The Toucan in Early Modern French Culture (1526-1650)

Alex Lawrence, Keble College

Submitted for the degree of DPhil in Medieval and Modern Languages

Hilary Term 2023

The Toucan in Early Modern French Culture (1526-1650)
Alex Lawrence, Keble College
Submitted for the degree of DPhil in Medieval and Modern Languages
Hilary Term 2023

Short Abstract

This is a thesis about the life of a strange little bird in early modern European culture. Bright and colourful in feather yet bizarre in physical form, bearing a seemingly impossible bill, the Toucan inspired wonder in many a traveller to the New World. Transcribed into text, it soon appeared in books of several genres, in the drawings of artists and, as a material sample, in the *cabinets de curiosités* of collectors and dignitaries. The sheer breadth of source material available indicates the cultural significance of the Toucan; our discussion sets out to assess the bird's impact on early modern thought and culture.

To fully understand the shape and nature of the bird's influence -- or what I refer to as its several 'lives' in European culture -- we develop an analytical framework based on the methodological cores of semiosis and agency. Our analysis shows how the 'lives' of the Toucan disrupted and reshaped a number of cultural frames, both in discursive formations and in cultural practices. These disruptions, in turn, transformed some major European cultural frames of reference regarding scientific and artistic mimesis and their didactic as well as theological stakes: idolatry, eschatology, deformity and hybridity, ingenuity and craft are all in play in these.

The thesis is organised into three principal chapters, each one following the Toucan in a distinct area of early modern culture -- that is, natural-historical writing, confessional discourses and material cultures of collecting and making. Reading familiar material in the new lights of semiosis and agency and drawing several new conclusions, the discussion also broaches little-known texts and reaches the borders between languages and genres. By focusing on European interactions with a challenging New World creature, this thesis tells a story of broader European re-imaginings of the natural world in a time of social and cultural transformation.

The Toucan in Early Modern French Culture (1526-1650)

Alex Lawrence, Keble College

Submitted for the degree of DPhil in Medieval and Modern Languages

Hilary Term 2023

Long Abstract

This thesis, first and foremost, is about the life of a strange little bird in early modern European culture. Bright and colourful in feather yet bizarre in physical form, bearing a seemingly impossible bill, the Toucan inspired wonder in many a traveller to the New World -- specifically to the forested coastline of what is today Brazil. It soon appeared in the books of travellers, in the drawings, engravings and paintings of artists and, as a material sample, in the *cabinets de curiosités* of collectors and dignitaries across Europe. The many representations of the bird in the sixteenth- and seventeenth centuries provide particularly fertile ground for research. Yet aside from some initial exploratory works (one chapter by Paul J. Smith and one article by Peter Mason), alongside a few mentions in passing, there has not yet been a dedicated, full-length study of the Toucan in early modern European thought and culture, much less one which incorporates the broad gamut of source material available.

That is what this thesis sets out to do. The Toucan merits critical attention for a number of reasons, the most significant being that it traversed a truly impressive range of critical discourses, genres and cultural media in a time of social and cultural transformation. As we will see over the course of the discussion, the Toucan acted as an agent in such transformation, playing a significant part in the broader re-imagining and re-configuration of European man's relation to (and interaction with) the natural world. Naturally, the bird's arrival caused a distinct shift in some of the core tenets and debates of what we know today as 'natural history'. Yet it also flew much further afield, sparking new ideas in the writing of confessional polemicists, missionaries and emblematists, and across the social cultures of making, collecting and display both at home and abroad.

Owing to the interdisciplinarity of the research subject, we could not simply join the dots together, as it were, as other single-animal studies (in literary scholarship) or 'bio-geographies' (in historical scholarship) have done in the past. One of the core challenges this project encountered lay in attempting to find a way to bring each of the representations (from the textual and the visual, to the

material and beyond) together within an analytical framework that allowed the sources to speak to one another in a way that made sense. The approach, from the outset, was to think of the Toucan as a tracer element; as a distinct cultural object that could be followed physically from one geographical location to another and, conceptually, as something that shifted and reshaped early modern thinking as it travelled -- an agent in cultural production.

We kept this idea in mind in the development of our methodological toolkit. The toolkit itself brings together two distinct critical perspectives: the contemporary ethnography of Eduardo Kohn, and the post-structuralist francophone literary scholarship of Terence Cave, Jean Céard, Frank Lestringant and others. Both sides, in their own way, adopt the theoretical mould of signs, sign-interpretation and semiosis (which stems, originally, from the work of early twentieth-century scholars -- most notably the American logician Charles Sanders Pierce) to explore the notion of agency.

Kohn posits that, as both human and nonhuman beings are capable of participating in the 'semiosis of life' (that is, the interpretation and production of signs), we can locate a distinct nonhuman agency in the signs they produce -- signs which become part of, and are therefore legible within, human symbolic signs, structures and thought. We bring Kohn's model to bear on the accounts of early moderns who, as Lestringant has shown, also thought in terms of signs and semiosis. This toolkit allows us to open the question of nonhuman agency as something legible in culture, to re-evaluate the extent to which early moderns ascribed agency to nonhuman beings through their texts, images and material objects. Specifically, the framework allows us to illustrate how early moderns, using poetic structures such as metaphor, semiotically ascribed the Toucan with a unique agency -- the bird had a distinct 'life' in early modern culture.

Our discussion therefore builds on semiotic precepts to explore the 'lives' of the early modern Toucan. This approach, which revolves around the methodological cores of semiosis and agency, was particularly well placed to answer the fundamental question this thesis poses: that is, how did the Toucan shape early modern European culture and thinking? What kind of a 'life' did the bird have? How did social actors across the continent semiotically ascribe the bird with meaning? In short, what kind of a lasting, transformative impact did the Toucan have, subsequent to its arrival in Europe?

As the thesis will go on to show, the 'lives' of the Toucan disrupted a number of cultural frames, both in discursive formations (wonder, marvels and their relation to knowledge in epistemic, confessional and artistic discourses) and in cultural practices (sociability and networks, material cultures of collecting and making). These disruptions, in turn, transformed some of the broader European understandings about mimesis, deformity and hybridity, ingenuity and craft, moral didacticism, idolatry and eschatology.

This thesis is divided into three principal chapters preceded by a longer, methodologically-oriented introduction and followed by a brief conclusion. In our introduction, we set out the principal research questions and contexts before outlining the methodology. We then offer a preliminary reading of Jean de Léry's interaction with two species of bird (the *Engoulevent d'Amérique* and the New World parrot) in his *Histoire d'un voyage faict en la terre du Brésil* (1580). This section is designed to show how the methodology works in practice, how it offers a new way to read early modern encounters with the natural and New Worlds in terms of semiosis and agency. From there, we move to Léry's discussion of the Toucan. The Reformed pastor's description of the bird and its interactions with the indigenous Tupinamba opens up practically all of the major threads running through the discussion and, therefore, serves as the critical starting point.

The first chapter, *'Merveilleusement difforme': The Toucan in Natural History*, provides a detailed overview of the major epistemic, aesthetic and social debates instigated by the Toucan's arrival in European natural-historical discourse. It shows how a set of salient characteristics were established in French natural-historical writing, and how such characteristics were then transmitted, debated and re-evaluated across the continent. Incorporating the works of Pierre Belon, André Thevet, Conrad Gessner among others, the chapter picks up on many of the threads to which Léry alludes, and highlights the processes of semiotic ascription taking place in natural history. Crucially, it acts as a baseline for the subsequent chapters, thereby making the broader point that contemporary texts of different genres were, in their own way, responding to the debates and discourses established in natural history.

The second chapter, *Beaks and Feathers: The Toucan in Confessional Discourses*, focuses on the texts of religious writers in France and beyond. It is divided into two parts, a structure which reflects the two major perspectives (Reformed and Catholic), but it also intentionally resists the idea of a stark confessional difference between the two sides -- one argued by Peter Harrison and Catherine Randall -- by showing how differing confessional interpretations overlap and intersect. The first part centres on the Reformed perspective of Léry, specifically the 1611 edition of his *Histoire d'un voyage*, in which he revises his description of the Toucan beak in order to stage a polemical satire about late Catholic apocryphal tradition. The second part draws attention to a number of Catholic interpretations, including those of Nicolas Caussin, Claude d'Abbeville and Fernão Cardim. In these accounts, the bird becomes part of a series of discussions about eloquence, provision, bounty and forms of spiritual and aesthetic grace. Set in the early seventeenth century, this chapter reveals how religious writers returned to earlier natural-historical material, reading it once again in a different light, and either used or imagined the Toucan's beak and feathers as part of their own confessional movements.

In the third chapter, *From the Forest to the Study: Material Histories of the Toucan*, we discuss the material history of the Toucan in Europe. Although beaks and feathers are central to the discussion throughout, in this chapter we draw attention to the movement of material samples and to moments of physical interaction with Toucan objects. We first revisit a series of texts already mentioned in order to show how a different process of semiotic ascription took place around material samples and collections (*cabinets de curiosités*). The chapter therefore provides an important micro-historical account of the Toucan in the material Renaissance. But it also demonstrates how interaction with physical samples encouraged new ideas -- new ways of looking at the natural world -- which, ultimately, fed back into textual and non-textual accounts (such as, for example, the embroidery of the exiled Scottish monarch Mary Stuart). The chapter concludes with *Le Jardin, et cabinet poétique* of the little-known Poitiers apothecary Paul Contant, a text which synthesises a number of the threads through which the Toucan became an embedded cultural object in Europe. Contant's book proves, once again, the lasting impact of the bird in European culture and thought.

The conclusion pieces together and summarises the principal findings in a discussion that follows a series of visual representations -- an engraving, a ceramic tile and several courtly devotional paintings produced in the seventeenth-century Low Countries. As a painted Toucan surveys the post-Diluvian world in Jan van Balen's *Noah and the Ark* or inspects a cello in Jan van Brueghel and Peter Paul Rubens's *Allegory of Hearing*, we ask how the core contentions and debates from earlier natural-historical and confessional writing in France continue to play out in visual form, how the 'lives' of the Toucan continue to be seen and, potentially, heard in times and places beyond.

Drawing all our threads together, the distinctive contribution to scholarship of this thesis lies in two areas. First, it provides a full-length, comprehensive (albeit not exhaustive) study of the Toucan in early modern European thought and culture, offering a detailed insight into the shape and nature of the bird's transformative influence therein. Second, it sets out a distinct methodological approach which allows the question of semiosis, agency and their poetic expressions to be properly treated. Such a method reflects, and indeed stems from, the interdisciplinary material from which it has arisen. Both areas offer possibility for future research. We could apply the same model to representations of the Toucan through the ages and across different cultural media (theatrical performance and pictorial art, for example, are only briefly touched on here). Similarly, we could use our methodology to assess the cultural impact of other animal species from the New World at the time, such as tapirs, sloths and several other kinds of bird.

Alongside the findings and conclusions this thesis outlines, it also provides a space in which the intersecting strands of thought and discourse can be better understood in relation to one another. It allows sources from across the spectrum of cultures, genres and media to speak to one another in a lively, synthetic manner. At its core, the thesis tells the story of human interaction with a New World creature, curious in physical appearance and even more curious in the sound it makes. Yet it also tells a story of natural-historical knowledge-making and the transmission of information in the early modern world. Finally, it also reveals what happens when information is lost: when communication fails. The discussion is, essentially, organised around an absence: it proves how, following the loss (or non-transcription) of indigenous cosmological thinking, European natural-historical knowledge production rushed to fill the void, leading to intricate and knotty networks of meaning being made.

Acknowledgements

This thesis has been many years in the making and I'd like to extend my heartfelt thanks to everyone who has helped me along the way.

To my supervisors, for their brilliant support and scholarly insight.

To Wes Williams, for his unwavering encouragement, mind-bending questions and good humour.

To Raphaële Garrod, for her precision, patience and absurdly rich knowledge.

To Katherine Ibbett and Jenny Oliver, for being excellent readers and supporters of my work, and for always being friendly faces in the faculty.

To Raphaële Garrod and René Lommez Gomes, for helping me translate the Latin and Portuguese.

To the Arts and Humanities Research Council and the Oxford-Open-Cambridge Doctoral Training Partnership, whose generous support made all this possible.

To Teddy Hall and to Keble. To my college advisor, Michael Hawcroft.

To the Modern Languages Faculty at Exeter University, where I was inspired early on. To Hugh Roberts, Adam Watt, George Ferzoco, Angelo Mangini and Fabrizio Nevola.

To the faculty of Lettres Modernes at Paris IV, who opened my eyes to travel writing in the early modern world. To Frank Lestringant and Alexandre Tarrête.

To the John Carter Brown Library in Providence, who offered me a four-month fellowship to research their collection -- an experience I will remember forever.

To the very fine fellows of the JCB Library, with whom I spent many happy hours discussing the early modern Americas. To Juan Ignacio Neves Sarriegui, René Lommez Gomes, Malena López Palmero, Francis Russo and Gustavo César Machado Cabral.

To Thierry Gentis, who gave generously of his time to show me the featherworks at the Haffenreffer Museum.

To everyone who gave me new Toucans and gifted me Toucan-themed objects -- my house is now full of them.

To my Oxford mates, Rachel, Oli, Patrick, Karah, Eileen, Marcel, Valentin and Marcelo.

To my Exeter dafties, Rob and Eddie.

To my West Country home boys, Sol, Oli, Mitch, Banner, Hiscott, Hughes and Kieran.

To my old muckers, Jacob, Finn, Ryan, Jono, Will, Dom.

To my family.

To my love.

Table of Contents

The Toucan in Early Modern French Culture (1526-1650) ***11***

Introduction **11**

I. Fledging 11

II. Semiosis, Agency and Metaphor: Methodological Outlines 17

III. *Une Forêt de Symboles* 19

IV. Early Modern Metaphor 23

i. *Engoulevent*: Semiosis, Salvation and the Power of the Imagination 26

ii. *Cherimbavé*: Mimesis, Misinterpretation and Mockery 34

iii. *Toucan*: A Dancing Bird 39

Chapter I. 'Merveilleusement difforme': The Toucan in Natural History **49**

Introduction 49

I. The Toucan in French Natural History 54

i. Pierre Belon: *Histoire de la nature des oyseaux* (1555) 54

ii. André Thevet: *Les Singularitez de la France Antarctique* (1557) 57

iii. Pierre Belon: *Portraits d'oyseaux* (1557) 60

iv. Conrad Gessner: *Icones avium omnium* (1560) 64

v. André Thevet: *La Cosmographie universelle* (1575) 71

vi. Ambroise Paré: *Des Monstres et prodiges* (1585) 74

II. The Toucan Takes Flight Across Europe 77

i. Ulisse Aldrovandi: *Ornithologiae* (1599) 77

ii. Johann Faber: *Animalia Mexicana* (1628) 82

Conclusion 87

Chapter II. *Beaks and Feathers*: The Toucan in Confessional Discourses **91**

Introduction: Wonders, Marvels and Miracles 91

I. 'Un maistre Bec': The Toucan in Reformed Confessional Satire 98

i. Jean de Léry: *Histoire d'un voyage* (1611) 98

II. 'Les Plumes de sa mauvaise coustume': The Toucan in Catholic Texts 122

i. Nicolas Caussin: *Polyhistor Symbolicus* (1618) 122

ii. Claude d'Abbeville: *Histoire de la mission des peres Capucins* (1614) 130

iii. Fernão Cardim: *Tratados da terra e gente do Brasil* (c. 1585-1590) 139

Chapter III. *From the Forest to the Study*: Material Histories of the Toucan **151**

Introduction: The 'Lives' of Objects 151

I. Objects in Motion 157

i. Paré's Rotting Pelt: The Challenges of Loss 157

ii. Belon's Bony Beak: The Social Lives of Wonder 159

iii. 'Un chapeau fort beau et riche': Thevet's Featherworks and the Logic of Fashion 163

iv. From Featherwork to Needlework: Mary Stuart's 'Byrd of America' 167

II. Objects in Collections....172
i. Paul Contant: *Jardin et Cabinet Poétique* (1609)....173

Conclusion....181
i. Jan Sadeler and Maarten de Vos, 'The Fifth Day' (c. 1587)....182
ii. The Seventeenth-Century Low Countries....185
iii. 'Allegory of Hearing'....191

List of Books....194
Primary....194
Secondary....199

List of Figures....212

The Toucan in Early Modern French Culture (1526-1650)

Introduction

I. Fledging

A flash of gold. A glimmer of red and yellow plumage under the forest canopy. A beautiful yet bizarre bird, uncanny in appearance, hybrid in form. An enormous beak. A strange croak and cronk, noisy and distinctly unbirdlike. This was the sight and sound witnessed by many a traveller to the New World in the sixteenth century, specifically to the Atlantic coastline of Brazil. Europeans would come to know the creature most commonly by its indigenous Tupinamba name: *Toucan*.

The 'discovery' of the Americas was one of the most significant developments of the early modern period. A staggering quantity of previously unseen people, landscapes, plants and animals suddenly became available to European contemplation and, as it did, it presented a serious epistemological challenge to structures of thought rooted in the Old World. Indigenous people across the continent forced Europeans to reconsider what they understood as 'barbarism', idolatry and 'the human'. The flora and fauna generated new ideas about the abundance and variety of the natural world, the material properties of natural objects and, by extension, the reach of the Creation across the globe. Animal species like tapirs, sloths and New World parrots troubled and reopened debates about the ontological differentiation between the 'monstrous' and the 'animal'.

One creature in particular captivated the European imagination. Distinct from any other type of bird witnessed in the Old World, the Toucan quickly became a subject of fascination for Europeans. A truly impressive breadth of early modern people -- travellers, traders, collectors, cosmographers, natural historians, local dignitaries, courtiers, missionaries, religious polemicists, emblematists, embroiderers, engravers and painters -- interpreted and sought to represent the Toucan in their texts, images and material collections. In terms of how vivid, imaginative and (often) contrasting these different interpretations were, the Toucan was unique. The bird inspired wonder in the European observer. It sparked intense debate across textual genres and cultural media. It raised questions across a swathe of critical discourses and challenged the European perception of the New

World. In short, the Toucan had a significant, indeed transformative impact on early modern culture and thought, and tracing its movements (or what I will call its several 'lives') across the period enables us to measure the force of this impact as early moderns reassessed the ways in which they perceived, interacted with, and represented the natural world.

We begin our discussion with a set of simple research questions. How did the Toucan change the way Europeans thought about the world around them? How did it shift perceptions, and shape cultural responses to the natural world and the New World? Which aspects of critical discourse did the bird inform? As mentioned, we will be addressing these questions as an investigation into the 'lives' of the Toucan, that is, successive layers of semiotic ascription taking place as the bird travels across geographical spaces and cultural media. These 'lives' disrupted and reshaped a number of cultural frames, both in discursive formations (wonder, marvels and their relation to epistemic, confessional and artistic discourses) and in cultural practices (sociability and networks, material cultures of collecting and making). These disruptions, in turn, transformed the broader European understandings of mimesis, deformity and hybridity, ingenuity and craft, moral didacticism, idolatry and eschatology. Assessing the lives of the Toucan as semiotic ascriptions, we gain a unique insight into each of these threads and their interplay.

Today, Toucans are classified within the Neotropical near passerine bird family *Ramphastidae* -- a name which, as we will see, has its origins in early modern natural history. Characterised by their huge bills and colourful plumage, Toucans inhabit a broad biological and geographical range from Southern Mexico to the northern banks of the Rio de la Plata. They are among the most iconic and best-known species of bird, and they have an expansive (and particularly rich) history in Western culture. In our own era, Toucans have featured as the iconic animal mascot for Guinness beer and Fruit Loops cereal, as the pet-name for politicians of the Partido da Social Democracia Brasileira and as countless animal characters in television and film.

This long (Western) cultural history starts in the sixteenth-century Americas. Our study begins in 1526, when the first written account of a Toucan was published in Europe. Printed in Toledo by Ramón de Petras, Gonzalo de Oviedo's natural-historical survey of New Spain -- *De la natural*

hystoria de las Indias -- presented what its author referred to as a *Picudo* ('Big-beak').[1] From then on, hundreds of depictions of the Toucan began to appear across Europe. We limit our investigation to accounts that were produced before 1650, which marks a turning point: by the mid-seventeenth century, the era of 'discovery' and early 'encounters' with the bird had passed -- the Toucan was, by then, a well-established animal in European natural-historical discourse. Our focus is on the bird's initial impact on early modern thought and culture, an impact which would have far-reaching implications beyond the period.

One of our core contentions is that French writers, collectors, artists and courtiers (among others) were primarily responsible for establishing the bird in the European cultural imagination. However, we do not limit the investigation to sources originating from France alone. The analysis also includes material published in Latin, Spanish and Portuguese, and we incorporate sources produced in the Low Countries, because they demonstrate the rapid cultural transmission of the Toucan across Europe and are often in direct critical conversation with accounts produced in France, granting them a unique status. Indeed, the story of the Toucan in early modern culture is a predominantly French one. When we think about the Toucan's travels, and the associated accretion of semiotic ascriptions in the various discourses dealing with the bird, French culture plays a significant, distinctive, and indeed determining role. France (and the French court in particular) was a significant actor (and factor) in the dissemination of natural-historical objects from the New World. It is thus central to any consideration of the transmission of material specimens in this period -- as well as the movement of ideas, texts and images. Secondly, as France remained in the grip of a fierce religious divide throughout much of the sixteenth and seventeenth centuries, many writers used or imagined the Toucan as part of their own confessional arguments. Such interpretations remain some of the most vivid, varied and, at times, completely bizarre aspects of the bird's many 'lives', and they mark a distinctive milestone in the cultural transmission of the Toucan across Europe.

