxford University Press.
- Perry, J. 1986: 'Thought without representation', *Proceedings of the Aristotelian Society, Supplementary Volumes* 60, 137–166.
- Perry, J. 1997: 'Indexicals and Demonstratives', in B. Hale and C. Wright (eds.), *A Companion to Philosophy of Language*. Oxford: Blackwell.
- Perry, J. 2001a: *Knowledge, Possibility, and Consciousness*. Cambridge, MA: MIT Press.

- Perry, J. 2001b: *Reference and Reflexivity*. Stanford: CSLI Publications.
- Pietroski, P. 2007: 'Systematicity via monadicity', *Croatian Journal of Philosophy* 7(3), 343–374.
- Predelli, S. 2005: *Contexts: Meaning, Truth, and the Use of Language*. Oxford: Clarendon Press.
- Prior, A. 1968a: 'Tense logic and the logic of earlier and later', in P. Hasle, P. Øhrstrøm, T. Braüner, and J. Copeland (eds.), *Papers on Time and Tense*. Oxford: Oxford University Press.
- Prior, A. 1968b: 'Quasi-propositions and quasi-individuals', in P. Hasle, P. Øhrstrøm, T. Braüner, and J. Copeland (eds.), *Papers on Time and Tense*. Oxford: Oxford University Press.
- Prior, A. 1968c: 'Egocentric logic', in P. Hasle, P. Øhrstrøm, T. Braüner, and J. Copeland (eds.), *Papers on Time and Tense*. Oxford: Oxford University Press.
- Proops, I. 2011: 'Russell on substitutivity and the abandonment of propositions', *Philosophical Review* 120(2): 151–205.
- Pylyshyn, Z. 1989: 'The role of location indexes in spatial perception: a sketch of the FINST spatial-index model', *Cognition* 32(1): 65–97.
- Quine, W. V. O. 1956: 'Quantifiers and propositional attitudes', *Journal of Philosophy* 53(5), 177–87.
- Quine, W. V. O. 1968: 'Propositional objects', *Crítica: Revista Hispanoamericana de Filosofía* 2, 3–29.
- Quine, W. V. O. 1976: 'Worlds away', *Journal of Philosophy* 73, 859–65.
- Quine, W. V. O. 1977: 'Intensions revisited', *Midwest Studies in Philosophy* 2(1), 5–11.
- Rabern, B. 2012: 'Against the identification of assertoric content with compositional value', *Synthese* 189, 75–96.
- Récanati, F. 1993: *Direct Reference: from Language to Thought*. Oxford: Blackwell.
- Récanati, F. 2007: *Perspectival Thought: A Plea for (Moderate) Relativism*. Oxford: Oxford University Press.

- Récanati, F. 2010: 'Singular thought: in defence of acquaintance', in R. Jeshion (ed.), *New Essays on Singular Thought*. Oxford: Oxford University Press.
- Récanati, F. 2012: *Mental Files*. Oxford: Oxford University Press.
- Récanati, F. 2016: *Mental Files in Flux*. Oxford: Oxford University Press.
- Richard, M. 1990: *Propositional Attitudes: An Essay on Thoughts and How We Ascribe Them*. Cambridge: Cambridge University Press.
- Richard, M. 2013: *Context and the Attitudes: Meaning in Context, vol. 1*. Oxford: Oxford University Press.
- Rothschild, D. 2007: 'Presuppositions and scope', *Journal of Philosophy* 104(2), 71–106.
- Royce, J. 1885: *The Religious Aspect of Philosophy: A Critique of the Bases of Conduct and of Faith*. Boston: Houghton Mifflin.
- Russell, B. 1903/2010: *The Principles of Mathematics*. London: Routledge.
- Russell, B. 1904/80: 'Russell to Frege 12.12.1904', in G. Gabriel *et al.* (eds.), *Gottlob Frege: Philosophical and Mathematical Correspondence*. Oxford: Blackwell.
- Russell, B. 1904/73: 'Meinong's Theory of Complexes and Assumptions', reprinted in his *Essays in Analysis*. London: Allen & Unwin.
- Russell, B. 1905: 'On denoting'. *Mind* 14(56), 479–93.
- Russell, B. 1910/51: 'Knowledge by acquaintance and knowledge by description', *Proceedings of the Aristotelian Society* 11(5): 108–28. Reprinted in his *Mysticism and Logic*. Totowa, New Jersey: Barnes & Noble Books, 1951.
- Russell, B. 1910/66: 'On the nature of truth and falsehood', in his *Philosophical Essays*. Cambridge: Cambridge University Press.
- Russell, B. 1911/92: 'Analytic realism', in his *Collected Papers vol. 6: Logical and Philosophical Papers 1909–13*. London: Routledge.