As the Toucan crosses so many critical territories in its flight through the early modern world, we must be methodologically mobile in our approach. Our discussion is multi-disciplinary and multi-

[1] Gonzalo Fernández de Oviedo, *De la natural hystoria de las Indias* (Toledo: Ramón de Petras, 1526) <http://bdh.bne.es/bnesearch/detalle/bdh0000050339> [accessed 5 Mar 2023], p. 56.

lingual, and our analysis sits at the intersection of multiple strands of criticism. The literature on epistemic recalibration subsequent to the discovery of the Americas is now vast, having been pioneered by Atkinson's and Chinard's work on Renaissance travel literature and further developed by the (post-) New Historicist studies of Pagden, Greenblatt, Frisch and many others.[2] Any study of France in the New World owes much to Frank Lestringant's extensive work.[3] The arrival of the Toucan in European culture is, at its core, a story about early modern engagements with wonder, marvel and the forms they take -- which includes critical reflections on monsters and miracles. As such, our discussion intersects frequently with the formative studies of Daston and Park, Jean Céard and Wes Williams.[4] Furthermore, as we discuss the reception of wonder through the transfer of objects, cultures of curiosity and collecting, we build on the material-historical scholarship of Bleichmar, Findlen, Buono and, more recently, of Stefan Hanß and Ulinka Rublack.[5] Finally, and

---

[2] Geoffroy Atkinson, *Les Nouveaux horizons de la Renaissance française* (Paris: Droz, 1935); Gilbert Chinard, *L'Exotisme américain dans la littérature française au XVIe siècle* (Paris: Hachette, 1911); Edmundo O'Gorman, *The Invention of America: An Inquiry into the Historical Nature of the New World and the Meaning of its History* (Bloomington: Indiana University Press, 1961); Wayne Franklin, *Discoverers, Explorers, Settlers: The Diligent Writers of Early America* (Chicago: University of Chicago Press, 1979); Anthony Pagden, *The Fall of Natural Man: The American Indian and the Origins of Comparative Ethnology* (Cambridge: Cambridge University Press, 1982); Stephen Greenblatt, *Marvellous Possessions: The Wonder of the New World* (Oxford: Clarendon Press, 1991); Mary B. Campbell, *The Witness and the Other World: Exotic European Travel Writing, 400-1600* (Ithaca, NY: Cornell University Press, 1988); Andrea Frisch, *The Invention of the Eyewitness: Witnessing and Testimony in Early Modern France* (Chapel Hill: North Carolina Studies in the Romance Languages and Literatures, 2004); Phillip John Usher, *Errance et cohérence: Essai sur la littérature transfrontalière à la Renaissance* (Paris: Classiques Garnier, 2006); Frédéric Tinguely, *Le Voyager aux milles tours: Les ruses de l'écriture du monde à la Renaissance* (Paris: Champion, 2014); Raphaële Garrod, *Cosmographical Novelties in French Renaissance Prose (1550-1630): Dialectic and Discovery* (Turnhout: Brepols, 2016); Surekha Davies, *Renaissance Ethnography and the Invention of the Human: New Worlds, Maps and Monsters* (Cambridge: Cambridge University Press, 2016).

[3] Frank Lestringant, *Le Huguenot et le sauvage: L'Amérique et la controverse coloniale en France, au temps des guerres de religion (1555-1589)* (Paris: Aux Amateurs des Livres, 1990); *L'Atelier du cosmographe: Ou l'image du monde à la Renaissance* (Paris: A. Michel, 1991); *André Thevet: Cosmographe des derniers Valois* (Geneva: Droz, 1991); *L'Expérience huguenote au Nouveau Monde (XVIe siècle)* (Geneva: Droz, 1996); *Sous la leçon des vents: Le monde d'André Thevet, cosmographe de la Renaissance* (Paris: Presses de l'Université de Paris-Sorbonne, 2003); *Jean de Léry, ou, l'invention du sauvage* (Paris: Champion, 2005).

[4] Jean Céard, *La Nature et les prodiges: L'Insolite au XVIe siècle, en France* (Geneva: Droz, 1977); Lorraine Daston and Katharine Park, *Wonders and the Order of Nature (1150-1750)* (New York: Zone Books, 1998); Pamela H. Smith, *Merchants and Marvels: Commerce, Science, and Art in Early Modern Europe* (London: Routledge, 2002); *Curiosity and Wonder from the Renaissance to the Enlightenment*, ed. by Alexander Marr and R. J. W. Evans (London: Routledge, 2006); Wes Williams, *Monsters and their Meanings in Early Modern Culture: Mighty Magic* (Oxford: Oxford University Press, 2011).

[5] Paula Findlen, *Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy* (Berkeley: University of California Press, 1994); Neil Kenny, *The Uses of Curiosity in Early Modern France and Germany* (Oxford: Oxford University Press, 2004); Amy J. Buono, 'Feathered Identities and Plumed Performances: Tupinambá Interculture in Early Modern Brazil and Europe' (unpublished doctoral thesis, University of California Santa Barbara, 2007); Frank Lestringant, *Le Théâtre de la curiosité* (Paris: PUPS, 2008); *Collecting Across Cultures: Material Exchanges in the Early Modern Atlantic World*, ed. by Daniela Bleichmar and Peter Mancall (Philadelphia: University of Pennsylvania Press, 2013); *The Global Lives of*

perhaps most obviously, we offer a fresh perspective in the recent rich strand of criticism on early modern natural history as discursive and poetic construct.[6]

In a conceptual sense, however, this thesis does more than contribute to the extensive scholarship on travel, wonder, curiosity and natural history. Because the Toucan had such a strong association with indigenous cosmologies, rituals and material culture in the New World, many of the early perspectives on the bird incorporated, interpreted and transmitted what Europeans understood of the indigenous perspective. In the case of Jean de Léry, for example, presenting the Toucan involved transcribing the meaning (as he understood it) of the bird for the Tupinamba with whom he lived and about whom he wrote. This has encouraged us to think about the transmission of knowledge from an anthropological perspective. In the methodology outlined below, we bring an ethnographical question to bear on early modern textual analysis. As we do so, we offer a different way to read our sources, which emphasises how early moderns thought both deeply and critically about the agencies of indigenous people and nonhuman animals. In this sense, we contribute a new critical approach to the expanding fields of animal studies, ecocriticism and environmental humanities.[7]

Things: The Material Culture of Connections in the Early Modern World, ed. by Anne Gerritsen and Giorgio Riello (London: Routledge, 2015); *Images Take Flight: Feather Art in Mexico and Europe 1400-1700*, ed. by Alessandra Russo, Gerhard Wolf and Diana Fane (Munich: Hirmer, 2015); Stefan Hanß, 'Material Encounters: Knotting Cultures in Early Modern Peru and Spain', *The Historical Journal*, 62 (2019), 583-615 <https://doi.org/10.1017/S0018246X18000468> [accessed 5 Mar 2023]; *Materialized Identities in Early Modern Culture, 1450-1750*, ed. by Susanna Burghartz, Lucas Burkart, Christine Göttler and Ulinka Rublack (Amsterdam: University of Amsterdam Press, 2021).

[6] Brian Ogilvie, *The Science of Describing: Natural History in Renaissance Europe* (Chicago: University of Chicago Press, 2006); *Early Modern Zoology: The Construction of Animals in Science, Literature and the Visual Arts*, ed. by Karl A. E. Enenkel and Paul J. Smith (Leiden: Brill, 2007); Sachiko Kusukawa, *Picturing the Book of Nature: Image, Text, and Argument in Sixteenth-Century Human Anatomy and Medical Botany* (Chicago: University of Chicago Press, 2012); *Natural History in Early Modern France: The Poetics of an Epistemic Genre*, ed. by Raphaële Garrod and Paul J. Smith (Leiden: Brill, 2018); *Worlds of Natural History*, ed. by Helen Curry, Nicholas Jardine, James Secord and Emma Spary (Cambridge: Cambridge University Press, 2018).

[7] Erica Fudge's work has been central in this. See *Perceiving Animals: Humans and Beasts in Early Modern English Culture* (Basingstoke: Macmillan, 2000); *Renaissance Beasts: Of Animals, Humans and Other Wonderful Creatures* (Urbana: University of Illinois Press, 2004); *Brutal Reasoning: Animals, Rationality, and Humanity in Early Modern England* (Ithaca, NY: Cornell University Press, 2006). See also Jacques Derrida, *L'Animal que donc je suis* (Paris: Galilée, 2006); *French Thinking About Animals*, ed. by Louisa Mackenzie and Stephanie Posthumus (East Lansing: Michigan State University Press, 2015); Peter Sahlins, *1668: The Year of the Animal in France* (New York: Zone Books, 2017); *Early Modern Écologies: Beyond English Ecocriticism*, ed. by Pauline Goul and Phillip John Usher (Amsterdam: Amsterdam University Press, 2020).

Following our methodological discussion, we present three readings from Jean de Léry's *Histoire d'un voyage faict en la terre du Brésil* (1580).[8] Each one focuses on a different species of bird: the *Engoulevent d'Amérique* (Nighthawk), the Parrot and the Toucan. The preliminary readings show how our methodology works in practice -- how it affords a nuanced reading of early modern encounters with the natural and New Worlds. Moreover, it proves how interacting with avian species in Brazil -- the Toucan in particular -- challenged, disrupted and reshaped an impressive range of discourses. The thesis is then divided into three chapters. The first, *Merveilleusement Difforme: The Toucan in Natural History,* provides a comprehensive overview of the major epistemic, aesthetic and social debates instigated by the Toucan's 'lives' in European natural history. It shows how a set of salient characteristics were established, shared and contested across the sixteenth and early seventeenth centuries. This first chapter acts as a baseline for those to follow, making the broader point that texts of different genres were, in their own way, responding to the key debates and discourses established in natural-historical writing in France.

The second chapter, *Beaks and Feathers: The Toucan in Confessional Discourses*, shows how religious writers in France (and beyond) interpreted the bird. It is written in two parts: the first one is dedicated to Reformed perspectives, the second to Catholic ones. Yet it also resists the idea of there being a stark confessional difference between the two by revealing how interpretations frequently intersected with one another. Set in the early seventeenth century, this chapter argues that religious writers read earlier natural-historical material in a new light, both using and imagining the Toucan's beak and feathers as part of their own confessional movements.

The third chapter, *From the Forest to the Study: Material Histories of the Toucan*, draws attention to the movement of material objects and moments of physical encounter with Toucan samples. Focussing on the inventories of *cabinets*, as well as revisiting a series of texts already discussed, this chapter provides an important micro-historical account of the Toucan in the material

[8] Jean de Léry, *Histoire d'un voyage faict en la terre du Brésil, autrement dite Amerique* (Geneva: Antoine Chuppin, 1580) <https://www.google.co.uk/books/edition/Histoire_d_un_voyage_fait_en_la_terre_du/WGFoAAAAcAAJ?hl=en> [accessed 5 Mar 2023].

Renaissance. It also demonstrates how interacting with physical specimens generated new meanings and ideas in both textual and non-textual accounts.

We draw our discussion to a close by way of a series of pictorial representations created in the seventeenth-century Low Countries. As the Toucan perches alongside stringed musical instruments in Van Kessel's *A Sense of Hearing*, overlooks the Garden in Breughel's *Paradise Landscape with the Fall of Man*, and surveys the post-Diluvian world in Van Balen's *Noah and the Ark*, each painting both reimagines the forms and genres of inscription which determined the Toucan's initial set of early modern lives and proves the lasting impact of the bird in early modern European culture and thought.

II. Semiosis, Agency and Metaphor: Methodological Outlines

> Les arondelles que nous voyons de retour du printemps fureter tous les coins de nos maisons, cherchent-elles sans jugement, et choisissent-elles sans discrétion, de milles places, celle qui leur est la plus commode à se loger? Et en cette belle et admirable contexture de leurs bâtiments, les oiseaux peuvent-ils se servir plutôt d'une figure carré, que de la ronde, d'un angle obtus, que d'un angle droit, sans en savoir les conditions et les effets? Prennent-ils tantôt de l'eau, tantôt de l'argile, sans juger que la dureté s'amollit en l'humectant? planchent-ils de mousse leur palais, ou de duvet, sans prévoir que les membres tendres de leurs petits y seront plus mollement et plus à l'aise? Se couvrent-ils du vent pluvieux, et plantent leur loge à l'Orient, sans connaître les conditions différentes de ces vents, et considérer que l'un leur est plus salutaire que l'autre?
>
> Montaigne, 'Apologie de Raimond Sebond' (Essais II, 12)[9]

Montaigne is talking about birds. Specifically, the swallows that return every Spring to his estate and how, in selecting a site for -- and building -- their nests, they exhibit both natural intelligence and intricate technical expertise. The passage has been rightly read as a reflection on the relative frailty of human reason, and on whether songbirds surpass humans in their sense of space and place.[10] But the essay also marks a critical milestone in early modern thinking about the agencies of nonhuman beings. Montaigne ascribes the swallows with a capacity for *jugement* and *discrétion* and the ability to

[9] Michel de Montaigne, *Essais II*, ed. by Emmanuel Naya, Delphine Reguig and Alexandre Tarrête (Paris: Gallimard, 2009), pp. 182-183.
[10] Tom Conley, *An Errant Eye: Poetry and Topography in Early Modern France* (Minneapolis: University of Minnesota Press, 2011) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=648100> [accessed 28 Nov 2022], pp. 178-183.

considérer, *prévoir* and *connaître*. These birds have significant cognitive agency -- a natural aptitude for thinking which man, despite all his 'divine intelligence', cannot claim to be alone in possessing.

Although Montaigne is reflecting on the thinking ability (and, therefore, agency) of birds explicitly in his 'Apologie', we may also read the passage as the product of an interspecies interaction, which prompts serious philosophical reflection. Or, to put it differently, the experience of engaging with a little bird that shapes the way the essayist thinks, changes the way he views *intelligence* and informs his perception of reason itself. His text therefore exhibits a different form of agency: the implicit nonhuman agency of swallows, which, through interspecies interaction, has informed his philosophical discourse.

Creatures shaped the way early modern people thought -- not only about the natural world, the 'human' and the relation between the two, but also about a host of other subjects. Beyond his swallows, Montaigne thinks about *police*, *ordre* and *office* in relation to bees, *déliberation* and *pensement* in relation to spiders, and in perhaps the best-known example, he asks what kind of *intelligence* and *prudence* he has in comparison with his cat, who appears to 'play with him'.[11] Animals really mattered to writers in early modern France. François Rabelais, famously, encouraged his readers to think about -- or perhaps like -- a dog, patiently gnawing and sucking the marrow from a bone, when they came to consider the kinds and the degrees of care they should take in reading, interpreting and divining meaning from text.[12] It was Jean Lemaire de Belges's experience with a parrot that allowed him to articulate his thinking about the relation between villainy and nobility in his *Epîtres de l'Amant Vert*.[13] These are just two among many examples in which nonhuman animals are suggested as having a profound impact on the way early moderns thought, interacted with the world around them and expressed themselves in cultural media.

This was also a period in which knowledge about animals was growing rapidly. Thanks, in no small part, to the increased activity in the New World, many new species of animal became available

[11] Montaigne, pp. 179-184.
[12] François Rabelais, *Gargantua*, ed. by Françoise Joukovsky (Paris: Flammarion, 1993), p. 37.
[13] Emma Herdman, 'Vile Birds and Beasts in Jean Lemaire de Belges's *Epîtres de l'Amant Vert*', *Early Modern French Studies* 39. 2 (2017), 99-113 <https://www.tandfonline.com/doi/abs/10.1080/20563035.2017.1380556?journalCode=yemf20> [accessed 6 Mar 2023].

to European consideration: animals which fundamentally changed ideas about what a creature might look like, sound like or how one might behave. American birds, in particular, became a subject of fascination for travellers. Besides their bizarre forms, beautiful colours and strange calls, many avian species appeared to have an intimate association with indigenous people. For the Tupinamba, the parrots, parakeets and Toucans that lived in and around the villages appeared to be much more than 'pets'; they were deeply inscribed in their thought and culture. The interspecies interactions between people and birds encouraged travellers like Jean de Léry to reflect further on the question of nonhuman agency.

Our leading proposition is that this reflection was underscored by a distinctive and productive theory of signs (or semiosis). This semiosis, which is perhaps most visible in depictions of New World birds, emerged from a close interaction with the forests of the Americas and the human and nonhuman beings that lived there. Over the course of the thesis, we pay close attention to semiotic processes, how they articulate the thinking of early modern writers around the question of agency, and how they are manifest in both text and image. In order to demonstrate how such a reading will work we will first present our methodology and conduct a close reading of Léry's encounters with birds in the *Histoire*.

III. *Une Forêt de Symboles*

Our methodological approach is centred on cognitivist and semiotic precepts. We are building on the assumption that the perception of agency is an interpretative process. That is, agency stems from -- is embedded within -- the interpretation of signs (a process known as semiosis) and, crucially, not within signs themselves. Any notion of a nonhuman agency is thus necessarily constructed by a perceiver. Our definitions of signs and semiosis are grounded in the philosophy of American logician Charles Sanders Pierce.[14] By 'sign', we mean anything that communicates a certain meaning to an interpreter -- this process may occur by means of any sensory faculty. By 'semiosis', we mean the process of

[14] See James Jakób Liszka, *A General Introduction to the Semeiotic of Charles Sanders Pierce* (Bloomington: Indiana University Press, 1996).

perceiving, interpreting, responding to and constructing meaning from signs, a procedure which either human or nonhuman beings may carry out.

The ethnographic work of Eduardo Kohn also relied on Pierce's semiotic precepts as a way of conceiving nonhuman agency. To call on this contemporary view is vital: not only does it allow us to better understand the theory of semiosis posited by Léry's text (and, of course, the many others we discuss in the thesis), it also provides an opportunity to reflect on the relation between semiosis and agency in the broad sense. In the opening lines of *How Forests Think*, Kohn's ethnography of the Runa people, the author states:

> Life is constitutively semiotic. That is, life is, through and through, the product of sign processes […]. What we share with nonhuman living creatures, then, is not our embodiment, as certain strains of phenomenological approaches would hold, but the fact that we all live with and through signs.[15]

All living beings engage in the process of semiosis. By acknowledging that to live is to interact with, perceive and interpret signs, we may argue that living nonhuman beings have their own form of cognitive agency, that they are thinking in some fashion, through semiotic processes. This is the basis for what Kohn refers to as an 'anthropology beyond the human', which constructs the idea that nonhuman beings think in some way (that they engage in semiosis) and that this thinking interacts with (and actually informs) human cognitive processes and symbolic structures.

Kohn argues that nonhuman beings use the first two of Pierce's sign categories, that is 'icons' and 'indices', yet do not have access to the third category ('symbols'). Icons are best defined as *likenesses* -- they resemble, simulate (provide an image of) the thing they stand for. A wolf pawprint in the sand of a creek bed, for example, indicates the existence of (it 'simulates') a wolf. Indices (or 'indexes'), however, signal the presence of something by virtue of a real connection to that thing. They impel the interpreter to make a connection between one event and another, between the real possibilities and consequences of what will happen subsequent to the perception of that sign. The nearby snarl of a wolf, for example, indicates that something is about to happen -- and that I had better do something about it. Symbols, to which nonhuman beings do not have access, invoke a

[15] Eduardo Kohn, *How Forests Think: Toward an Anthropology Beyond the Human* (Berkeley: University of California Press, 2013), p. 9.

system of references unique to humans. They *refer*, as Kohn puts it, 'not simply through the similarity of icons, or solely through the pointing of indices. Rather […] they refer to their object indirectly, by virtue of the ways in which they relate systematically to other such symbols.'[16] The symbolic sign, for example, may be a physical notice board which bears a picture of a wolf and/or some language, informing me that there are wolves in the area. In other words, symbols contain further referential information (the precautions to take, the behaviour patterns of wolves, potential evidence of their activity, and so on). In the broad brushstrokes that we have outlined, then, icons *resemble*, indices *point*, and symbols *refer indirectly*.[17]

The salient point about symbolic signs is that they constitute an 'emergent dynamic' which depends entirely on things happening in the world (the 'semiosis of life'), which is to say iconic and indexical signs.[18] The human domain of the symbolic is nested within -- and subsequently emerges from -- a network of signs that nonhumans are capable of producing. The theory therefore outlines two major points. First, that nonhuman beings engage in the 'semiosis of life' (they interpret and produce iconic and indexical signs, they have some form of cognitive, thinking agency) and second, that the symbolic signs created and used by humans depend on these kinds of signs in order to come into being. The model thus assumes a radically redistributed agency between human and nonhuman beings regarding semiosis. Human modes of representation not only emerge from, but actually rely on the non-symbolic signs produced by nonhumans. As a result, these non-symbolic signs are tangible within symbolic signs, within the complex forms of human symbolic representation such as language, images, rituals, cosmological beliefs and so on.

Kohn's semiosis theory is directly relevant to our discussion. The model encourages us to investigate the early modern perspective on signs, semiotic ascriptions and nonhuman agency. If only humans use symbolic signs where nonhuman beings are restricted to icons and indices, we may constructively open the question of how Léry, for instance, investigates semiotic ascription and the transfer of animation -- or ensoulment -- in the context of interspecies relations.

---

[16] Kohn, p. 32.
[17] For a precise elucidation of Pierce's sign categories, see Liszka, pp. 43-52. Kohn, p. 42.
[18] Kohn, p. 55.

Léry's engagement with the New World certainly occurs at the level of the sign. Scholarship of the late twentieth century has shown, to varying degrees, just how sign-oriented the *Histoire d'un voyage* is. Frank Lestringant, for instance describes how, for Léry, 'la terre d'Amérique apparaît d'emblée couverte de signes, irriguée par le sens.'[19] In other words, the New World is an environment rich in semiotic potential, which Léry seeks to interpret and transcribe in his narrative. A semiotic reading of Léry, one which is similarly carried out by Jean Céard and Marie-Luce Demonet, is pertinent in that it recognises the complex, immersive sensory environment that the narrator presents.[20] Indeed, Léry's engagement is by no means confined to the domain of the visual: he listens attentively to indigenous speech and performances, tastes their fermented drink, smells their fragrant plant products and feels their material objects in his hands.

Up to now, however, these readings have privileged the recuperative nature of Léry's thinking, arguing that Léry's sign-interpretation only happened through the lens of his Reformed, evangelical agenda. For these scholars, everything Léry witnessed in the New World merely solidified structures of thinking rooted in the Old World. Yet the *Histoire* was much more than a procedure of semiotic decoding along such lines. Léry's semiosis was conscious: he raised theoretical questions concerning both the status and the inscription of signs and semiosis in his narrative. A new investigation is therefore required -- one that not only recognises Léry as thinking in terms of signs, but one that focuses on the theory of semiosis that is both presented and enacted in the *Histoire*. Léry's semiosis is unique and the understanding of agency in the *Histoire* is both subtle and complex. By acknowledging that nonhumans engage in semiosis, we are not necessarily saying that they are conscious of this process (that they are reflexive, thinking subjects), nor that they strictly mean to do it (that they have intentional agency, or intentionality). Léry's multi-layered semiosis accounts for -- and probes the limits of -- each of these related concepts, which constitutively fall under a wider definition of agency. In this sense, we can read Léry's framework in the light of Kohn's, and in doing so examine the intersections of (and divergences between) these two distinct accounts of semiosis.

[19] Lestringant, *L'Expérience Huguenote*, p. 85.
[20] Céard, pp. viii-xii. Marie-Luce Demonet, *Les Voix du signe: Nature et origine du langage à la Renaissance (1480-1580)* (Paris: Champion, 1992), p. 440.

Our investigation thus facilitates a productive reopening of the question of (or distinctions between) the 'human' and the 'nonhuman' in relation to semiosis in the broad sense.

To summarise, then, and to bring us back to our initial observations: all agency is interpretative. Kohn's theory of semiosis provides a means to reimagine agency within living nonhuman beings. The non-symbolic signs they produce (iconic and indexical) resonate within (are actually the basis of) human symbolic signs, such as language. The *forêt de symboles* presented within the pages of the *Histoire* reveals a distinct early modern theory of signs. We are therefore encouraged to apply Kohn's framework to the text as a way to shed light on Léry's investigation of semiotic ascriptions born from interspecies relations -- particularly between indigenous people and birds -- and to probe his view of the transfer of animation (or agency) between human and nonhuman beings.

IV. Early Modern Metaphor

A crucial component in our investigation is metaphor. Metaphors are at the core of cognitive processes. They indicate the transcription of non-symbolic signs into symbolic modes of representation. By examining the metaphors of a text, we gain a valuable insight into the cognitive processes of the writer. But more than that, metaphors also reflect a collective cognitive environment: the effectiveness of a metaphor depends, in equal measure, on its reception and transmission in respect of an audience. Metaphors are thus crucial to any semiotic or cognitivist reading -- they reveal both auctorial cognition within a text, and collective (cultural) thinking and aesthetic preferences in the readership.[21]

Metaphor was theorised extensively in the early modern period. More than an ornament or embellishment, it was viewed as central to strategies of textual representation. Indeed, theories of metaphor appeared across several poetic and rhetorical treatises from Joachim Du Bellay to Marie de

[21] Terence Cave, for example, discusses the 'cognitive power' metaphors reveal and relevance-theoretical responses to literary study have highlighted the importance of metaphor to the analysis of interpretative processes. See: Terence Cave, *Thinking with Literature: Towards a Cognitive Criticism* (Oxford: Oxford University Press, 2016), p. 85. Terence Cave and Dierdre Wilson, 'Introduction', in *Reading Beyond the Code: Literature and Relevance Theory*, ed. by Terence Cave and Dierdre Wilson (Oxford: Oxford University Press, 2018), pp. 1-20 (pp. 8-9).

Gournay.[22] Early modern French writers conceived of *métaphore* in two principal ways. First, it was seen as a rhetorical trope -- an ornament of, but also something that enlivened discourse. In the *Deffense et Illustration de la Langue Françoyse* (1549), for example, Du Bellay considered *métaphore* to be a crucial aspect of *Eloquution* (elocution), that which lends an embodied vigour (vertu) and health to one's text or oration:

> Eloquution (dy je) par la quelle principalement un Orateur est jugé plus excellent, et un Genre de dire meilleur, que l'autre: comme celle, dont est apellée la mesme Eloquence: et dont la vertu gist aux mots propres, usitez, et non aliénes du commun usaige de parler: aux Methaphores, Alegories, Comparaisons, Similitudes, Energies, et tant d'autres figures, et ornemens, sans les quelz tout oraison, et Poëme sont nudz, manques, et debiles.[23]

The enlivening produced by metaphors, allegories and other devices was rhetorically significant, for they lent considerable affective or argumentative power. Furthermore, metaphor was one of the author's key interpretative tools. Textual representation was a tricky task and a metaphor could relate disparate phenomena, forming connections between things as a means, in the words of Gournay, to 'transformer les sujects en sa propre nature.'[24] Put differently, metaphor was viewed as a device that could organise the abundant signs of the world and 'transform them into something else'. This latter definition already reveals the extent to which early modern writers thought in terms of signs, semiotic ascription and interpretation.[25]

Moreover, and perhaps most significantly in the context of our discussion, the writers of such treatises closely linked metaphor with agency and animation/ensoulment. Antoine Fouquelin, in *La Rhetorique Française* (1549), attempted to outline all of the things from which metaphors could be made, arriving at the conclusion that one could 'deriver des métaphores des animaulx et choses qui ont ame, comme des plantes et arbres.'[26] Metaphors required *ensoulment*: for a metaphor to work, the

---

[22] Joachim Du Bellay, *La Deffence, et Illustration de la Langue Françoyse (1549)*, ed. by Jean-Charles Monferran (Geneva: Droz, 2001). Marie Le Jars de Gournay, *L'Ombre de la demoiselle, oeuvre composée de meslanges* (Paris: Jean Libert, 1626) <https://gallica.bnf.fr/ark:/12148/bpt6k70563p> [accessed 6 Mar 2023], pp. 422-444.
[23] Du Bellay, p. 87.
[24] Gournay, p. 434.
[25] Caroline Trotot, 'Introduction', in *Métaphore, savoirs et arts au début des temps modernes*, ed. by Caroline Trotot and Bruno Petey-Girard (Paris: Classiques Garnier, 2016), pp. 7-20 (p. 12). Anne-Pascale Pouey-Mounou, 'La Métaphore vide et le voleur de mots: La Remotivation métaphorique des adages chez Rabelais (*Tiers Livre*)', in *Métaphore, savoirs et arts*, ed. by Trotot and Petey-Girard, pp. 115-137 (p. 132).
[26] Antoine Fouquelin, *La Rhétorique françoise d'Antoine Foclin* (Paris: A. Wechel, 1555) <https://gallica.bnf.fr/ark:/12148/bpt6k63291011> [accessed 6 Mar 2023], p. 17.

subject from which it was made had to have an *ame* or soul. Fouquelin's interpretation of metaphor stems from the classical notion of *translatio*, which was based on the idea that poetic *enargeia* could be transferred between subjects by metaphor. Therefore, *enargeia* can be constructed as a poetic form of agency and life travelling through metaphor. To construct a metaphor of, or from, a parrot, for instance, is to reconfigure the bird's agency by acknowledging that it is alive and therefore ensouled. Moreover, metaphor acts as a conduit. By describing one subject in terms of another, it transfers *enargeia* between the two. But this is also a process of transformation, of metamorphosis: the transferred agency has the effect of changing the shape and meaning of the described subject. Metaphor is thus a conscious procedure of transference (of *enargeia*, of agency) and subsequent transformation.

By paying attention to metaphors, we not only discover what the perceiver believes is animate (has *ame*) in the first place -- the subject from which the metaphor is fashioned -- we also witness the intended direction of this transferred animation, and the rhetorical effect that comes as a result.[27] To describe a New World animal by metaphorically comparing it to an Old World species is to transfer some of the *enargeia* -- and thereby the interrelated sets of meanings -- of the latter into the 'new' species. A contrived example of this process would be the description of an American beaver as bee-like, the comparison of its river dam to a hive, or the depiction of its behaviour as 'busy'. These metaphorical constructs transfer the *enargeia* of the well-known European bee, with all of its perceived associations with collective labour, *ordre* and *police* (in short, its *fabled* energy) into the American species. Through the metaphor, the 'soul' of the bee now resides in the beaver -- the same qualities and characteristics are now distributed between the two. Metaphors therefore interact closely with sign-theories and agency in early modern rhetoric and poetics. Léry harnesses and, indeed, continues to experiment with these interrelated concepts himself.

The first of the three remaining sections in our introduction will demonstrate how a semiotic engagement with the nonhuman world -- the successful interpretation of signs and the metaphors that

[27] Other scholars have grappled with the early modern interrelation of metaphor and agency (in nonhuman beings) in recent times. See, for example, Hassan Melehy's analysis of Montaigne's sand dunes in 'Des Cannibales' (I, 31): Hassan Melehy, 'Off the Human Track: Montaigne, Deleuze, and the Materialization of Philosophy', in *Early Modern Écologies*, ed. by Goul and Usher, pp. 23-48 (pp. 42-3).

are made as a result -- allows Léry to configure his own questions about agency and interspecies animation and, by extension, human and animal. However, such interpretation was not always so successful, or indeed possible. By focussing on a species of New World parrot, the second part demonstrates what happens when signs are misinterpreted, when communication fails and information is lost. Such instances of 'impaired' or 'frustrated' semiosis are equally important in the *Histoire*, as they encourage Léry to reflect on the other forms semiosis might take (namely, mimicry, misunderstanding and mockery). The final section then draws our attention to the main bird in question.

i. *Engoulevent:* Semiosis, Salvation and the Power of the Imagination

This section focuses on an enigmatic bird whose calls are only occasionally heard issuing over the forest canopy at night. The bird's description emerges from multiple interpretative layers involving the nonhuman world, the Tupinamba and the narrator. Léry successfully captures each one of these interpretative layers in turn (without flattening them) and discusses, at length, the kinds of meanings and metaphors that are made in the process. This section therefore disentangles this complex web of interaction and interpretation, all of which stems initially from the cries of the unseen animal. Although the bird only appears fleetingly (in both forest and narrative) it is worth pausing to hear it:

> Cet oyseau n'est pas plus gros qu'un Pigeon, et de plumage gris cendré: mais au reste le mystere que je veux toucher est qu'ayant la voix penetrante et encores plus piteuse que celle du Chahuant: nos pauvres *Toüoupinambaoults* l'entendant aussi crier plus souvent de nuict que de jour, ont ceste resverie imprimee en leur cerveau, que leurs parents et amis trespassez en signe de bonne adventure, et sur tout pour les accourager à se porter vaillamment en guerre contre leurs ennemis, leur envoyent ces oyseaux: ils croyent fermement s'ils observent ce qui leur est signifié par ces augures que non seulement ils veincront leurs ennemis en ce monde, mais qui plus est, quand ils seront morts que leurs ames ne faudront point d'aller trouver leurs predecesseurs derriere les montagnes pour danser avec eux.[28]

This passage bristles with semiotic potential. What becomes immediately clear is the many different sign categorisations that proceed from the description of the creature's call. The author moves from *mystere* and *resverie* to *signe de bonne adventure* and *augure* within the space of only a few lines.

[28] Léry, pp. 156-7.

Not only is he seeking to interpret the bird's call himself, the narrator also reformulates the Tupinamba interpretation (or semiosis) concurrently. Léry's interpretation is therefore inherently semiotic and reflexive from the outset, incorporating both signs and sign-interpretation processes. The opening line constitutes a qualification by visual analysis: the comparison of the New World bird with a *Pigeon* immediately characterises it as something fairly common and unremarkable. Indeed, it bears no name the narrator is aware of.[29] Initially, then, Léry evokes and thwarts a series of perceived assumptions about New World animals. Not all American birds are as impressive, or as colourful (it is *gris-cendré* 'ashy-grey') as other travellers' texts might suggest. The description calls into question the expectation of visual wonder in the New World more broadly. Once again, not everything seen there is as marvellous or ontologically challenging as you might think. This commentary, condensed within the opening phrase, prepares the reader for the shifted mode of attention in the following lines. The message being conveyed is clear: sights are not the only signs available for our interpretation -- there is a wealth of sound too if we but stop to listen.

Once our attention is directed to the auditory landscape, the narrator provides his first definition of the sign. The sound is a *mystere*, but this term also refers to the indigenous interpretation, as we will see further down. *Mystere* is highly evocative: it conveys both the modern meaning of 'strange' and the early modern one, which indicates the spiritual, religious realm. Indeed, *mystere* in the Renaissance means 'religious secret' or 'hidden rite' and also refers to a particular kind of religious drama.[30] At this point we witness the first expression of intentionality -- *que je veux toucher* -- which confers the principal agency of the sentence to the narrator. Only 'je' has the ability to convey this *mystere* to the reader -- only the narrator may divulge such secrets to the audience. As Léry casts his semiosis in religious terms, his narrator is transformed into a priest of sorts, both *myste*, a 'mystic' and

[29] The species was later identified as the *Engoulevent d'Amérique* (Common Nighthawk (*Chordeiles minor*)) by anthropologists. See Claude Lévi-Strauss, 'D'un Oiseau l'autre. Un exemple de transformation mythique', *L'Homme*, 93 (1985), 5-12. For ease of purpose, we will use this name in the section. However, it is nonetheless important to note that neither Léry nor the Tupinamba named it.

[30] Randle Cotgrave, *A Dictionarie of the French and English Tongues* (London: Adam Islip, 1611) <https://www.google.co.uk/books/edition/A_Dictionarie_of_the_French_and_English/IOhMAAAAcAAJ?hl=en&gbpv=0> [accessed 6 Mar 2023], s.v. mystère. Peter Happé, 'Introduction', in *Les Mystères: Studies in Genre, Text and Theatricality* (Leiden: Brill, 2012) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789401207669> [accessed 6 Mar 2023], pp. 7-20.

mystagogue (a non-native guide to the mysteries of a place), one who transcribes the auditory sign into text and reveals hidden meanings to the reader in what appears as a quasi-ceremonial undertaking.[31]

The *mystere* itself is grounded in an affective response to the sound, which is described as *penetrante* and *piteuse*, 'piercing' and 'pitiful', conjuring pathos. This sense is reinforced by a second comparative bird. The *Chahuant* (owl) whose name evokes the nocturnal mewing of cats, confers a series of qualities upon both the sound and the bird in question. As Pierre Belon notes in the *Histoire de la nature des oyseaux*, the owl is 'rare à voir, combien qu'on le puisse bien ouïr la nuict, et fait peur aux hommes timides.'[32] The call of this unknown bird conveys the same impression of haunting as that of the *Chahuant*, and such a comparison shows how the Old World approach to transcribing animal sounds is adapted in the *Histoire*. Sound-interpretation is a transplanted technique in this instance -- some aspect of Léry's own interpretation is borrowed from the natural-historical genre -- to which Léry then contributes.

Thus, within the first three lines, we become aware of a self-conscious process of semiosis in which the narrator makes explicit his own intentional agency as interpreter. This is further elaborated in the following clauses, which are concerned predominantly with the Tupinamba. The narrator introduces the Tupi with a possessive determiner -- *nos* -- and qualifies them as *pauvres*. Such a formulation is expressly parochial. Repeatedly in the *Histoire*, the narrator depicts the Tupinamba as an impoverished people in dire need (of God) and casts himself as the one who assumes responsibility for their moral and spiritual wellbeing. The semiotic agency of the narrator as guide is thus reinforced here, and its spiritual nature further specified: the Tupinamba *Pajé* is, as it turns out, a (Reformed) French priest.[33] Made possible by a common spiritual core -- the cultures of Léry and the Tupinamba are both subject to religious hierarchies -- the slippage from *Pajé* to priest is precisely what Léry

[31] For the figure of the 'mystagogue', see Wes Williams, 'D'un ami l'autre: La Figure du compagnon chez les pelerins de Jerusalem', *Romanic Review*, 94 (2003), 93-114 (p. 95).
[32] Pierre Belon, *Histoire de la nature des oyseaux: Avec leurs descriptions et naïfs portraicts* (Paris: Gilles Corrozet, 1555), p. 140.
[33] *Pajé* is the Old Tupi term for spiritual guides. *Pajé* is preferable to 'shaman' due to its specificity to the Tupinamba and freedom from colonial connotations. See Eduardo de Almeida, *Dicionário de tupi antigo: A língua indígena clássica do Brasil* (São Paulo: Global, 2013).

exploits. Although he confers an emergent subjectivity on the Tupi by indicating their potential to form part of a (European) religious community, it remains distinctly ancillary in comparison with the narrator. The syntactical construct *je veux toucher* continues to design him as the principal agent.

The key moment lies in the following sentence. Moving beyond the *mystere*, the narrator terms the Tupinamba's interpretation of the bird's call as *ceste resverie imprimee en leur cerveau* -- a 'raving' or 'fancy'. While *resverie* does evoke a dreamlike state in the early modern sense, which attests to a wider evaluation of indigenous beliefs as 'dreams' by European explorers, the predominant meaning is one of 'madness' or 'mental instability'.[34] Read literally, it is 'imprinted in their minds'. Thus, what we see here is the narrator's depiction of Tupinamba semiosis as a material process involving the imagination or fantasy. The imagination was the subject of a renewed, pan-European debate in the early modern period, discussed by philosophers, poetical theorists and others from Marcilio Ficino to Montaigne.[35]

Léry's understanding of imagination has two principal features. Firstly, it is grounded in sensory perception (the Tupi imagination is sparked by hearing the cry of the *Engoulevent*) and, secondly, it has the power to delude the interpreter, to lead them (both rationally and morally) astray, into madness. These two facets resonate with several contemporary definitions of imagination, chief among which is that of Reformed philosopher Pierre de La Primaudaye. La Primaudaye's *L'Academie Française* (1577) develops the Aristotelian precepts outlined in *De Anima* and views the imagination as an unrelenting force: it is 'soudaine, et tellement sans arrest, que mesme en dormant à peine elle peut prendre repos, qu'elle ne soit tousjours occupee en songeant.'[36] The struggle to contain the imagination in La Primaudaye's view, as O'Brien shows, mirrors a broader conflict between God and the Devil: 'if God has given man natural light in the understanding by which to make moral

[34] See, for example, Anthony F. C. Wallace, 'Xanadu: Dreams and the Dark Side of Paradise', in *Dreams, Dreamers, and Visions: The Early Modern Atlantic World*, ed. by Anne Marie Plane and Leslie Tuttle (Philadelphia: University of Pennsylvania Press, 2013) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.9783/9780812208047> [accessed 6 Mar 2023], pp. vii-xiv (pp. ix-xii).
[35] For an excellent synopsis of the evolving definitions of 'imagination' in the Renaissance, see John O'Brien, 'Reasoning with the Senses: The Humanist Imagination', *South Central Review*, 10 (1993), 3-19 <https://www.jstor.org/stable/3189996> [accessed 6 Mar 2023].
[36] Pierre de La Primaudaye, *Suite de l'Académie Françoise, en laquelle il est traicté de l'homme* (Paris: Guillaume Chaudiere, 1580) <https://gallica.bnf.fr/ark:/12148/bpt6k8707794z.texteImage> [accessed 6 Mar 2023], 61r. Quoted in O'Brien, p. 10.

distinctions, the imagination by contrast is subject to diabolic influence.'[37] This assessment displays a notable similarity to Léry. As we see in the *Histoire*, the Tupinamba imagination is not tempered, it results in the signs of the forest being misinterpreted and the subjects being led astray. The New World therefore acts as a proving ground for Léry's understanding of imagination; from his interaction with the indigenous people and their interpretation of a bird's call, he concludes that the imagination is a powerful force, able to delude the subject when it is not guided correctly.

The remainder of the passage focuses on Tupinamba semiosis, specifically how it results in the formulation of the belief (the *resverie*). The sign definition shifts once again as Léry introduces another kind of nonhuman being -- the dead. For the Tupi, the bird's call is a *signe de bonne adventure*, a 'sign of good fortune' sent by their deceased relatives as an exhortation to act courageously in battle. In other words, the bird's call is a metaphor which conveys the *enargeia* of the Tupinamba ancestral voice -- or at least part of it. Here again, Léry broaches the question of agency. The depiction does not confer any intentionality to the *Engoulevent*. Rather, the bird is a conduit, capable only of relaying the message. While this configures intentional agency primarily in the deceased Tupinamba (those sending the messages), the bird nonetheless retains some form of semiotic agency. It can still *produce* signs (without necessarily comprehending them) at a given moment and may move freely between the realms of the present and the afterlife. Its own form of agency is more subtle.

Crucially, however, in order to understand the bird's call as a *signe de bonne adventure*, the Tupinamba must themselves interpret the sign correctly, that is, in accordance with their own frame of reference. They must, simultaneously, take the sign to be -- and herein comes the final sign-definition -- an *augure*, a 'divination' or 'omen'. The entire final clause establishes a conditional mode, predicated upon an opposition between present and future tenses: 's'ils observent […] ils veincront leurs ennemis […] quand ils seront morts […] leur ames ne faudront point d'aller trouver leurs predecesseurs.' The construct depicts the sending and receiving of signs between the living and the deceased Tupinamba as a cyclical process. If the living Tupinamba interpret the signs correctly and

[37] O'Brien, p. 11.

behave according to the guidance, they may accede to this spiritual realm themselves, wherein, as *amis trespassez*, they may send messages back to the living, using the *Engoulevent* as a conduit. The final clause thus shows the Tupinamba sign-interpretation to be a process of continual feedback and self-perpetuation.