- Russell, B. 1912: *The Problems of Philosophy*. London: Oxford University Press.
- Russell, B. 1913/84: 'Theory of knowledge: the 1913 manuscript', in E. R. Eames and K. Blackwell (eds.), *The Collected Papers of Bertrand Russell vol. 7*. London: Allen & Unwin.
- Russell, B. 1914/93: *Our Knowledge of the External World*. London: Routledge.
- Russell, B. 1914/51: 'The relation of sense-data to physics', in his *Mysticism and Logic*. Totowa, New Jersey: Barnes & Noble Books.
- Russell, B. 1914/86: 'The relation of sense-data to physics', in his *Collected Papers vol. 8: The Philosophy of Logical Atomism and Other Essays, 1914–19*. London: Allen & Unwin.
- Russell, B. 1918/2009: *The Philosophy of Logical Atomism*. London: Routledge.
- Russell, B. 1919: *Introduction to Mathematical Philosophy*. London: Allen & Unwin.
- Russell, B. 1959: *My Philosophical Development*. London: George Allen and Unwin.
- Russell, B. 1961/2009: 'My mental development', in *Basic Writings of Bertrand Russell*. London: Routledge.
- Russell, B. 1994: 'Points about denoting', in A. Urquhart (ed.), *The Collected Papers of Bertrand Russell, vol. 4: Foundations of Logic 1903–05*. London: Routledge.
- Russell, B. and Whitehead, A. N. 1910/27: *Principia Mathematica*. Cambridge: Cambridge University Press. Second edition printed in 1927.
- Ryle, G. 1933: 'About', *Analysis* 1(1), 10–12. Reprinted in his *Collected Papers vol. 2*. London: Routledge.
- Ryle, G. 1990: 'Logical atomism in Plato's Theaetetus', *Phronesis*, 35(1), 21–46.
- Sainsbury, M. 2002: *Departing from Frege*. London: Routledge.
- Sainsbury, M. 2005: *Reference without Referents*. Oxford: Clarendon Press.
- Salmon, N. 1986: *Frege's Puzzle*. Cambridge, MA: MIT Press.

- Salmon, N. 2004: 'The good, the bad, and the ugly', in M. Reimer & A. Bezuidenhout (eds.), *Descriptions and Beyond*. Oxford: Oxford University Press.
- Salow, B. 'Lewis on iterated knowledge', *Philosophical Studies* 173(6): 1571–1590.
- Santorio, P. 2012: 'Reference and monstrosity', *Philosophical Review* 121(3): 359–406.
- Scharp, K. 2013: *Replacing Truth*. Oxford: Oxford University Press.
- Schelling, F. W. J. 1800: *System des transcendentalen Idealismus*. Tübingen: Cotta.
- Schiffer, S. 1978: 'The basis of reference', *Erkenntnis* 13(1), 171–206.
- Schiffer, S. 1988: 'Review of *The Varieties of Reference*', *Journal of Philosophy* 85(1): 33–42.
- Schiffer, S. 2003: *The Things We Mean*. Oxford: Oxford University Press.
- Schlenker, P. 2003: 'A plea for monsters', *Linguistics & Philosophy* 26, 29–120.
- Schlenker, P. 2008: 'Be articulate: a pragmatic theory of presupposition projection', *Theoretical Linguistics* 34(3), 157–212.
- Schopenhauer, A. 1818/44: *The World as Will and Idea vol. I, book 2* (second edition). Leipzig: F. A. Brockhaus.
- Schroeter, L. 2007: 'The illusion of transparency', *Australasian Journal of Philosophy* 85, 597–618.
- Schulte, P. 2012: 'How frogs see the world: putting Millikan's teleosemantics to the test', *Philosophia* 40(3): 483–96.
- Sidelle, A. 1991: 'The answering machine paradox', *Canadian Journal of Philosophy* 81(4), 525–539.
- Soames, S. 1995: 'Beyond singular propositions?', *Canadian Journal of Philosophy* 25(4), 515–549.
- Soames, S. 2003: *Philosophical Analysis in the Twentieth Century, Vol. 1*. Princeton, NJ: Princeton University Press.