Indeed, the potential (present plus future) construct shifts both the living Tupinamba and the deceased into contemporaneity, into a present mode of being: the dead continue to function as sign-emitting members of human society beyond the end of their earth-bound lives. However, we must remind ourselves that, for Léry, this interpretation is denoted as a *resverie* -- nothing more than the continuation of a misleading myth -- in which even the signs themselves become *piteuses*. While Léry successfully identifies the Tupinamba semiosis around the call of the *Engoulevent* (and therefore gives himself licence to imagine what it might be like to construe signs in such ways), he ultimately characterises it as a process of heretical belief-formation.

Furthermore, Léry constructs a metaphor of his own here. To return to the question of subjectivity and salvation, Léry construes the call of the *Engoulevent* as a sign that the Tupinamba are capable of conceiving *an* afterlife -- that they are receptive to some form of spiritual guidance and, therefore, potentially sympathetic to his own beliefs. In this sense, and in light of the evangelical Reformed mind of the narrator, the bird remains a bona fide *augure*, a metaphor for the Tupinamba's potential to accede to the Christian afterlife.

Overall, the passage reveals how we can use semiosis to investigate the agency and ensoulment granted to the bird by the Tupinamba, and the assessment of this process by Léry. What is extraordinary about the *Histoire* is that each interpretative layer is captured, allowing the narrator to account for (but also to reframe) the agency of each being. By depicting each interpretative procedure concurrently, Léry is able to highlight the commonalities, as well as the crucial differences between Tupinamba and European semiosis. For the Tupi, the bird's call is a *signe de bonne adventure* and an *augure*, reflecting a belief in the afterlife. In terms of Léry's assessment, the retrospective negative assessment by the Calvinist pastor does not cancel out the acknowledgement of a common experience of an uncanny bird's call.

The text, however, tells only one half of the *Engoulevent* story. The bird appears again in the chapter on Tupinamba warfare, and it is here we see how semiosis also plays out in the *Histoire*'s images. In the engraving of Tupi combat (Fig. 1), we can read the bird situated in the top right corner as an *Engoulevent* for several reasons. Firstly, it perches on a branch adjacent to the mountains, one of its topographical domains in Tupinamba cosmology. Next, it looks out over the scene of ritual combat taking place below, as if to issue the ancestral exhortation and to prepare for the passage of Tupinamba souls into the afterlife. The small beak gives it only a fleeting resemblance to the other birds (chiefly parrots) that appear in Léry's book.



Figure 1. *Portrait du Combat entre les Sauvages Toüoupinambaoults et Margajas Ameriquains*.[38]

An initial analysis might suggest that the image preserves the Tupinamba interpretation. However, the scene is highly stylised and, therefore, does much more than convey the indigenous meaning. In terms of composition, the image is divided into two parts along a horizontal axis about a third of the way from the top down. In one reading, this is simply the brow of a hill. Yet we may also take this division

[38] Léry, p. 196.

to be symbolic: between the two halves, there is a clear contrast in the kinds of activities taking place. The upper half depicts Tupinamba domesticity -- people are visibly collecting wood, sleeping in hammocks, cooking and playing. In the lower half, by contrast, there is a scene of extreme violence, populated with the contorted faces and bodies of Tupi warriors in battle. Taken together, the image translates the conceptual similarities and oppositions perceived by the narrator: these people are domestic and peaceable, but also violent and destructive. They are recognisably human -- they follow rituals familiar to Léry's readers, both in their domestic lives and in war. Yet the fact they remain largely naked already unsettles an imagined commonality with idealised European society. The inclusion, on the left-hand side of the domestic scene, of a classically configured cannibal barbecue, is a further unsettling sign, one which renders the Tupinamba something closer to barely human monsters.[39]

The sense of simultaneity in Lery's image is important. As its construction suggests, each of these (morally contrasting) readings of Tupinamba culture is possible at the same time. In light of this, the meaning of the *Engoulevent* changes. As there is no spatial division in the scene, the deceased Tupinamba (represented by the bird) are shown to be contemporaries of the other human and nonhuman beings. The image therefore implicitly recognises the agency of the Tupi ancestors by showing their existence to be located in a different mode of present being. The *Engoulevent* therefore features as an eschatological sign in the context of the image: it represents the spiritual afterlife of the Tupinamba (and, potentially, a Christian one) as existing concurrently with the terrestrial world.
In the text, the narrator interprets the *Engoulevent* as a metaphor for (potential) Tupinamba salvation. The same interpretation occurs in the image: the bird is placed at the interface of the two halves, residing within the upper one yet visibly overlooking the events taking place in the lower one. Caught at the seam, the bird (as is the case for Tupi salvation) is ultimately troubled by the diverging tendencies towards peaceability and violence, domesticated humanity and brute inhumanity. Within

[39] Many scholars have shown how Léry constructs his 'Other' along such an axis. See Frank Lestringant, 'Préface: Léry ou le rire de l'Indien', in *Histoire d'un voyage faict en la terre du Brésil*, ed. by Frank Lestringant (Paris: Librairie Générale Française, 1994), pp. 15-39 (p. 16). Wes Williams, '"L'Humanité du tout perdue": Early Modern Monsters, Cannibals and Human Souls', *History and Anthropology*, 23 (2012), 235-256 <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1080/02757206.2012.675817> [accessed 6 Mar 2023] (p. 237).

this visual metaphor, the nature of the bird itself (specifically the sound it produces) continues to resonate. Just as the *Engoulevent* is only occasionally heard, so too is the potential for the Tupinamba to accede to the Christian afterlife only fleetingly sighted by the narrator. Returning to semiosis, we can see how metaphors may also be visual. The *enargeia* of the *Engoulevent* (with all its elusiveness and ephemerality), which is initially drawn from hearing the bird's call, plays out in the image. Léry's semiosis therefore continues to resonate in the iconography.

ii. Cherimbavé: Mimesis, Misinterpretation and Mockery

As we have seen, attending to semiosis reveals many knotted networks of meaning and gives us a clear understanding of Lery's reflections on semiosis and ensoulment, as on human and nonhuman agency in the *Histoire*. But not all sign-interpretations are so successful. Léry's account also presents multiple instances of mistranslation, misunderstanding and failed (or frustrated) semiosis. In such moments, we become aware of the restrictions in our own ability to interpret and transcribe the meaning of signs. Misinterpretation occurs around Léry's presentation of another species of New World bird: the parrot. Unlike other American birds, parrots already had an extensive cultural history in Europe. Léry, like many others, was fascinated by the bird's ability to mimic human speech and gesture. This section therefore contrasts the preceding by reading a different species in the *Histoire*: Léry's parrots show us what happens when semiosis is impaired, interpretation fails and meanings are lost.

We begin with an engraving in which the reader is encouraged to think in terms of interspecies semioses: the *Danseur et Sonneur de Maracas* (Fig. 2). The image presents two human and two nonhuman characters, arranged almost symmetrically. In the foreground, we see the *Danseur* with his ankle ornaments and *enduap* (rhea-feather buckler) beside a sitting monkey. In the background, we ostensibly have the *Sonneur de Maracas* holding the ritual object, wearing an impressive feather diadem alongside a parrot.[40] The main visual draw in the scene lies between the bird and the feathered head of the *Sonneur*. The two appear to share a gaze, and the man's

[40] We can confirm this as a parrot for its large, hooked bill, upright posture and distinct primary feathers.

gesticulations further suggests that a form of nonverbal communication is taking place between them. The image therefore hints at an interspecies intelligibility.



Figure 2. *Danseur et Sonneur de Maracas*.[41]

Referring to the text, we recognise the *Sonneur* as the Tupinamba *Caraibe* (*Pajé*). Acting as spiritual guides for the Tupi, these individuals were troubling for the Reformer Léry. In the *Histoire*, the *Pajé* becomes part of a discourse of idolatry -- a theme which runs throughout our discussion: 'Et ne vous les sçaurois mieux comparer, en l'estat qu'ils estoyent lors, qu'aux sonneurs de campanes de ces caphards, lesquels en abusant le pauvre monde par-deça portent de lieu en lieu les chasses de sainct Antoine, de sainct Bernard et autres tels instrumens d'idolatrie.'[42] As we can see, Léry's dancing *Pajé* holding the *Maracas* quickly brings to the mind of the Reformed pastor a Catholic priest carrying a relic. The image thus reflects the broader Reformed anxiety about relics as pieces of the body still

[41] Léry, p. 246.
[42] Léry, p. 245.

filled with a saintly power (or *enargeia*) and, in conjunction with the text, enacts a critique of errant preachers in France.[43]

Léry constructs a creaturely metaphor in the description: these preachers are not *Catholiques* but 'caphards'.[44] Referring back to the image, we notice a similar process of metaphor-making happening between the parrot and the *Pajé*. As mentioned, parrots were deeply inscribed with meaning in early modern France -- due to their ability to imitate human speech, they embodied mimicry.[45] In the first instance, mimicry entailed a lack of understanding, the mindless repetition of something that has already been said. Yet mimicry also had the potential to be more subversive: as it reduces serious speech and discourse to mere sounds and gestures, it can be interpreted as a form of parody. Indeed, the notion that the bird represents a subverted, undermined wisdom is further reinforced by the Reformed perception of parrots. Reformers associated the birds strongly with the Papacy. Popes throughout the late medieval and early modern period had authorised the payment of an official parrot keeper and, as a result, the bird quickly became a symbol of popish extravagance and excess.[46]

In the context of Léry's discussion, the image of the parrot already carries the associated meanings of mimicry, mockery and Catholic ostentation. Furthermore, the *Pajé*, covered in parrot feathers, appears to mimic the bird himself. Mimicry therefore appears in several places in the scene, distributed visually between the man and the bird. Indeed, if we pay attention to the *Sonneur*'s gesticulations -- the raised right leg; the pointing of both fingers and toes -- by the theatrical conventions of the period, we can confirm that the *Pajé* (like the parrot) visually constructs a sense of vulgarity, excess and lack of reason.[47] Yet the sense of irrationality produced by flailing limbs could,

---

[43] Ellen McClure, *The Logic of Idolatry in Seventeenth-Century French Literature* (Cambridge: Boydell and Brewer, 2020), <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1017/9781787446892> [accessed 6 Mar 2023], p. 9.
[44] 'Caphard' denotes both a 'moath, or beetle that flyes by night' and a 'hypocrite; a counterfeiter of, or dissembler in, religion, devotion, pietie' (Cotgrave, s.v. caphard).
[45] Terence Cave, *Pré-Histoires II: Langues étrangères et troubles économiques au XVIe siècle* (Geneva: Droz, 2001), p. 32.
[46] Bruce Boehrer, *Parrot Culture: Our 2,500-year-long Fascination with the World's Most Talkative Bird* (Philadelphia: University of Pennsylvania Press, 2004), p. 55. Bruce Boehrer, *Animal Characters: Nonhuman Beings in Early Modern Literature* (Philadelphia: University of Pennsylvania Press, 2010) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=3441770> [accessed 6 Mar 2023], p. 90.
[47] Sabine Chaouche, *L'Art du comédien: Déclamation et jeu scénique en France à l'âge classique* (Paris: Champion, 2001), p. 50.

similarly, reveal something more subversive. As Chaouche shows, 'des gestes ou des postures qui n'appartiennent pas à la rhétorique apparaissent comme un défaut majeur chez l'orateur -- qui ne se fait plus "orateur" mais "farceur" ou "bateleur".'[48] The mindless *Pajé* becomes a *bateleur*, his performance a 'farce'. Thus, both senses of mimicry (mimicry as (poor) imitation or a lack of understanding; mimicry as mockery) feature in the *Pajé* as they do in the parrot.

The shared gaze is crucial to this arrangement as it explicitly shows us how the metaphor-making process takes place. The *Pajé* looks upon the parrot and, as he does, the *enargeia* of the bird is transferred into him. The sightline therefore works as a vector of visual *enargeia*. Indeed, we can apply the same principle to the two characters in the foreground. As the *Danseur* leans towards and looks down at the monkey, a part of the nonhuman *enargeia* -- *singerie*, playfulness, but also (as in the case of the parrot) mimicry and mockery -- are transferred to him. The engraving therefore constructs the discourses of *singerie* and *contrefaçon* (embodied by the monkey and parrot respectively) and, through the visual transfer of *enargeia*, shows how both qualities are perceptible in the Tupinamba. Indeed, given the context in which the image appears, the *Histoire* means to show us just how far *singerie* and *contrefaçon* are embedded in idolatrous religious practices.

The Tupinamba are not the only ones to interact with parrots in the *Histoire*. In a key passage in which the narrator and his companions encounter a Tupi woman and her pet parrot, we witness another instance of failed semiosis.

> Mais c'estoit bien encor plus grand merveille d'un Perroquet de ceste espece lequel une femme sauvage avoit apprins en un village à deux lieues de nostre isle: car comme si cest oiseau eust eu entendement pour comprendre et distinguer ce que celle qui l'avoit nourri luy disoit: quand nous passions par là, elle nous disant en son langage, Me voulez-vous donner un peigne ou un miroir, et je feray tout maintenant en vostre presence chanter et danser mon Perroquet? si là dessus, pour en avoir le passetemps, nous luy baillions ce qu'elle demandoit, incontinent qu'elle avoit parlé à cest oyseau, non seulement il se prenoit à sauteler sur la perche où il estoit, mais aussi à causer, siffler et contrefaire les sauvages quand ils vont en guerre, d'une façon incroyable: bref, quand bon sembloit à sa maistresse de luy dire, Chante, il chantoit, et Danse, il dansoit. Que si au contraire ne luy plaisoit pas, et qu'on ne luy eust rien voulu donner, si tost qu'elle avoit dit un peu rudement à cest oyseau, *Augé*, c'est à dire cesse, se tenant tout coy sans sonner mot, quelque chose nous luy eussions peu dire, il n'estoit pas lors en nostre puissance de luy faire remuer pieds ni langue.[49]

[48] Chaouche, p. 54.
[49] Léry, pp. 152-3.

As with the *Engoulevent*, this passage presents multiple interpretative layers -- multiple semioses -- in quick succession. Léry is amazed by the woman's ability to communicate with the parrot. He interprets the entire interaction as a *grand merveille*. Receiving instruction from the woman, the parrot immediately begins to talk, whistle and mimic (*contrefaire*) Tupi warriors in battle. Moreover, the woman is able to engage the bird at will, to solicit the singing and dancing on command. Léry's presentation of the interspecies interaction therefore confers considerable cognitive agency to the parrot, and a distinct intentional agency to the woman.

In the following sentence, he develops the sense of mutual intelligibility further. When Léry and his companions are reluctant to hand over one of their trading goods for the parrot's performance alone, the woman issues another command: *Augé* -- stop! From this point, the bird does not budge, and the visitors are powerless to make it move themselves. The parrot, it turns out, will only listen to commands given by the Tupinamba woman. Léry's story therefore recognises the intentional agencies of both the bird and the woman. Together, they have a successful semiosis which curates an interspecies connivance and leaves the Frenchmen at a loss. Crucially, it is now the Europeans who lack understanding and, as the passage continues, a further litany of misinterpretations take place on their part.

> Aussi ceste femme sauvage l'appellant son *Cherimbavé*, c'est à dire, chose que j'aime bien, le tenoit si cher que quand nous le luy demandions à vendre, et que c'est qu'elle en vouloit, elle respondoit par moquerie, *Moca-ouassou*, c'est à dire une artillerie: tellement que nous ne le sceumes jamais avoir d'elle.[50]

Following their failed interaction with the parrot -- and realising the communicative power only the woman possesses -- the narrator and his companions propose to purchase the bird instead. But the Europeans have misread the situation once again: this is no trading trinket, the woman states, it is her *Cherimbavé* (a kind of 'wild pet', as Norton has shown), something dear to her, too beloved to be bartered with.[51] Léry has misunderstood the true value of this creature and, as the narrator believes

[50] Léry, p. 153.
[51] Marcy Norton, 'The Chicken or the Iegue: Human-Animal Relationships and the Columbian Exchange', *The American Historical Review*, 120 (2015), 28-60 <https://www.jstor.org/stable/43696335> [accessed 6 Mar 2023] (p. 39).

that the unique interspecies interrelation may be reduced to a trading transaction, the episode assumes the shade of a colonial fable.

The consequence of this failed semiosis is fairly extreme. As the narrator cannot make the parrot sing or dance, and then fails to buy it, his intentional agency is continually thwarted throughout the passage. Moreover, the key agents (the Tupi woman and bird) openly deride the narrator by naming the object that must be handed over for the exchange to be fair -- *Moca-ouassou, c'est à dire une artillerie* -- a gun. As the intentionality of the woman comes up against that of the Europeans, the true stakes of the transaction are revealed. In addition to showing how European intentions remain, at times, uncaptured or unfulfilled in the New World, the passage also underscores the limits of the narrator's own interpretative ability. He is the one who misinterprets, makes mistakes, and he is the one who ends up being mocked.

Over the course of the interaction, the narrator demonstrates how semiosis can be, at once, successful (between the Tupi woman and the parrot) and impaired (between the Europeans, the Tupi woman and the parrot). The episode, then, is an important instance in which the narrator defines the limits of his own sign-interpreting ability and intentional agency. In contrast with the image of the *Danseur et Sonneur de Maracas*, the parrot attains a new significance in the text. Instead of standing as a visual metaphor for mimicry (and potential mockery), it becomes an emblem of the power of the Tupinamba woman (her ability to make it talk, and stop talking, at will). The parrot reflects the mutual intelligibility between animal and indigenous woman, a mutual understanding to which neither the narrator (nor any European in the scene) has access. In the text, the parrot stands as a metaphor of impaired semiosis and the limits of European agency in the New World.

iii. *Toucan:* A Dancing Bird

Having seen what a semiotic reading can offer, we now turn our attention now to the main bird in question. Just as the *Engoulevent* introduced Léry to Tupinamba cosmology around the afterlife, and the parrot offered him an insight into the rituals of the *Pajé*, the Toucan provided an important lens for understanding Tupi material culture and ritual practices. As in the case of the preceding birds,

Léry transcribes multiple interpretative layers around the Toucan, offering a glimpse of the indigenous view alongside his own mediated account.

As well as demonstrating how a semiotic reading functions in relation to the Toucan, this section also reveals how interacting with the bird encouraged reflection on a number of critical discourses in the traveller's text -- ideas about beaks and feathers, indigenous craft and ingenuity, nonhuman agency, social performances, colour and beauty. The ideas Léry introduced in his discussion of the bird would appear time and again during the bird's transmission across Europe. The *Histoire* therefore serves as a critical starting point, identifying many of the major themes and threads to which we return over the course of our discussion.

a. Feathers, Craft and Colour in Tupinamba Material Culture

From the early letter of Pêro Vaz de Caminha to the surveys of colonial administrators in the seventeenth century, a great number of European texts discussed the indigenous use of feathers in the New World.[52] Feathers featured in a huge variety of objects, from ritual capes and headdresses to musical instruments and weapons. As Léry informs us, the Tupinamba domesticated species of Toucan, parrot and parakeet in order to routinely collect feathers for use.

> Nos *Toüoupinambaoults* les plumans soigneusement trois ou quatre fois l'annee, font (comme j'ay dit ailleurs) fort proprement des robes, bonnets, bracelets, garnitures d'espees de bois et autres choses de ces belles plumes.[53]

Indigenous makers showed impressive artisanal skill in fashioning such a range of objects from feathers. But the Tupinamba were also adept at husbandry, Léry suggests. They took care when plucking feathers, and only did so three or four times a year, allowing the birds to recover and new plumes to grow. Moreover, as we know from Léry's presentation of the Tupi woman and her *Cherimbavé*, avian species were more than a source of raw material for the Tupinamba.

---

[52] For Aztec examples, see Leo Cabranes-Grant, 'From Scenarios to Networks: Performing the Intercultural in Colonial Mexico', *Theatre Journal*, 63 (2011), 499-520 <https://www.jstor.org/stable/41411237> [accessed 6 Mar 2023]. For Inca examples, see Heidi King, 'Feather Arts in Ancient Peru', in *Peruvian Featherworks: Art of the Precolombian Era*, ed. by Heidi King (London: Yale University Press, 2012), pp. 9-44.
[53] Léry, p. 151.

Accommodated in the domestic surroundings of the village, treated with love and respect, they entertained a kinship with the indigenous people. As the text suggests, the Tupinamba granted them a nascent form of subjectivity.

Yet Léry mostly focuses on the material application of bird parts to the human body, specifically feathers, feather ornaments and featherworks. Throughout the *Histoire*, he often describes avian species and indigenous material culture in the same brushstroke: the two are practically indissociable. It is not in the chapter on birds (Chapitre XI: *De la varieté des oyseaux de l'Amerique, tous differens des nostres: ensemble des grosses chauve-souris, abeilles, mousches, mouschillons et autres vermines estranges de ce pays-la*) that the Toucan first appears, for instance, but in the one describing the physical appearance, stature and bodily ornamentation of the Tupinamba.[54]

> Et au surplus, ayans en leur pays un oyseau qu'ils nomment *Toucan*, lequel (comme je le descriray plus amplement en son lieu) a entierement le plumage aussi noir qu'un corbeau, excepté sous le col, qu'il a environ quatre doigts de long et trois de large, tout couvert de petites et subtiles plumes jaunes, bordé de rouge par le bas, escorchans ses poitrals (lesquels ils appellent aussi *Toucan* du nom de l'oyseau qui les porte) dont ils ont grande quantité, apres qu'ils sont secs, ils en attachent avec de la cire qu'ils nomment *Yra-yetic*, un de chacun costé de leurs visages au dessus des oreilles: tellement qu'ayans ainsi ces placards jaunes sur les jouës, il semble presques advis que ce soyent deux bossettes de cuivre doré aux deux bouts du mord ou frain de la bride d'un cheval.[55]

Toucan is a Tupinamba term, the narrator states: it refers both to the living bird and to the feather sample taken from it. The living bird and the material object are one and the same in the indigenous language. Thus, as the narrator proceeds to outline the material properties of the bird in considerable detail himself, he reinforces the indigenous definition. The plumage is as black as a raven's, with a crop of small, fine yellow feathers measuring four *doigts* in length, and three in width. The yellow breast is bordered by red feathers on the underside.

Léry's description reveals a close personal engagement with the bird. The narrator provides impressive detail on dimensions and textures and, although *doigts* is a standard unit of measurement in the period, it hints at the possibility that Léry had both seen and touched one of the *Toucan* material

[54] Chapitre VIII. *Du naturel, force, stature, nudité, disposition et ornemens du corps, tant des hommes que des femmes sauvages Bresiliens, habitans en l'Amérique, entre lesquels j'ay frequenté environ un an*. Léry, pp. 94-116.
[55] Léry, pp. 100-101.

samples. Indeed, having lived among the Tupinamba for several weeks following his expulsion from the French colony by Villegagnon, it is likely Léry witnessed a living bird as well.

As the passage shows, Léry was fascinated by the colours and the fine aesthetic qualities of the Toucan. The bird's yellow feathers are 'subtiles' and he compares their colour to a metal used in goldsmithery in the Old World ('cuivre doré'). But his main interest lies in the Tupinamba application of Toucan feathers, and he carefully outlines the material processes of plucking, drying and gluing. The Tupi skin the breast for a fine pelt of red and yellow feathers -- this is the feather sample they name *Toucan*. They have a great number of these pelts, he continues, which they first cure before sticking them to their cheeks using a resinous gum named *Yra-yetic*. Enumerating the technical procedures, Léry hints at a discourse about indigenous craft: the Tupinamba are dextrous, skilful and they produce objects akin to those in Europe which are considered to be of high aesthetic value. Indeed, he develops this idea further in the passage, reinforcing the connection to aesthetic forms of European craft -- even suggesting the artisanal superiority of indigenous makers:

> Tellement qu'apres qu'elles sont par eux ainsi diversifiees, entremeslees, et fort proprement liees l'une à l'autre, avec de tres-petites pieces de bois de cannes, et de fil de cotton, n'y ayant plumassier en France qui les sceust gueres mieux manier, ny plus dextrement accoustrer, vous jugeriez que les habits qui en sont faits sont de velours à long poil. [...] il fait merveilleusement bon voir.[56]

Moreover, they are not only adept at knotting and weaving (as indeed other contemporary accounts show), but also at gluing and sticking with plant material.[57] In short, they exhibit an impressive knowledge of their environment, the natural materials that may be found there and how to combine them in material crafts. Although the narrator stops short of telling us precisely why the Tupinamba prepare feathers in this way, he grants them considerable creative agency and what theorists of European craft called ingenuity. By comparing the Tupinamba worked material (the Toucan feather sample adhered to the cheek) with the fine metalwork of European artisans, he promotes indigenous agency even further and momentarily reopens the debate on their relative 'humanity' through the crafted objects they produce.

[56] Léry, p. 101.
[57] Hanß, p. 610.

However, Léry also problematises the interpretation of the Toucan-feathered Tupinamba's visual appearance. The two *placards* of Toucan pelts glued to the cheeks reminds the narrator of the two copper studs on the bit of a horse's bridle. The comparison is an evocative one, and it appears -- at first -- to present a discourse of animalisation: the Tupinamba have such an affinity to their natural environment that they assume a creaturely guise. Yet the comparison is also problematic as the horse was not native to the New World and was, moreover, a creature that terrified indigenous people. In his essay 'Des Coches' (III, 6), Montaigne famously discussed indigenous people's horror at witnessing Europeans on horseback for the first time.

> Le juste étonnement qu'apportaient à ces nations-là, de voir arriver si inopinément des gens barbus, divers en langage, religion, en forme, et en contenance, d'un endroit du monde si éloigné, et où ils n'avaient jamais imaginé qu'il y eût habitation quelconque, montés sur des grands monstres inconnus, contre ceux, qui n'avaient non seulement jamais vu de cheval, mais bête quelconque duite à porter et soutenir homme ni autre charge, garnis d'une peau luisante et dure [...].[58]

Although the horse stood for nobility and social status in the Old World, this symbolic meaning did not hold as horses travelled to the Americas.[59] The animal became synonymous with discourses of entry, conquest and colonial dominion, particularly in the context of the Hispanic Americas.[60]

Léry's comparison between the feathered Tupinamba and the horse therefore does much more than ascribe a sense of creatureliness to the indigenous dancer -- it also evokes the troubling image of the European domination (and destruction) of native peoples across the continent. Indeed, the specificity of a horse's bridle also implies possession and control, the image of indigenous populations as being subject to colonial rule. While Léry grants considerable creative agency to the Tupinamba through their impressive, aesthetically attractive craft, his moralising concerns call into question the true extent of their power subsequent to the European arrival. In other words, their agency, also metaphorically reflected in the image of the bridled horse, appears limited.

---

[58] Michel de Montaigne, *Essais III*, ed. by Emmanuel Naya, Delphine Reguig and Alexandre Tarrête (Paris: Gallimard, 2009), p. 183.
[59] Peter Edwards and Elspeth Graham, 'The Horse as Cultural Icon: The Real and the Symbolic Horse in the Early Modern World', in *The Horse as Cultural Icon: The Real and Symbolic Horse in the Early Modern World*, ed. by Peter Edwards, Karl A. E. Enenkel and Elspeth Graham (Leiden: Brill, 2011) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004222427> [accessed 6 Mar 2023], pp. 1-33 (p. 4).
[60] Greg Bankoff, 'Big Men, Small Horses: Ridership, Social Standing and Environmental Adaptation in the Early Modern Philippines', in *The Horse as Cultural Icon*, ed. by Edwards, Enenkel and Graham, p. 101.

Over the course of the *Histoire*'s opening passage on the Toucan, the feather acts as an affordance. Léry's interpretation of Toucan feathers (their visual appearance, their feel and the way they were used by the Tupinamba) inspires a set of discourses around colour, craft and indigenous agencies in the New World. Such ideas would appear time and again, debated and reworked by many writers across multiple early modern accounts. But it was not the feathers and featherworks alone that captivated Léry. He also spent considerable time thinking about Toucan parts in relation to Tupinamba ritual.

b. Noise, Naivety and Idolatry in Tupinamba Ritual

Coming to the *Histoire*'s chapter on birds, Léry offers a second description of the Toucan.[61] Once again, the narrator reinforces the connection between the living bird and the material sample. But the feather object assumes a new meaning in the context of Tupi ritual:

> Les autres oyseaux du pays de nos Ameriquains sont, en premier lieu celuy qu'ils appellent *Toucan*, (dont à autre propos j'ay fait mention ci-dessus) lequel est de la grosseur d'un Ramier, et a tout le plumage, excepté le poictral, aussi noir qu'une Corneille. Mais ce poictral (comme j'ay aussi dit ailleurs) estant l'environ quatre doigts de longueur et trois de largeur, plus jaune que saffran, et bordé de rouge par le bas: escorché qu'il est par les sauvages, outre qu'il leur sert, tant pour s'en couvrir et parer les jouës qu'autres parties du corps, encores par ce qu'ils en portent ordinairement quand ils dansent, et pour ceste cause le nomment *Toucan-tabouracé*, c'est à dire plume pour danser, ils en font plus d'estime. Toutesfois, en ayans grande quantité, ils ne font point de difficulté d'en bailler et changer à la marchandise que les François et Portugais, qui traffiquent par-dela leur portent.[62]

Although the narrator reworks the previous description in large parts, he also provides a revised interpretation in this chapter. First, he refers to a different species of corvid (the crow) to emphasise the black colour of the plumage. Then he points to another common European bird (the ring dove) to give a sense of physical scale. As we will see in the following chapter, this descriptive technique -- one of relativisation and of reference to better-known birds -- is characteristic of natural history. In this sense, Léry borrows from (and, subsequently, contributes to) a key epistemic debate in natural-historical discourse.

[61] Léry, pp. 147-163.
[62] Léry, p. 154.

Furthermore, as he identifies the blacks and reds, and accentuates the yellow of the breast with the comparative expression 'plus jaune que saffran', Léry insists on the visual appeal of the feather colouration. This would become a major theme in successive accounts of the Toucan and one to which we will return at numerous points in our discussion. The allusion to saffron is significant: not only does it reaffirm Léry's aesthetic appraisal of Toucan feathers, it also invokes a discourse of trade and luxury goods in Europe. As Léry makes clear in his description of Toucan-feather trading, the bird's plumes had a distinct social and aesthetic value for both the Tupinamba and the Europeans.[63]

Once again, Léry draws attention to the indigenous use of Toucan feathers. Repeating the technique for skinning the breast, he informs us that the Tupinamba not only cover their cheeks with the pelt samples, but their entire bodies. Although we lose the specificity of where the feather ornament is placed in this instance, we gain crucial contextual information on the performative setting in which these feathers are put to use. The Tupi refer to the sample as *Toucan-tabouracé*, which means a 'feather for dancing' in their language. As Léry transcribes the indigenous term, he intimates that the object has a specific social value, and that it is crucial to their dancing ritual.

There are numerous instances in the *Histoire* providing us with Léry's interpretation of Tupinamba dancing. For him, dancing reveals the qualities of naivety and naturalness in indigenous society. In his description of the *caouin* ritual, for example, he notes: 'soit qu'ils boivent peu ou prou, outre ce que j'ay dit, qu'eux n'engendrans jamais melancolie, ont ceste coustume de s'assembler tous les jours pour danser et s'esjouir en leurs villages.'[64] Dancing characterises the joy of the Tupinamba for the narrator and is associated with a distinct soundscape -- one of shouting, whistling and clamorous vocal encouragement: 'tant que ce *Caoüi-inage* dure, nos friponniers et galebontemps d'Ameriquains, pour s'eschauffer tant plus la cervelle, chantans, siflans, s'accourageans et exhortans l'un l'autre de se porter vaillamment, et de prendre force prisonniers quand ils iront en guerre.'[65]

As the Toucan is so closely connected to dancing through the feather sample, it becomes associated -- to at least some degree -- with these perceived indigenous qualities of jocundity and

[63] Trade, luxury and fashion become core themes in subsequent discussions of the Toucan's plumage. See the Thevet section in Chapter III, pp. 154-157.
[64] Léry, p. 129.
[65] Léry, p. 128.

light-heartedness. Moreover, the association with the noisy spectacle of Tupi dancing identifies the Toucan with a particular auditory environment in the New World. Although the bird does not speak for itself in this instance, the connection opens an important dimension in our discussion: we are not only trying to understand how seeing a Toucan informed European perception, but also, crucially, the kind of impact the sounds either produced by or taking place around the bird had in early modern thought.

However, Léry does not construct all indigenous performances in such a positive light. Throughout the *Histoire*, the narrator interprets the rituals of the Tupinamba in two ways. In one mode, indigenous performance (which includes dancing) is taken as 'merveilleusement bon voir' -- aesthetically appealing, reflecting the joy and naivety of the New World inhabitants. The second mode is far more troubling to Léry; it includes the activities of the *Pajés*, as we have already seen, and the ritualised cannibalism of prisoners taken in war. These kinds of ritual raise the moralising concerns of the narrator -- they reflect the Tupinamba tendency towards excess, falsehood and, ultimately, idolatry.

Feathers feature prominently in both kinds of ritual. Léry's perception of feathers and feather-objects is therefore paradoxical. Although they display the aesthetic charm and crafting ability of the Tupinamba, they frequently appear in spectacles that are not so pleasant to see. The paradox comes to light clearly in Léry's account of the cannibal ritual. The Tupinamba executioner is covered in feathers -- 'richement decoree de beaux et excellens plumages, comme aussi luy en a un bonnet et autres paremens sur son corps.'[66] Yet the 'beaux et excellens plumages' contrast sharply with the ritual, which he interprets as an 'estrange tragedie', 'chose horrible à ouir, et encore plus à voir.'[67] Despite the positive aesthetic construction of featherwork, such objects are framed by a ritual that is fundamentally unpleasant, both to hear and to see.

[66] Léry, p. 215.
[67] Léry, p. 223.

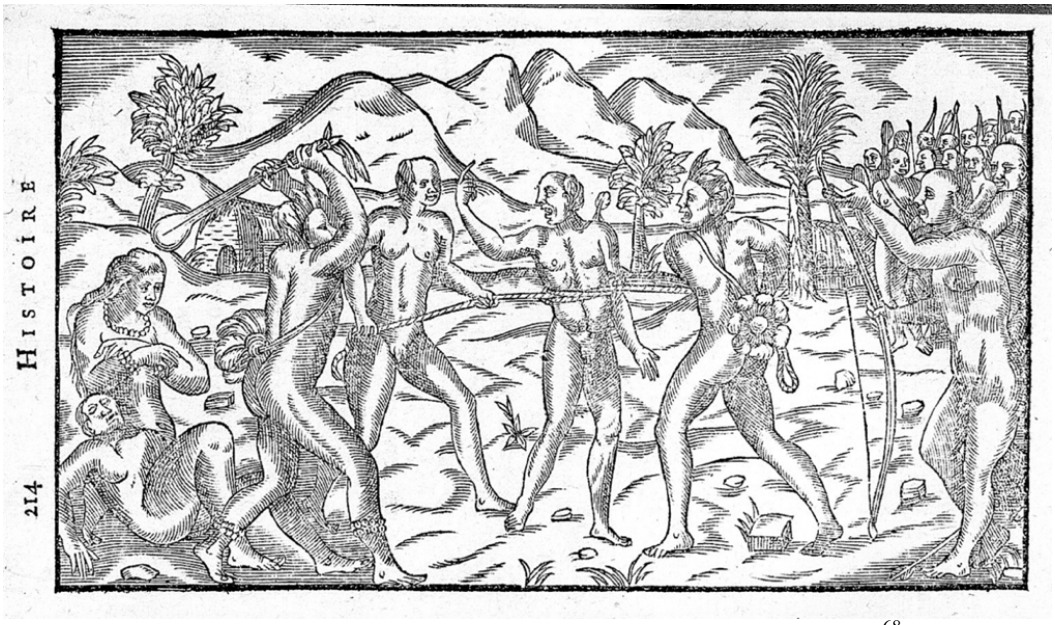


Figure 3. *Guerriers Indiens du Brésil ayant fait un prisonnier*.[68]

Due to the lack of specificity in naming the kinds of feather involved in the second category of ritual, we never get a sense of whether Léry connected Toucan plumes to (what he interpreted as) the morally troubling spectacles of the Tupinamba. However, as we have seen in the case of the *Danseur et Sonneur de Maracas*, the parrot was the bird most strongly connected to excess, contortion and deception in the *Histoire*. A parrot perches alongside the *Pajé* in the engraving, tricks the European visitors in the text, and their distinct primaries can be found elsewhere in the *Histoire*'s iconography, notably on the heads and adorning the clubs of the Tupi executioners (Fig. 3).[69] While the paradox exists explicitly in the case of parrot feathers, then, it is not so visible in the case of the Toucan. Léry therefore appears to locate Toucan feathers primarily in the first mode of performance: they reflect more the naivety, naturalness and joy of the Tupinamba. *Toucan* is not a feather for cannibalism, nor for idolatry it transpires, but simply for dancing.

In both descriptions, Léry insists on the aesthetic value of Toucan feathers. Not only are they visually appealing and pleasing to the touch, their use by the Tupinamba affords Léry the opportunity to launch into an incipient discourse on technical expertise, craft and indigenous creative agency -- something he develops further around other featherworks. Yet although he investigates the technical

[68] Léry, p. 214.
[69] We should take care to outline the distinction between the text and the images of the *Histoire*, as information on Léry's role in the production of the engravings is scarce.

processes closely and transcribes his experience of the *Toucan-tabouracé* ritual in his text, he does not capture the true cosmological meaning for the Tupinamba in either case. The implicit European semiosis which focuses on craft in the first case, and constructs the dance as a joyful, noisy spectacle in the second (which the reader infers from other examples of dancing), displaces the indigenous semiosis -- which, in this instance, remains silent. Although we do not learn what the Toucan really meant for the Tupinamba in the *Histoire*, the bird takes on a new life as it is transcribed into European culture and configured around a set of ideas relating to creatureliness, craft, ingenuity and agency. Writers, engravers and a host of others across early modern Europe would return, time and again, to these topics in their own representations of the Toucan. As we will now see, this thesis is primarily organised around an absence -- it reveals the extent of European semiotic ascription and meaning-making subsequent to the loss of (or failure to transcribe) 'early modern' indigenous cosmological thinking.

Chapter I. 'Merveilleusement difforme': The Toucan in Natural History

Introduction

One of the key points of entry for the Toucan in early modern thought was natural-historical writing.[70] From the aptly named 'Big-beak' of Gonzalo de Oviedo's *De la naural hystoria de las Indias* (1526) to the 'American Woodpecker' of Johann Faber's *Animalia Mexicana* (1628), natural historians across Europe reflected extensively on how to name, describe and classify this 'new' bird in their accounts. This chapter provides an overview of the Toucan in natural history, formulating a narrative of transmission which contextualises and informs each of the chapters to follow.

Natural-historical texts of the early modern period drew on a wide range of sources, including written reports, verbal testimonies, images, material samples, anatomical specimens and eventually, living creatures. Natural-historical semiosis therefore relied on a variety of sources, from bookish knowledge to experiential information. It was the natural historian's task to interpret the abundance of signs, organise them into classificatory sequences and present them succinctly to an audience. As we have noted, the sign-interpretation process is most visible in descriptions of animal species from the New World.[71] While evidence of American animals did exist, it remained scattered, only accumulating gradually as the vessels of transoceanic navigators returned to port. The natural historian had to be discerning in their assessment of what little information was available and relied heavily on imaginative inferences.

This chapter carries out a semiotic reading of both textual and visual representations. How did natural historians interpret the Toucan? What kinds of meaning did they inscribe in the bird? What did they view as its salient characteristics, and how were they transposed into text and images? In other

[70] In the context of this discussion, we understand 'natural history' as works involved in the systematic or categorical study of natural organisms and objects. It should be noted, however, that 'natural history' as a distinct discipline or generic field was not so neatly defined at the time.

[71] Roger French and Miguel de Asúa, *A New World of Animals: Early Modern Europeans on the Creatures of Iberian America* (London: Routledge, 2016) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=4817020> [accessed 6 Mar 2023]. Peter Mason, 'From Presentation to Representation: *Americana* in Europe', *Journal of the History of Collections*, 6 (1), 1-20 <https://doi.org/10.1093/jhc/6.1.1> [accessed 6 Mar 2023].

words, this chapter tells the story of semiotic ascription in early modern natural history around the Toucan. It reveals the extent and shape of the bird's life in the genre.

Our first set of questions considers the ascription of epistemic values to the bird. Images are vital in this regard: copied, reworked and reprinted in multiple volumes, a visual depiction could have a discursive life of its own, independent of its original (con)text. Moreover, the life of an image was influenced by much more than authorial choice.[72] By focussing on images in natural history, not only do we witness the visual part of the epistemic story play out, but we also gain a valuable insight into the interpretations of other actors involved in the discipline.

As indicated, natural historians were not exclusively concerned with establishing the bird in epistemic terms. Many accounts pick up on the vivid colouration of the feathers, the scale and proportion of the beak and the overall form. As Léry did in his *Histoire*, many natural historians drew attention to the aesthetic dimension of the Toucan. But which of the bird's features were discussed in terms of their beauty? How did aesthetic appraisals differ between accounts? What might this tell us about the evolution of aesthetic appreciation reflected in natural-historical discourse? This second set of questions thus draws attention to the ascription of aesthetic values to the Toucan.

Finally, there was a clear intertextual aspect to the bird's dissemination across Europe. Natural historians worked closely together in the period. They reproduced and referenced one another's ideas; they shared reports, corroborated evidence and sent material samples to one another through agents and collectors. The third set of questions in this chapter focuses on the ascription of social values to the bird in natural-historical writing. Who were the key agents to help establish the bird in European natural history? Who became most influential? How was authority constructed -- or, indeed, undermined -- over time?

An impressive breadth of scholarship has told the epistemic and social histories of natural-historical knowledge making in the early modern period.[73] Indeed, among such studies is an account

---

[72] Kusukawa, p. 63. Victoria Dickenson, *Drawn from Life: Science and Art in the Portrayal of the New World* (Toronto: University of Toronto Press, 1998) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=4671445> [accessed 6 Mar 2023], p. 67.

[73] Raphaële Garrod, 'Introduction. Knowledge and Literature: The Natural-Historical Description as Epistemic Genre?', in *Natural History in Early Modern France: The Poetics of an Epistemic Genre*, ed. by Raphaële Garrod and Paul J. Smith (Leiden: Brill, 2018), pp. 1-17. Daniela Bleichmar, *Visible Empire: Botanical*

of the Toucan's initial reception in natural history by Paul J. Smith.[74] However, by shedding new light on the aesthetic dimension of natural-historical semiosis, our discussion reveals a major aspect only little discussed in the literature. The chapter weaves together the three main threads (epistemic, aesthetic and social), following the natural-historical lives of the Toucan as it travelled textually from France to the rest of Europe. Indeed, it was through a series of sixteenth-century French sources that the Toucan was first established in European natural-historical discourse. The pivotal works by Pierre Belon, André Thevet and Ambroise Paré are studied in the first section ('The Toucan in French Natural History'). The second section ('The Toucan takes flight across Europe') then focuses on the large compendious volumes produced beyond France: volumes which can be read as responding, in large measure, to the early French accounts. The principal sources here include Ulisse Aldrovandi's *Ornithologiae* (1599), Johann Faber's *Animalia Mexicana* (1628), Juan Eusebio Nieremberg's *Historia naturae, maxima peregrina* (1635) among others.