- Soames, S. 2007: 'Actually', *Aristotelian Society Supplementary Volume* 81(1), 251–277.
- Sosa, E. 1970: 'Propositional attitudes *de dicto* and *de re*', *Journal of Philosophy* 67(21), 883–896.
- Sosa, E. 1999: 'How to defeat opposition to Moore', *Noûs* 33(13), 141–153.
- Stalnaker, R. C. 1978: 'Assertion', in P. Cole (ed.), *Pragmatics*. New York: New York Academic Press.
- Stalnaker, R. C. 1984: *Inquiry*. Cambridge, MA: MIT Press.
- Stalnaker, R. C. 1988: 'Belief attribution and context', in R. H. Grimm and D. D. Merrill (eds.), *Contents of Thought*. Tucson, AZ: University of Arizona Press.
- Stalnaker, R. C. 2008: *Our Knowledge of the Internal World*. Oxford: Clarendon Press.
- Stanley, J. 1997: 'Rigidity and content', in R. Heck (ed.), *Language, Thought, and Logic: Essays in Honour of Michael Dummett*. Oxford: Oxford University Press.
- Stanley, J. 2000: 'Context and logical form', *Linguistics and Philosophy* 23: 391–434.
- Stanley, J. and Szabo, Z. G. 2000: 'On quantifier domain restriction', *Mind and Language* 15(2-3): 219–261.
- Stich, S. 1982: 'On the ascription of content', in A. Woodfield (ed.), *Thought and Object*. Oxford: Oxford University Press.
- Stout, G. F. 1905: 'Things and sensations', *Proceedings of the British Academy* 2, 1–13.
- Strawson, P. F. 1950: 'On referring', *Mind* 59(235), 320–344.
- Strawson, P. F. 1959: *Individuals*. London: Methuen.
- Strawson, P. F. 1974: *Subject and Predicate in Logic and Grammar*. London: Methuen.
- Tarski, A. 1933/83: 'The concept of truth in the languages of the deductive sciences', *Prace Towarzystwa Naukowego Warszawskiego, Wydział III Nauk Matematyczno-Fizycznych* 34 (Warsaw).

Expanded English translation in J. Corcoran (ed.), *Logic, Semantics, Metamathematics, papers from 1923 to 1938*. Indianapolis: Hackett Publishing Company, 1983.

Unger, P. 1980: 'The problem of the many', *Midwest Studies in Philosophy* 5: 411–67.

Williams, J. R. G. 2006: 'An argument for the many', *Proceedings of the Aristotelian Society* 106(1), 411–9.

Williamson, T. 1994: *Vagueness*. London: Routledge.

Williamson, T. 2000: *Knowledge and its Limits*. Oxford: Oxford University Press.

Williamson, T. 2001: 'Comments on Michael Williams' 'Scepticism, contextualism, and discrimination', *Philosophical Studies* 103: 25–33.

Williamson, T. 2009a: 'Probability and danger'. *The Amherst Lecture in Philosophy* 4: 1–35. Available at: <http://www.amherstlecture.org/williamson2009/>

Williamson, T. 2009b: 'Responses to critics', in P. Greenough and D. Pritchard (eds.), *Williamson on Knowledge*. Oxford: Oxford University Press.

Williamson, T. 2013: *Modal Logic as Metaphysics*. Oxford: Oxford University Press.

Williamson, T. forthcoming: 'Justification, excuses, and sceptical scenarios', in F. Dorsch & J. Dutant (eds.), *The New Evil Demon*. Oxford: Oxford University Press.

Yablo, S. 2014: *Aboutness*. Princeton, NJ: Princeton University Press.

Yalcin, S. 2007: 'Epistemic modals', *Mind* 116(464), 983–1026.