Before we set out, however, we should pause to consider the very first depiction of a Toucan in Europe. As noted, Gonzalo Fernández de Oviedo y Valdés was the first to mention the bird in his 1526 *De la Natural Hystoria de las Indias*. The text was a *sumario*, a concise edition printed in advance of *La Historia General de las Indias* (1535).[75] *La Historia General* enjoyed a broad dissemination. Translated into French by Jean Poleur, the text was printed in two editions by Michel de Vascosan in Paris in 1555 and 1556.[76] The Spanish natural historian Francisco López de Gómara used it as a major source of information. Indeed, he published a book of the same name in 1554,

Expeditions and Visual Culture in the Hispanic Enlightenment (Chicago: University of Chicago Press, 2012) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.7208/chicago/9780226058559.001.0001> [accessed 6 Mar 2023]. See also Daston and Park, *Wonders and the Order of Nature*, Findlen, *Possessing Nature* and *Worlds of Natural History*, ed. by Curry et al.

[74] Paul J. Smith, 'On Toucans and Hornbills', in *Early Modern Zoology: The Construction of Animals in Science, Literature and the Visual Arts*, ed. by Karl A. E. Enenkel and Paul J. Smith (Leiden: Brill, 2007) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/ej.9789004131880.i-657> [accessed 6 Mar 2023], pp. 75-119.

[75] Gonzalo Fernández de Oviedo, *La historia general de las Indias* (Seville: Cromberger, 1535) <https://babel.hathitrust.org/cgi/pt?id=ucm.5323537519&view=1up&seq=5> [accessed 6 Mar 2023].

[76] Gonzalo Fernández de Oviedo, *L'Histoire naturelle et generalle des Indes, isles, et Terre Ferme de la Grand Mer Oceane*, trans. by Jean Poleur, ed. by Michel de Vascosan (Paris: Michel de Vascosan, 1556) <https://babel.hathitrust.org/cgi/pt?id=ucm.5324316051&view=1up&seq=7> [accessed 6 Mar 2023].

which would itself critically inform Montaigne's 'Des Coches'.[77] Oviedo's texts travelled well. Curiously, though, Oviedo's 'Picudo' did not: it appeared only in the *sumario* of 1526.[78]

> Una ave hay en Tierra-Firme, que los cristianos llaman picudo, y tiene un pico muy grande, según la pequeñez del cuerpo, el cual pico pesa mucho más que todo el cuerpo. Este pájaro no es mayor que una codorniz o poco más, pero el bulto es muy mayor, porque tiene mucha más pluma que carne. Su plumaje es muy lindo y de muchas colores, y el pico es tan grande como un xeme o más, revuelto para abajo, y al principio, a par de la cabeza, tan ancho como tres dedos o casi; y la lengua que tiene es una pluma, y da grandes silbos y hace agujeros con el pico en los árboles, por donde se mete, y cría allí dentro; y certo es ave muy extraña y para ver, porque es muy diferente de todas cuantas aves yo he visto, así por la lengua, que, como es dicho, es una pluma, como por su vista y desproporción del gran pico, a respecto del cuerpo. Ninguna ave hay que cuando cría esté más segura y sin temor de los gatos, así porque ellos no pueden entrar a tomarles los huevos o los hijos, por la manera del nido, como porque en sintiendo que hay gatos se meten en su nido y tienen el pico hacia fuera, y dan tales picadas, que el gato ha por bien de no curar de ellos.[79]
>
> [There is a bird on the mainland that the Christians call 'Picudo'; it has a very large bill relative to the smallness of the body, which weighs much more than the whole body. This bird is no bigger than a quail, or just a little bit, but the shape is far larger because it has much more plumage than flesh. Its plumage is very beautiful and of many colours and the beak is as big as a *xeme* or more, curved downwards and, from its start at the head, as wide as three fingers or thereabouts. Its tongue is a feather. It makes big whistling sounds. With the beak it makes holes in trees, inside which it lives and breeds. The bird is certainly a very strange sight, for it is very different from all of the birds I have seen on account of its tongue, which, as I have said, is a feather, and because of the appearance and disproportion of the big beak relative to the body. No bird is so safe and without fear of cats when it breeds, for they cannot enter to take the eggs or chicks because of the way the nest is made, and when they hear the cats nearby, they go into the nest and put their beaks outside; they give such big pecks that the cat does not trouble them.]

One of Oviedo's main concerns is to give an impression of physical size and scale. In the opening line, he contrasts the *very large* bill with the *relative smallness* of the body, equating the overall size with that of a quail (a bird commonly known to Europeans). By establishing the exact proportions, Oviedo responds to the epistemic question of scale. Yet his insistence on disproportion -- a term he uses explicitly further down -- also demonstrates an aesthetic dimension in play. With a massive, heavy beak supported by a tiny frame, Oviedo perceives hybridity and incongruity in the Toucan. It is 'certainly a very strange sight', he remarks, an affirmation which locates the bird in the Renaissance

[77] Francisco López de Gómara, *La historia general de las Indias, con todos los descubrimientos, y cosas notables que han acaescido en ellas, dende que se ganaron hasta agora* (Antwerp: Juan Steelsio, 1554) <https://books.google.co.ve/books?id=m7OHMz-DozgC&hl=es> [accessed 6 Mar 2023]. Montaigne, *Essais III*, p. 183.
[78] The Toucan remained absent from all the material reworked into *La historia general*.
[79] Oviedo, *De la natural hystoria*, p. 56.

aesthetics of wonder.[80] Moreover, the noise the bird makes further accentuates the sense of disproportion: although it is only the size of a quail, it makes *big whistling sounds*. As the epistemic question of scale slides into an aesthetic one, we are left with the impression of this being a small, bizarrely formed creature with a big voice.

The emphasis on visual impression, alongside behavioural characteristics and sound, strongly implies the natural historian had seen a living bird for himself. Indeed, Oviedo had travelled to the New World on several occasions. Before he wrote about his journeys in the late 1510s, he spent an extensive period working as a *veedor* (overseer of mines) and *escribano general* (judicial notary) in the territory of Castilla del Oro (the continental southern rim of the Caribbean, now part of Panama and Colombia).[81] Like many writers of the New World in the early modern period, Oviedo relied on the rhetoric of *autopsia* to establish his epistemic authority. Although it is buried deep in the syntactic structure of the second sentence, *yo he visto* ('I have seen') is the key line here. The first-person verbal phrase implicitly asks the reader to believe in the narrator -- not only because he has witnessed this bird, but also because he has seen many others. The transcription of sound also plays a big part in Oviedo's construction of epistemic authority: it demonstrates that he has attended closely to the sights, noises and other aspects of the multi-sensory environment in the New World -- facets which one cannot glean from bookish accounts alone.

Furthermore, Oviedo's discussion of the Toucan's behaviour grants it a form of agency. The bird uses its beak to carve out a hollow nest cavity inside a tree, the natural-historian reports, and uses it to defend its young from predatory cats. He constructs these abilities in hyperbolic terms: 'no bird is so safe', he claims, and 'they give such big (or strong) pecks.' The *Picudo*, in short, is a clever little

[80] The aesthetics of wonder was based on 'variety and ingenuity in nature as well as in art.' Daston and Park, p. 209. 'Wonders' and 'marvels' are (unfamiliar, strange or unrecognised) things that incite an intellectual and emotional passion, which serves as the starting point of investigation. As many scholars have shown, 'monsters' in the early modern world were deeply connected with wonder and marvel. See Davies, pp. 183-184. Williams, *Monsters*, p. 12. Céard, pp. viii-xii. James V. Mirollo, 'The Aesthetics of the Marvelous: The Wondrous Work of Art in a Wondrous World', in *Wonders, Marvels, and Monsters in Early Modern Culture*, ed. by Peter G. Platt (Newark: University of Delaware Press, 1999) <https://catalog.hathitrust.org/Record/004071254> [accessed 6 Mar 2023], pp. 24-45 (pp. 25-26). We return to the question of wonder in further detail below: see pp. 91-95.

[81] Kathleen Ann Myers, *Fernández de Oviedo's Chronicle of America: A New History for a New World* (Austin: University of Texas Press, 2007) <https://catalog.hathitrust.org/Record/005648875?> [accessed 6 Mar 2023], p. 13.

creature, noisy and feisty in protecting its chicks, possessing a unique ability to craft and carve out its own nest. Indeed, the name itself, which literally translates as 'Big-beak' or 'pointy-nosed' also carries a sense of being 'cunning'.[82] Oviedo's interpretation therefore shows the bird to be a conscious, intelligent being. Thus, from even the very first recorded European encounter with a Toucan, we are able to perceive the bird's ability to inspire reflection on nonhuman agency in the New World.

I. The Toucan in French Natural History

i. Pierre Belon: *Histoire de la nature des oyseaux* (1555)

As Michel de Vascosan published Poleur's translation of Oviedo in 1555, natural-historical writing in France was beginning to expand in a significant way. Guillaume Rondelet had just printed his volume on fish.[83] Two major natural-historical volumes on birds were published in the same year: one in Paris, Pierre Belon's *Histoire de la nature des oyseaux*, and the other, the third book of Conrad Gessner's *Historia animalium*, just across the border in Switzerland.[84] Natural historians were bringing birds into print on an unprecedented scale. Between the many accounts of the Toucan to appear in French natural-historical writing in the sixteenth century, many would make a series of distinct claims that would be considered, debated and reproduced for years to come.

Belon's text was the first volume to provide an image of the Toucan -- albeit an incomplete one. In contrast with Oviedo, Belon gave no name to the bird. Instead, he based all of his observations on a material specimen of a beak placed in front of him. Indeed, Belon contradicts Oviedo in several ways.

> Ceux qui naviguent aux terres neufves, faisants leur profit de toutes choses, apportent ce qu'ils trouvent de bon, pour vendre aux marchands. Or est-ce qu'il y a un oyseau en ce païs là, ayant le bec long de demy pied, gros comme le bras d'un enfant, poinctu et noir par le bout mais blanc en toutes autres endroits, et quelque peu coché par les bords. Il est creux par dedans: estant si finement delié, qu'il en est transparent et tenue comme parchemin, et par ce est moult legier. C'est sa beauté qui fait qu'on en voit ja plusieurs par les cabinets des hommes curieux

[82] Oviedo therefore momentarily opens a discourse on *flair* or pointy-nosed-ness standing as a sign of intelligence. We return to this question in further detail in Chapter II. See below pp. 116-121.
[83] Guillaume Rondelet, *Libri de piscibus marinis, in quibus veræ piscium effigies expressæ sunt* (Lyon: Macé Bonhomme, 1554) <https://www.biodiversitylibrary.org/item/130384#page/5/mode/1up> [accessed 6 Mar 2023].
[84] Conrad Gessner, *Historiæ animalium liber III. qui est de Avium natura* (Zurich: Christoph Froschauer, 1555) <https://archive.org/details/gri_33125010867691/page/n151/mode/2up> [accessed 8 Mar 2023].

> de choses nouvelles: Car au demeurant, lon ne s'en sert à aucune chose. Et nous n'ayants veu l'oyseau qui l'a produit, n'en pouvons dire autre chose, sinon que par soupçon le pensons estre de pied plat. Et par ce l'avons mis en cest endroit avec les oyseaux de rivière. Mais pour faire voir quel est ce bec, en avons cy mis le pourtraict. Il est seul entre touts ceux qu'avons observez, à qui n'ayons veu conduicts pour odorer.[85]

As we can see, the French natural historian frames the Toucan in economic terms from the opening line. By identifying the commercial activities of navigators and merchants that take place there, Belon insists that the New World is a space defined primarily by trade. Yet the precise social dimension of the bird's arrival in Europe is merely alluded to; we only know that it is through the activities of traders that Belon received his material sample (Fig. 4).

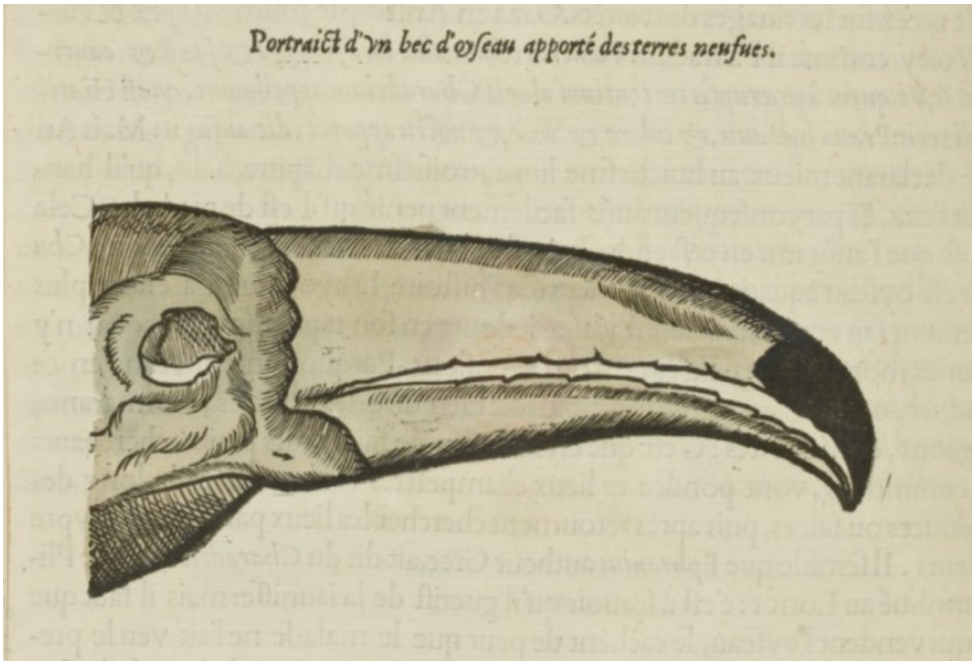


Figure 4. *Portraict d'un bec d'oyseau apporté des terre neufves*.[86]

As Belon recounts his experience of looking at and touching the beak specimen, he marks a conceptual shift from full *autopsia* in the New World to partial autopsy in Europe. The epistemic outcome of this shift is significant. Because we have not seen the living bird, he claims, we cannot say anything more, yet we are permitted to *think*, to make an inference based on what is in front of us. It is this fifth sentence of the passage that neatly defines Belon's epistemic principles. As the natural

[85] Belon, p. 184.
[86] Belon, p. 184.

historian cannot provide an eyewitness account of the whole living bird in its native environment, he denies himself the authority to speak about it -- or, rather, defines its limits. Instead, he may only talk about what is directly before him: the bird in bone form. The sound present in Oviedo's account is therefore lost in the *Histoire*. But Belon's haptic analysis provides detailed information on the material qualities of the bird in a way Oviedo does not, and his measurement of the beak makes it even bigger than the Spanish natural historian claims -- it is 'gros comme le bras d'un enfant'.

Furthermore, Belon's anatomical investigation allows him to make inferences about the overall shape, habitat and diet of the living creature. He places the unnamed bird at the tail end of his third order, among 'ceux qui vivent es eaux doulces et salees, nageants sur l'eau', which classifies it as a water bird.[87] Indeed, he reinforces the classification in the description, stating that it belongs among other 'river birds'. As Smith points out, Belon's interpretation is likely based on an anatomical comparison with other water birds (such as ducks and mergansers) whose bills have serrated edges to catch fish.[88] After feeling the notched edges of the mandibles, Belon makes a comparative inference, which produces the distinct epistemic claim.

Yet Belon remains rhetorically ambiguous. In the final line, he argues that the bird is unlike any that he has seen before because there are no holes in the beak through which the bird may smell. Something is missing. While he makes a strong claim about the bird's habitat, he is more hesitant around the beak, and he draws attention to the sense of epistemological challenge it poses. The open-ended assertion invites the reader to make up their own mind about how the bird breathes. Indeed, as we will see, Belon's followers each responded to this conundrum in their own way. Belon is therefore rhetorically agile: he flits between making a clear classificatory claim and raising a puzzling anatomical question. Yet the nameless, immobile bird that he outlines is quite literally worlds apart from Oviedo's living *Picudo*. The noisy, cunning creature of New Spain becomes colourless, motionless, silent and lifeless on the natural historian's desk.

[87] Belon, p. 7.
[88] Smith, p. 80.

ii. André Thevet: *Les Singularitez de la France Antarctique* (1557)

The next account to appear was that of the travel writer André Thevet. His second publication, *Les Singularitez de la France Antarctique*, printed by Maurice de la Porte in Paris in 1557, was a first-hand relation of the 1555 Protestant expedition to Brazil led by Nicolas Durand de Villegagnon.[89] Thevet's book provides the first eyewitness account of the living bird in French. Furthermore, it presents the first complete image of the bird and transcribes the name given by the Tupinamba: *Toucan*. A key source in the narrative of transmission across early modern Europe, Thevet's *Singularitez* is worth quoting in full:

> Sur la coste de la marine, la plus frequente marchandise est le plumage d'un oyseau, qu'ils appellent en leur langue *Toucan*, lequel descrirons sommairement, puis qu'il vient à propos. Cest oyseau est de la grandeur d'un pigeon. Il y en a une autre espece de la forme d'une pie, de mesme plumage que l'autre: c'est à sçavoir noirs tous deux, hors-mis autour de la queuë, ou il y a quelques plumes rouges, entrelacées parmy les noires, soubs la poitrine plume jaune, environ quatre doigts, tant en longueur que largeur: et n'est possible trouver jaune plus excellent que celuy de cest oiseau: au bout de la queue il a petites plumes rouges comme sang. [...] Au reste cest oyseau ne vit d'autre chose parmy les bois ou il fait sa residence, sinon de certains fruictz provenans du païs. Aucuns pourroient penser qu'il fust aquatique, ce qui n'est vray semblable, comme j'ay veu par experience. Au reste cest oyseau est merveilleusement difforme et monstrueux, ayant le bec plus gros et plus long quasi que le reste du corps. J'en ay aussi apporté un qui me fut donné par delà, avec les peaux de plusieurs de diverses couleurs, les unes rouges comme fine escarlate, les autres jaunes, azurées, et les autres d'autres couleurs.[90]

In similar fashion to Belon, Thevet frames the Toucan in the context of trade.[91] Yet, as we can see, the main emphasis is on colour and the aesthetic dimension of the bird's feathers. As he describes the 'petites plumes rouges comme sang' or 'rouges comme fine escarlate' and claims one cannot find a 'jaune plus excellent que celuy de cest oiseau', Thevet accentuates the sense of beauty and depicts almost a completely different creature relative to Belon's bony black-and-white beak.

Thevet's *Toucan* is, by comparison, colourful, vibrant and lively. But, as we soon discover in the second half of the passage, the traveller does not see the whole bird as so beautiful. On account of

---

[89] André Thevet, *Les Singularitez de la France Antarctique, autrement nommée Amérique, et de plusieurs terres et isles découvertes de nostre temps* (Paris: Maurice de la Porte, 1557). For an excellent biography of Thevet's travels, see Frank Lestringant, *Le Brésil d'André Thevet: Les Singularités de la France Antarctique (1557)* (Paris: Chandeigne, 2011), p. 18.

[90] Thevet, fol. 90^{v}-91^{v}.

[91] We will develop the questions of trade, fashion and luxury in Thevet's texts in Chapter III. See below pp. 163-166.

the huge beak, which is almost as thick and long as the rest of the body, the bird is also 'merveilleusement difforme et monstrueux'. The description draws the Toucan into the category of wonders, marvels and the 'monstrous' in the context of the New World. In this sense, the phrase provides an epistemic definition, but it also marks an aesthetic assessment of the bird's appearance. The characterisation of the bird's 'monstrosity' stems from its 'difformité' -- 'deformitie', 'ouglinesse' or 'unseemlinesse', as Cotgrave defines it.[92] Despite the aesthetic colouration of the feathers, the Toucan also appears to belong in a category of things which are not so pleasant to see. Thevet therefore points out another paradox -- the bird is a hybrid, an uneasy combination of a grotesque beak with beautiful feathers, both chimerical and contradictory in nature. In this sense, *difformité* assumes another guise. Although it has no verified meaning as such in the period, *difformité* is a useful term for us to think about the 'two-part', 'di-formed' nature of the Toucan in early modern thought. Indeed, the image in the *Singularitez* (Fig. 5) reinforces the notion of a bipartite division: the bird perches in a triangular pose, which pivots around the eye. The visual presentation is similarly split in two -- on one side, the body, on the other, the beak. As in the text, then, the aesthetics of wonder is visible in the image.



Figure 5. *D'un oyseau nommé Toucan*.[93]

[92] Cotgrave, s.v. difformité.
[93] Thevet, fol. 91ʳ.

The woodcut engraving makes several epistemic assertions of its own. While Thevet would not have made the image himself (it was likely produced in an atelier, probably that of Jean Cousin or Bernard de Poisduluc in Paris) it nonetheless functions as a clear epistemic rebuttal of Belon.[94] The image displays a nostril halfway along the upper mandible. It is through *this* conduit, the engraver shows, that the bird is able to breathe and smell. Furthermore, the edges of the beak are smooth, without denticulation. This heavily altered bill corroborates Thevet's textual claim. Contrary to what 'aucuns pourroient penser' -- by which he means Belon directly -- the Toucan is not a water bird. Actually, it lives in trees and it feeds on fruit. Following on from the definitive restoration of colour, the passage takes shape as a distinct polemic with Belon.

The epistemic recalibration occurs throughout the description. Thevet has seen not one, but *two* kinds of Toucan and, in order to make them familiar to readers at home, he offers two comparisons with common Old World birds. One is the size of a *pigeon*, the other the shape of a *pie*. The approximations mark an early attempt to bring the bird(s) into the European frame of reference -- as we will see, they would be repeated time and again in successive accounts. Furthermore, as we sense from the polemic with Belon, Thevet's account also contains a critical assessment of likelihood, the way knowledge is passed on and who can be trusted as a reliable source. According to him, the only one with true authority to speak on these matters is the eyewitness observer: in this sense, Thevet displaces Belon's armchair autopsy to reclaim New World *autopsia*. Indeed, his insistence on testimonial authority is reflected rhetorically in the passage: 'J'ay veu par experience', 'J'ay apporté un chapeau' and 'J'en ay aussi apporté un qui me fut donné par delà' are all phrases which emphasise the value of first-hand observation.

The *Singularitez* therefore reshapes the discourse of the Toucan by rebuking Belon's *Histoire* at several turns. The beak is remoulded and smoothed. The bird is removed from water. Colour is decisively restored and, crucially, the impression of a lively creature in the New World returns. Yet, in a perhaps surprising development, Thevet gives no indication about the sound that the bird makes. Despite claiming to have witnessed one himself, he avoids the question of noise altogether. Unlike

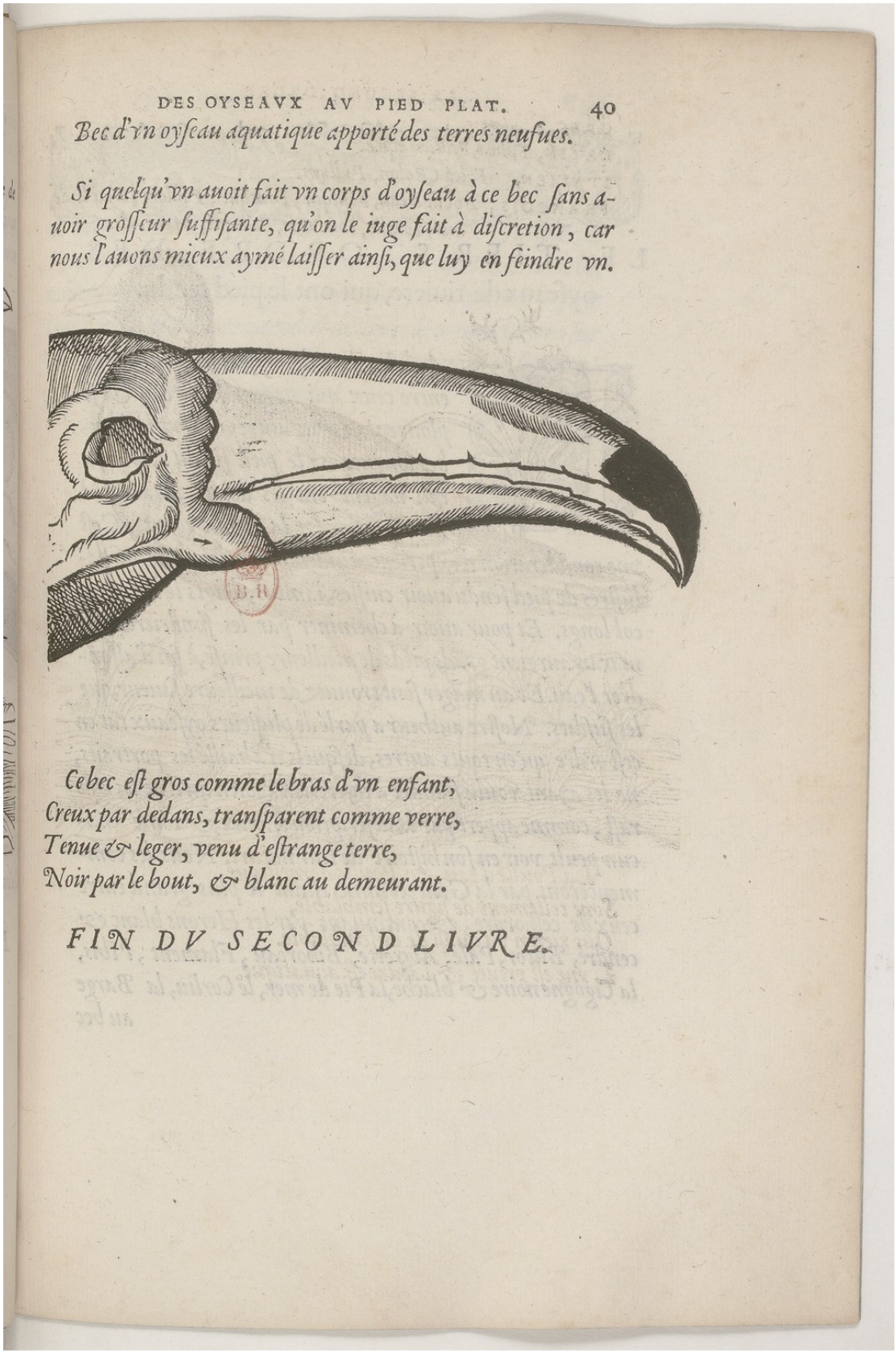
[94] Lestringant, *Le Brésil d'André Thevet*, p. 5.

Oviedo, who insists on its bizarre 'big whistling sounds', Thevet's Toucan remains silent -- a feature which might cast doubt on the traveller's claims of autoptic knowledge.

iii. Pierre Belon: *Portraits d'oyseaux* (1557)

Belon's discussion of the Toucan did not end with the *Histoire de la nature des oyseaux*. In the same year as Thevet's *Singularitez*, Guillaume Cavellat printed a shorter version of Belon's *Histoire* -- *Portraits d'oyseaux*.[95] The *Portraits* reprinted all of the images from the larger volume and compressed the long descriptions into a few lines of verse. Requiring fewer materials and less time to make, the edition was cheaper to produce and more affordable to purchase. The book was therefore more widely accessible, in terms of both cost and format. The *Portraits* is one of many examples of printers seeking to turn a faster profit from the expensive-to-make woodcut illustrations commissioned for the major works. This was a standard editorial practice -- particularly for natural history.[96]

[95] Pierre Belon, *Portraits d'oyseaux, animaux, serpens, herbes, arbres, hommes et femmes d'Arabie et d'Égypte: Le Tout enrichy de quatrains, pour plus facile cognoissance des oyseaux et autres portraits* (Paris: Guillaume Cavellat, 1557) <https://gallica.bnf.fr/ark:/12148/bpt6k1511381f> [accessed 6 Mar 2023].
[96] Paul J. Smith, 'Deux Recueils d'Illustrations Ornithologiques: Des *Icones Avium* (1555-1560) de Conrad Gessner et les *Portraits d'oyseaux* (1557) de Pierre Belon', in *Natural History in Early Modern France*, ed. by Garrod and Smith, pp. 18-45 (p. 20). Kusukawa, p. 59.



DES OYSEAVX AV PIED PLAT. 40

Bec d'vn oyſeau aquatique apporté des terres neufues.

Si quelqu'vn auoit fait vn corps d'oyſeau à ce bec ſans auoir groſſeur ſuffiſante, qu'on le iuge fait à diſcretion, car nous l'auons mieux aymé laiſſer ainſi, que luy en feindre vn.

Ce bec eſt gros comme le bras d'vn enfant,
Creux par dedans, tranſparent comme verre,
Tenue & leger, venu d'eſtrange terre,
Noir par le bout, & blanc au demeurant.

FIN DV SECOND LIVRE.

Source gallica.bnf.fr / Bibliothèque nationale de France

Figure 6. *Bec d'un oyseau aquatique apporté des terres neufves*.[97]

[97] Belon, *Portraits*, fol. 40[r].

The new edition of Belon shifts the Toucan towards a new generic category. With the inclusion of a name -- in this case, simply *un oyseau aquatique* ('a water bird') -- a picture and a short epigram alone, the text resembles an emblem. A close connection between emblematical works and natural history existed in the early modern period. The two genres drew from and critically informed one another.[98] Visually appealing and textually succinct, emblems prompted readers to actively decipher and interpret information for themselves.[99]

The opening lines set out a distinct epistemological code concerning the representation of natural wonders. With Thevet clearly in mind, the text states that if the body is out of balance with the beak in terms of scale, one should assume that the depiction is 'fait à discretion' -- that it is the result of someone's 'discretion' or 'good judgement'. The *Portraits* therefore uses irony to rebuke Thevet's *Singularitez* and states, implicitly, that his Toucan would be so anatomically disharmonious that it would be impossible. The polemic in epistemic and aesthetic terms between the two writers therefore continues here. The *quelqu'un* (referring to Thevet) in the *Portraits* is adopted in response to the *aucuns* (referring to Belon) of the *Singularitez*. However, the opening three lines also exhibit a broader epistemic anxiety. That is, we should only show what we can witness by direct observation. Any attempt at reconstruction (without using autoptic information) has the potential to be wrong -- and should be avoided. In short, we simply cannot know what the bird really looks like, and we certainly should not invent falsehoods to sell our books and stories.

The good exercise of *discretion* is central to the epistemic code outlined in *Portraits*. *Discretion* involves the astute ability to 'decide between things'. As Cotgrave defines it, *discretion* is the quality of having 'wit enough to find out what's good, t'eschew what is bad, and to make best use

[98] Karl A. E. Enenkel and Paul J. Smith, 'Introduction: Emblems and the Natural World (ca. 1530-1700)', in *Emblems and the Natural World*, ed. by Karl A. E. Enenkel and Paul J. Smith (Leiden: Brill, 2017) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004347076> [accessed 8 Mar 2023], pp. 1-40 (p. 33).
[99] We discuss emblematic works further in the second part of Chapter III. See below pp. 122-130.

of either.'[100] It is a keyword for Belon, which surfaces again in his text on fish.[101] Reflecting on the representation of sea monsters, Belon shows the same epistemic anxiety: 'N'est-ce pas une faulte digne de reprehension, de les veoir mettre tant de monstres marins en peincture sans avoir discretion? Inconstant espris, que ne considerent ils qu'il y a perfection en nature?'[102] Both texts identify a specific ethics of representation in which, as Williams has shown, 'artistic confabulation should be outlawed' and fanciful reconstruction avoided.[103] The opening stanza in the *Portraits* therefore enacts a discourse on fiction, warning against *inventio* and fanciful reconstruction. Such techniques, the author argues, has the potential to damage the epistemic authority of natural history in a broader sense.

Yet the opening lines also reflect a rhetorical agility. Despite carefully delineating this ethical code, the first stanza nonetheless makes an imaginative inference of its own -- it polemically reasserts the identity of the bird as an *oyseau aquatique* against Thevet. At this point, we notice an aesthetic dimension in play behind the author's own *discretion*. Through the phrase *sans avoir grosseur suffisante*, we know that the author has a clear idea in mind about the physical dimensions of the bird. What is really at stake here, then, is the notion of nature as artist. From his book on fish, we know Belon believes there is 'perfection en nature': that nature generates harmonious organic patterns and structures. If we accept that this bird has a tiny body relative to its huge beak, then we believe -- on the contrary -- that nature follows *copia*: that it expresses itself through multitude and (occasionally) monstrous variance. The author is unsure which stance to take. His aesthetic expectation of the living bird had not been corroborated by eyewitness reports -- least of all by the *difforme* bird of Thevet's *Singularitez* -- and this provokes the epistemic anxiety we read in the text.

However, in the quatrain that follows beneath the illustration, the carefully defined code is disrupted. In four lines of verse, the majority of which is very neatly recycled from the *Histoire de la nature des oyseaux*, the author interprets the beak in positive aesthetic terms. As in the larger volume,

---

[100] Cotgrave, s.v. discretion. Timothy Chesters, 'Discretion', in *Renaissance Keywords*, ed. by Ita Mac Carthy (London: Legenda, 2013) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.4324/9781315088907> [accessed 8 Mar 2023], pp. 103-118 (p. 105).
[101] Pierre Belon, *L'Histoire naturelle des estranges poissons marins: Avec la vraie peincture et description du Daulphin, et de plusieurs autres de son espece, observee par Pierre Belon du Mans* (Paris: Regnaud Chaudière, 1551) <https://gallica.bnf.fr/ark:/12148/bpt6k1511375q?rk=21459;2> [accessed 8 Mar 2023].
[102] Belon, *Poissons*, fol. 16^{v}.
[103] Williams, *Monsters*, p. 52.

it is *gros comme le bras d'un enfant*, as 'thick as a child's arm' and, therefore, proverbially robust. In the *Portraits*, however, the papery substance of the beak turns to glass: *parchemin* becomes *verre*. In one reading, the amendment is made simply to provide a rhyme for *estrange terre*. Yet, by another, the revision means to echo the aesthetic appreciation for the beak's transparent parchment-like quality from the *Histoire* (where it is *si fin et délié qu'il en est transparent*) -- and, indeed, accentuate the sense of wonder further. Here, the beak is transformed into the rarefied, worked material of glass, something that contradicts Thevet's colourful bird all the more fervently.

Given that the opening lines create such a distinct epistemic code, outlining the perils of turning one's imaginative power loose in the depiction of wonders, the renewed aesthetic assessment of the quatrain appears incongruous: it raises the question of authorship in the *Portraits*. It seems likely that Belon had only little involvement in making the shorter volume. Rather, it was the publisher (Guillaume Cavellat) who oversaw the work. In this short two-part passage on the Toucan, Cavellat prompts the reader to get their own imagination working by offering one example of an aesthetic interpretation in the quatrain below. This is an imaginative treat for the audience, an example of where one's imagination might go. What Cavellat appears to be doing through the quatrain, then, is tempting the reader's *discretion*. He asks the reader, in a nicely meta-discursive fashion: what will *you* make of this bony beak? How would you interpret it? The Toucan of the *Portraits* therefore becomes a quasi-emblem for the correct use of one's faculties -- and the careful moderation of one's imaginative power -- in the interpretation of natural-historical information.

iv. Conrad Gessner: *Icones avium omnium* (1560)

Three years later, the Toucan appeared once again, this time in the *Icones avium omnium* of the Swiss natural historian Conrad Gessner.[104] Although the *Icones* was printed in Zurich -- and therefore signals a departure from France -- Gessner relied almost exclusively on French natural-historical

[104] Conrad Gessner, *Icones avium omnium, quæ in historia avium Conradi Gesneri describuntur, cum nomenclaturis singulorum Latinis, Italicis, Gallicis et Germanicis plerunque, per certos ordines digestæ* (Zurich: Christoph Froschauer, 1560) <https://archive.org/details/gri_33125011099229/mode/2up> [accessed 8 Mar 2023].

texts. Furthermore, he received a material sample (as well as a verbal report) from a collector based in Paris. On account of his near-complete reliance on French material and, owing to the fact that Thevet reincorporated and responded to Gessner in his second book (to which we will return), we consider the *Icones* as part of the French transmission narrative.

The *Icones* itself is a short version of the third volume of Gessner's *Historia animalium*, which is the book dedicated to birds. It is therefore similar in format to Belon's *Portraits*. But Gessner's volume was more than a reprinting for economic reasons: the many *Icones* books also allowed the author to make revisions and amendments, which would be worked back into the larger volumes.[105] Indeed, in the 1585 edition of the *Historia animalium*, Gessner depicted the Toucan once again -- this time alongside a second engraving (Fig. 8) which clearly reworks the image of Thevet's *Singularitez* -- incorporating the other natural historical accounts (notably that of Ambroise Paré) that appeared since.[106]

In Gessner's *Icones*, we first notice the profusion of names in classical and vernacular languages. He names the bird *Indianischer vogel* ('Indian bird') in German, *Toucan* in French and *Pica Bressillica* ('Brazilian Magpie (or Jay)') in Latin. The names alone prove how geographically and linguistically widespread the Toucan had become by the mid-sixteenth century. Gessner's description is particularly rich; it draws attention to a number of features hitherto undiscussed in the preceding accounts.

> Pica Bressillica, cuius rostro Io Ferrerius Pedemontanus summæ eruditionis vir me donavit, quod hic expressi, reliquum corpus ex Galliæ Antarcticæ descriptione Andreæ Theveti Gallicè edita adieci. Rostrum hoc permagnum (inquit Ferrerius) avis est cuiusdam ex Bressilla regione allatum: non maioris (ut referunt qui ex illis locis ad nos revertuntur) Pica nostra. Is qui mihi hoc rostrum pertulit, eam avem refert nutriri pipere: quo quidem voracissimè repletur, et non digerit, sed statim egerit; atque eius piperis egesti magnum apud illius regionis incolas esse usum, potius quam alterius ex arbore recenter collecti. Persuasum etenim habent, uim piperis illic maximam, sic ab avicula domari, ut minus utentes eo laedat. Et pleraque alia de eadem ave referunt, quæ omnia an vera sint, non facile dixerim. Hæc ille qui postea etiam pellem de pectore cum plumis aureo vel croceo colore splendidissimo pulcherrimoque insignibus, (reliquum corpus nigrum est, nisi quod caudæ initium et extremitas rubent,) ad me misit. Rostrum ei fere crassius et longius esse quam reliquum

[105] Philippe Glardon, 'Gessner Studies: State of the Research and New Perspectives on 16th-century Studies in Natural History', *Gesnerus*, 73 (2016), 7-28 <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/22977953-07301002> [accessed 8 Mar 2023] (p. 23).
[106] Conrad Gessner, *Historiæ animalium liber III. qui est de Avium natura* (Frankfurt am Main: Johann Wechel, 1585) <https://www.google.co.uk/books/edition/_/L6lkAAAAcAAJ?hl=en&gbpv=0> [accessed 8 Mar 2023], p. 801.

> corpus tradit Andreas Thevetus: quod eo facilius credimus, quoniam tenuissimum instar membranae, et fere pellucidum, levissimumque et cavum est, aerisque interni capax; quamobrem hoc etiam ei peculiare, quod odorandi meatu careat. In tanta enim tenuitate ut facilius penetrant odores: ita si quid apertum fuisset, facile frangi potuisset rostrum, quod idcirco etiam denticulatum a natura factum videtur, ut minore vi ali-quid secaret. An vero etiam aer orbiter circa hos veluti dentes, quibus rostrum penitus claudi prohibetur, se insinuate ad fauces et arteriam? Avis ispa ab hac rostri magnitudine Burhynchus aut Ramphestes (sicut et pisces quidam) appellari poterit. Toucan ab Americae incolis vocatur. Lege Thevetum cap. 47. libri iam citati.[107]
>
> [The Brazilian Magpie (or Jay): the notable scholar Giovanni Ferrerio gave me its beak which I have depicted here. I added the rest of the body from the description of the Singularitez de la France Antarctique by André Thevet, published in French. This very great beak (says Ferrerio) belongs to a certain bird which was brought back from the region of Brazil: the bird is no bigger than our own Magpie (or Jay) (as those who came back to us from these distant lands have stated). The man who brought me home this beak says that this bird feeds on pepper, and that the pepper it filled itself so voraciously with, and did not digest, it discharged straightaway; and that there is great use of this excreted pepper among the inhabitants of this land, more than of the other type recently gathered from the tree. Indeed, they have this belief that the utmost strength of the pepper in this place is tamed by the little bird so that it hurts them less when they use it. And they said many other things about this bird: whether they are true, I could not say with ease. I gathered these things from him who afterwards even sent me a sample from the breast, with feathers remarkable for their bright golden or saffron colour (the rest of the body is black, except for the beginning and end of the tail turning red). André Thevet says that the beak is sturdier and longer than the body. We would believe him all the more since it is as thin as a membrane, and almost transparent, very light and hollow, and able to hold much air inside; hence its peculiar characteristic of being deprived of airways for smelling. It is of such thinness to allow smells to enter it more easily; thus if there had been any opening the beak could easily have broken: and for that same reason the beak seems to have been serrated by nature, so that it can cut anything with less force. Or could it even be that the air while travelling around these quasi teeth that prevent the beak from closing completely, finds its way into the throat and windpipe? A bird with a beak of this size could be named 'Burhynchus' or 'Ramphestes' (like the fish). The inhabitants of America call it Toucan. See Thevet chapter 47 of the book already cited.]

Still one of the earliest writers of the Toucan, Gessner inherited a set of epistemic questions from his French forerunners Belon and Thevet. In a similar fashion to Belon, Gessner probed a beak specimen on his desk. Yet he also relied on secondary information -- explicitly, Thevet's *Singularitez* and the verbal report of the man who brought him the beak (Giovanni Ferrerio). Whether he meant to or not, Gessner makes a pun on the term 'corpus' in the text. It refers, at once, to Thevet's book and to the bird's body (which he cannot see). The semantic duality raises the idea of *difformité* again. In the *Icones*, however, *difformité* arises from the natural-historical method of bringing different sets of

[107] Gessner, *Icones*, p. 130.

information together.[108] As no complete specimen of the bird had yet reached Europe, natural historians continued to rely on the two forms of disjointed material available to them -- that is, testimonials (either verbal or printed) and material samples. In order to depict the entire bird, natural historians had to carefully reunite these two disjointed parts. But the process of reconstruction had its dangers, as the *Portraits d'oyseaux* makes clear. What resulted was, by its very definition, *difforme* -- rendered so by the act of collation and compilation. Since *difformité* implied a form of monstrosity, then, the early modern natural historian could himself create a monster through the process of drawing together (two) sets of dismembered fragments.

Furthermore, the *Icones* responds to the epistemic question of breathing raised by Belon. In his text, Gessner offers two suggestions. The first is a claim of porosity: the material of the beak is so fine that air may permeate it freely. The second, phrased as a question further down, is that air may pass over the denticulated edges of the mandibles, which prevent the beak from fully closing. Gessner's suggestions arise from a functional analysis of the material specimen. There can be no nostril, he asserts, as this would compromise the structural integrity of an already frail beak. Indeed, the edges of the mandibles are serrated for the very same reason: they ensure that only a small amount of force is used in biting and cutting, which relieves pressure on the overall structure. These epistemic claims, which respond to Belon and actively refute Thevet, are reinforced by the image (Fig. 7). The notches appear in bold detail and the phantom nostril of the *Singularitez* is removed.

[108] Kusukawa, for example, has shown how Gessner 'compile[d] a new animal' in his interpretation of the toucan. Sachiko Kusukawa, 'Gessner's History of Nature', in *Worlds of Natural History*, ed. by Curry et al., pp. 33-43 (p. 38). Compilation was central to Gessner's bibliographic practice. See Ann Blair, 'The Capacious Bibliographical Practice of Conrad Gessner', *The Papers of the Bibliographical Society of America*, 111 (2017), 445-468 <https://www.jstor.org/stable/26547531> [accessed 8 Mar 2023]. Ann Blair, 'The 2016 Josephine Waters Bennett Lecture: Humanism and Printing in the Work of Conrad Gessner', *Renaissance Quarterly*, 70 (2017), 1-43 <https://doi.org/10.1086/691829> [accessed 7 Dec 2022] (pp. 1-2).

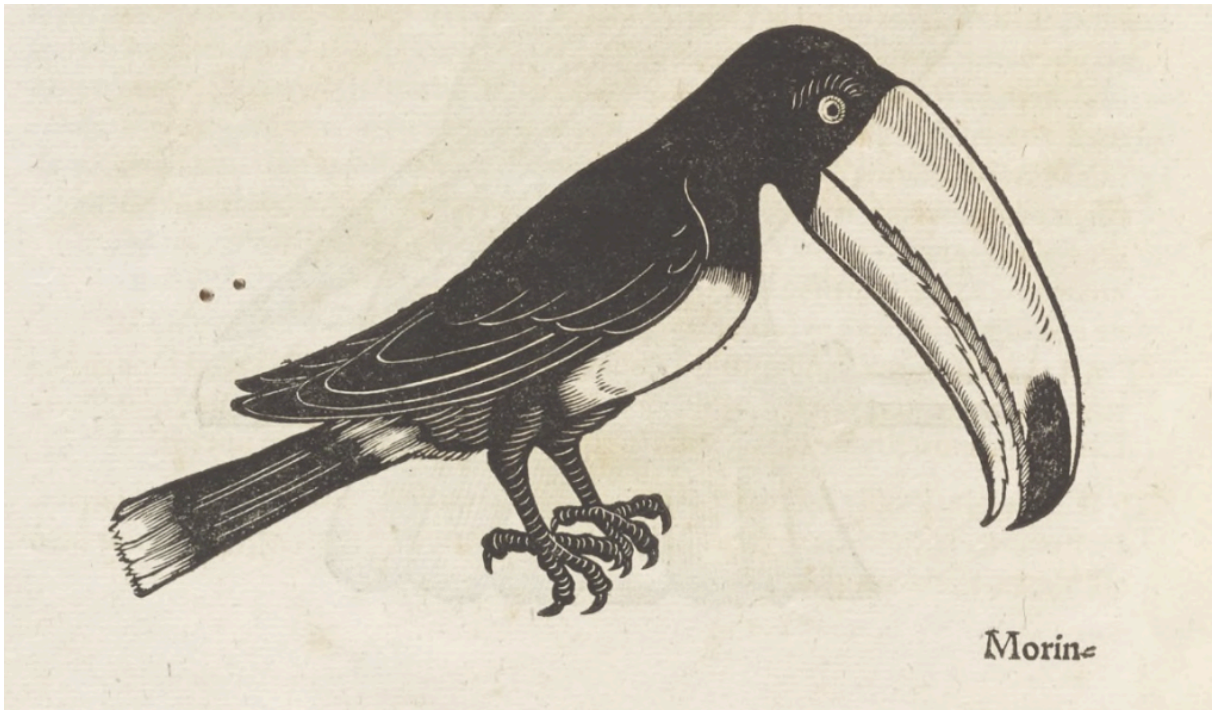


Figure 7. *Pica Bressillica*.[109]



Figure 8. *Altera icon eiusdem avis ex Andrea Theveto et Ambrosio Parao*.[110]

[109] Gessner, *Icones*, p. 130.
[110] Gessner, *Historiæ animalium* (1585), p. 801.

Gessner's most significant epistemic claim surrounds the nomenclature and classification. He excludes the Toucan from his class of water birds and places it in an appendix of the third order: 'Avibus volacibus, quae non rapaces sunt, majoribus ac mediis' ('Flying birds, which are not predatory and of medium or large size').[111] The Latin name he confers -- *Pica Bressillica* -- places it among species of crow, which turns Thevet's comparison into a category in a classification. Gessner also proposes two names in Greek: *Burhynchus* ('Beautiful snout') and *Ramphestes* ('Big beak').[112] *Ramphestes* therefore carries the same meaning as Oviedo's *Picudo*, which raises the question of whether the early Spanish natural historian's influence could be felt in the *Icones*, even though there is no reference to *De la natural hystoria*. At any rate, the names -- alongside the Latin ones offered above -- reveal the kind of reader the publication was meant to reach: educated communities of scholars and elites across Europe.

In a significant development from the previous accounts, Gessner shows a more detailed interest in the Toucan's diet. The bird feeds voraciously on 'pepper' before discharging the seeds undigested. At this point, Gessner outlines a series of intercultural and interspecies semioses. The 'inhabitants of this land', as he refers to them (which removes the ethnographic specificity of Thevet) have many uses for the excreted seeds. It is their 'belief', he asserts, that the bird has the power to 'tame', to subdue the pepper's asperity and make it more amenable to human consumption. Indigenous people grant a form of agency to the bird, Gessner claims, an ability to transform plant matter and pacify the powerful forces of nature. Humans do not have a technique for taming the pepper plant themselves. Gessner, for his part, remains sceptical. Using the term 'belief', he makes a comment about verisimilitude and confirms that he does not grant the same degree of agency to the bird. Indeed, the way he frames this statement also casts doubt on the authority of indigenous knowledge.

As well as making a new set of epistemic claims, Gessner also highlights the social dimension of natural history. He mentions obtaining a beak from an agent (Giovanni Ferrerio) in the opening sentence. Ferrerio was an Italian theologian based in Paris, where he worked as a copyeditor for

[111] Gessner, *Icones*, p. 130.
[112] The Neotropical near passerine bird family name used in modern taxonomy 'Ramphastidae', which encompasses most species of Toucan, has its etymological origin here in Gessner's text.

Michel de Vascosan and collected material specimens for Gessner.[113] It is possible that Thevet was the one to give Ferrerio the beak and feather samples that reached Gessner in Zurich. We learn from Thevet's correspondence that, of the three beaks brought back from the New World, he kept two in his *cabinet* and sent one to Gessner: 'Je luy envoyay par mesme moyen un bec de l'oiseau *Tocan*.'[114]

Acting as one of the Swiss natural historian's agents in Paris at the time, Ferrerio could well have collected the samples from Thevet before sending them on. Furthermore, as Gessner states that 'the man who brought me home this beak says that this bird feeds on pepper', he hints at a verbal conversation between Thevet and Ferrerio: the travel writer informing the agent about the bird behind the beak as he handed it over. In this sense, it seems likely that Thevet was also behind Gessner's claims about the pepper diet. Indeed, Thevet spends considerable time describing the different pepper plants ingested by the Toucan in his later (1575) *Cosmographie universelle*, as we will see. The French travel writer was therefore the major authority in Gessner's discussion of the Toucan: he provided a printed source, an oral report and a material object. Indeed, as we can see in the second engraving (Fig. 8), the natural historian credits Thevet explicitly his 1585 edition.

Whether this was the case or not, Gessner frames Ferrerio as much more than a passive *passeur*. The agent provides both material evidence and a verbal testimonial. Gessner recognises his contribution -- and, by extension, the importance of agents working for collectors to natural-historical practice -- by naming him at the top of the passage. The social network of collecting becomes visible: we have come a long way from the unnamed New World navigators of Belon's *Histoire*. In fact, Gessner traces his sources with precision. The text exhibits an early example of writers crediting their correspondents in the emerging Republic of Letters. Indeed, Gessner gives chapters and verse to Thevet's description in the *Singularitez*. But his mention of Ferrerio also reveals a physical exchange behind the book. In return for providing vital information to Gessner, Ferrerio was rewarded with a named appearance in the book. Citing correspondents was a system of mutual benefit which, as Blair

[113] John Durkan, 'Giovanni Ferrerio, Gesner and French Affairs', *Bibliothèque d'Humanisme et Renaissance*, 42 (1980), 349-360 <https://www.jstor.org/stable/20676118> [accessed 8 Mar 2023] (p. 349).
[114] André Thevet, *Histoire d'André Thevet angoumoisin, Cosmographe du Roy, de deux voyages faits aux Indes Australes, et Occidentales*, ed. by Jean-Claude Laborie and Frank Lestringant (Geneva: Droz, 2006), p. 376.

has shown, assured the continued collaboration of colleagues in the future.[115] The *Icones* therefore outlines the social, intertextual dimension of natural history clearly.

Finally, Gessner owned more than a beak. He also mentions a pelt taken from the breast whose feathers are 'remarkable for their bright golden or saffron colour.' The feather sample has a high aesthetic value, Gessner contends, as he outlines the shades and vicissitudes of colour in detail. On account of the Latin lexis, the colour palate of the bird expands dramatically in his description -- *aureus*, *luteus*, *flavus* and *croceus* each evoke a specific kind of yellow. While it does not appear to be one of Gessner's main concerns, there is clear aesthetic dimension in play. The *Icones* thus builds on Thevet's interest in colour and attempts to enliven the Toucan further from the monochromatic medium of the printed book. Although the bird remains silent, an inkling of the soundscape of the New World (in the form of mediated indigenous voices) begins to filter through.

v. André Thevet: *La Cosmographie universelle* (1575)

Returning from Zurich to Paris, the Toucan appeared once again in a short period of time. In 1575, Guillaume Chaudière and Pierre L'Huillier printed André Thevet's major cosmographical opus, *La Cosmographie universelle*.[116] The *Cosmographie* contained a considerably revised description of the Toucan (relative to the earlier *Singularitez*) and a new woodcut illustration to match. Thevet's amended image would prove to be highly influential in years to come, something that shows not only the degree of artistic skill in the engraving, but also the broad dissemination of this (French) text across Europe. Thevet begins by reasserting some of his epistemic claims from the *Singularitez*. The bird is similar to a pigeon or magpie, has a precise colour pattern on its body and feeds on fruit. Yet the cosmographer also offers several revisions, many of which appear in the newly minted image (Fig. 9).

[115] Ann Blair, 'Conrad Gessner's Paratexts', *Gesnerus*, 73 (2016), 73-122 <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/22977953-07301004> [accessed 8 Mar 2023] (p. 81).
[116] André Thevet, *La Cosmographie universelle* (Paris: Guillaume Chaudière, 1575) <https://gallica.bnf.fr/ark:/12148/btv1b8626691v?rk=21459;2> [accessed 8 Mar 2023].



Figure 9. *Portrait du Toucan*.[117]

The *Cosmographie*'s new engraving highlights the evolving epistemic debate between Belon, Gessner and Thevet. By removing the nostril from the earlier image, the *Cosmographie* bows to the authority of Gessner. Yet, in keeping with the previous woodcut -- and, therefore, refuting both Belon and Gessner -- the edges of the mandibles remain smooth. Furthermore, the feet are altered: here the bird has only two toes facing forward, rather than three, which corrects both the *Singularitez*'s and Gessner's earlier assertions. Perhaps the most significant development, however, is the inclusion of a detailed background. Set in front of a cloudy sky and hilly landscape, the Toucan perches between two species of plant. Based on what we read in the text, it is likely that these are the pepper plants on which the bird feeds:

> Cest oyseau ne vit que de certains fruicts parmy les boys, où il fait ordinairement sa residence, et mange aussi de certain poivre long et rouge, duquel se trouvent deux especes, l'un plus long que l'autre, et le plus petit est fait tout ainsi qu'une fraise, un peu toutesfois plus pointu, et se nomme *Quién Apoüa*: le plus grand s'appelle en leur patois *Quién Boucoup*. De ce poivre se nourrit non seulement le *Toucan*, ains encore un autre oyseau, que les Sauvages appellent *Suviath*, lesquel est de la grandeur d'un Merle, duquel s'en voyent deux especes, l'un tout noir, et l'autre aussi finement rouge que Escarlatte, tel que encore j'en ay dans mon Cabinet diverses peaux que ce peuple escorche. Quand ces oyseaux ont mangé de ce poivre, en quelque lieu qu'ils fientent, soit sur un rocher ou ailleurs, ceste matiere, bien digeree et

[117] Thevet, *Cosmographie*, fol. 938[v].

> cuitte, ou non, ne faudra de prendre en terre, et se convertir en herbe, tout ainsi que si lon y avoit semé de ce mesme poivre susnommé, et devient ceste herbe, haulte d'une couldee et demye, et davantage quelquefois.[118]

Initially, Thevet polemically reasserts that this is no water bird, thereby rebuffing Belon once again. Then, encouraged by Gessner's transcription of his oral report, Thevet emphasises the pepper diet further in the written account. The cosmographer carefully transcribes the names of two kinds of pepper plant -- *Quién Apoüa* and *Quién Boucoup* -- from the oral language of the Tupinamba. He therefore gives far more space to (and, consequently, promotes) indigenous terminology and usage. In a further development from the *Icones*, the cosmographer ties his description to a discourse of generation. The undigested seeds which the Toucan discharges are extremely fertile -- they will grow rapidly in any location once they are sown.[119] Thevet even selects the *rocher* as a site characteristic of sterility to emphasise the generative power these digested seeds possess. As well as being an overlooked milestone in the history of plant propagation, then, the description also underlines a transformative power in the bird. Not only can it subdue the harsh natural power of pepper, but it also ensures the reproduction of its own food source. The Toucan is (to some degree) self-sufficient, able to keep itself fed. Through the pepper diet, the cosmographer grants a significant degree of agency to the bird.

As in his previous account, Thevet returns to the question of colour in the *Cosmographie*:

> Cest oyseau est de la grandeur d'un pigeon, et encore une autre espece, comme une Pie, tous les deux de mesme plumage, a sçavoir tous noirs, sauf le bout de la queue, ou ils ont quelques plumes aussi rouges que sang, entrelacees parmy les noires: mais soubs la poitrine leur plume est jaune environ quatre doigts, tant en longueur qu'en largeur: et est ce jaune si fin, pur et excellent, que il est impossible de trouver couleur plus vive.[120]

Describing the tailfeathers as 'aussi rouges que sang' and the yellow of the breast as 'si fin, pur et excellent, que il est impossible de trouver couleur plus vive', Thevet accentuates the aesthetic value of the bird in hyperbolic terms. The passage indicates an increased interest in colour and even appears to imply -- through the use of the word 'vive' ('sparkling' and 'light' but also 'full of life') -- that colour

[118] Thevet, *Cosmographie*, fol. 938^{v}-939^{r}.
[119] *Couldée* (cubit): a unit of measurement indicating the length of the hand and forearm.
[120] Thevet, *Cosmographie*, fol. 938^{r}.

may have its own form of agency. The *Cosmographie* therefore responds to Gessner's Latinate colour palate in its own way and develops both the epistemic and aesthetic debates to a significant degree.

vi. Ambroise Paré: *Des Monstres et prodiges* (1585)

Ten years after the *Cosmographie* was printed, Ambroise Paré (the royal surgeon) depicted a Toucan in his treatise on monsters -- *Des Monstres et prodiges*.[121] The surgeon's account of the bird drew on and, in turn, responded to both Thevet (explicitly) and Belon (in the description of the beak). Indeed, Paré references the cosmographer in his opening line and uses the same woodcut illustration as the *Cosmographie* (Fig. 10). The description is concise, yet it contains an impressive range of information addressing questions of a predominantly social and epistemic nature.

> Thevet, en sa cosmographie, dict qu'il a veu aux terres neufves un oiseau que les sauvages appellent en leur gergon Toucan, lequel est fort monstrueux et difforme, entant qu'il a le bec plus gros et plus long que tout le reste du corps. Il vit de poivre, comme nos tourtes, merles et estourneaux font icy de graine de lierre, qui n'est pas moins chaude que le poivre. Un gentilhomme Provençal en feit present d'un au feu Roy Charles neufiesme, ce qu'il ne peust faire vif, car en l'apportant mourut, neantmoins le presenta au Roy: lequel apres l'avoir veu, commanda à Monseigneur le Mareschal de Rets me le bailler, pour l'anatomiser et embaumer, à fin de le mieux conserver; toutesfois bien tost apres se putrefia. Il estoit de grosseur et plumage semblable à un Corbeau, reste que le bec estoit plus grand que le reste du corps, de couleur jaunastre, transparant, fort leger, et dentelé en maniere de scie. Je le garde comme chose quasi monstrueuse. La figure duquel t'est icy representee.[122]

[121] The treatise was originally printed as part of *Les Œuvres* (Paris: Gabriel Buon, 1575). However, the Toucan did not appear until the 1585 edition of the same name. Ambroise Paré, *Les Œuvres d'Ambroise Paré* (Paris: Gabriel Buon, 1585) <https://www.proquest.com/books/les-œuvres-dambroise-paré-diuisees-en-vingt-huict/docview/2090362479/se-2> [accessed 8 Mar 2023], p. 1086.
[122] Ambroise Paré, *Les Œuvres*, ed. by Jean Céard, Evelyne Berroit-Salvadore and Guylaine Pineau (Paris: Classiques Garnier Numérique, 2019) <https://classiques-garnier-com.ezproxy-prd.bodleian.ox.ac.uk/pare-ambroise-les-oeuvres.html> [accessed 8 Mar 2023], p. 2837.



Figure 10. *De l'oiseau nommé Toucan*.[123]

As was now common in natural-historical descriptions of the bird, the text begins by outlining the name, size and physical proportions of the beak. Rather than accentuate the sense of wonder the Toucan inspires, Paré actively diminishes it in the discussion around the pepper diet. The ivy berry, which European birds like blackbirds and starlings consume without trouble, is 'as hot as' the Brazilian pepper on which the Toucan feeds. Paré therefore dismisses Thevet's ideas about the apparently remarkable taming power of the Toucan and, as he does, accords less importance to indigenous terminology. The taming power is common, he suggests to the contrary, which deconstructs the agency of the bird.

Indeed, Paré draws attention away from the New World in a broad sense, focussing instead on physical transactions taking place in Europe. Putrefaction sits at the heart of his story. Passed between multiple individuals, the sample Paré receives is in no fit state to be analysed properly by the time it

[123] Paré, *Les Œuvres* (2019), p. 2838.

reaches his desk.[124] Yet by placing himself at the end of a long chain of *passeurs* in the text, Paré fashions himself as the key agent in the network. He is the one who ends up with the object; he is the one who gets to decide how to present it to the reader. He makes both of these claims simultaneously and succinctly in the final line: 'Je le garde comme chose quasi monstrueuse.' The phrase indicates ownership, but it also carries an epistemic (and aesthetic) charge -- this bird is a 'monster' or 'almost-monstrous thing'.

Paré's interpretation of the Toucan as a monster appears from the start in the passage. He collocates 'monstrueux' and 'difforme' (as Thevet does) in the opening line. Thus, in a similar fashion to Gessner's, Paré's *difformité* arises from the processes of reassembly and reconstruction, from combining Thevet's and Belon's texts and Thevet's image with a material fragment of his own. Moreover, Paré's text shows us how social convention contributed to the sense of *difformité*. As the specimen passed between many sets of hands, it became gradually more rotten and less amenable to natural-historical analysis. Due to the social aspect of object circulation, the natural historian was only left with degraded, dismembered samples; as a result, they relied on reassembly and creative reconstruction. Social convention, in this sense, created *difformité*.

Paré's passage marks a series of important developments in the Toucan's transmission through natural-historical discourse. By demystifying the pepper diet, the surgeon seems to suggest that the Toucan was no longer as wonderful as one might think. He therefore provides an early indication that the bird was shifting away from being a New World mirabilia (*singularité* or marvel) and becoming an established creature in the canon of European natural history. In a figurative sense, the Toucan was beginning to make a noise in early modern Europe; but in a literal sense -- perhaps surprisingly -- the bird continued to remain silent.

As we have shown, the epistemic debate around the bird developed considerably in the accounts of Belon, Thevet, Gessner and Paré. The size, shape and function of the beak was a key point of contention; the distribution of colour and, latterly, the diet and behaviour all became part of a broader quest for epistemic accuracy. What becomes clear is how significant a role Thevet had in

[124] We discuss the material transfers in Paré further in Chapter III. See below pp. 157-159.

establishing the Toucan in natural-historical discourse -- both in epistemic and aesthetic terms. His contribution would prove to be highly influential on Gessner and Paré, and it was through his polemic with Belon that the bird first came to European knowledge. Indeed, the traveller would continue to be vital in successive accounts beyond France -- as we will now see.

II. The Toucan Takes Flight Across Europe

i. Ulisse Aldrovandi: *Ornithologiae* (1599)

Over the course of the sixteenth century, natural historians, anatomists and travellers in France established a core set of epistemic assertions about the Toucan. Their discussions defined a series of salient characteristics -- namely, the beak and its (dis)proportion to the body, the colour of the plumage, the name, the pepper diet and the breathing conundrum. These features would prove to be of crucial significance, critically informing the major natural-historical works that appeared across Europe in the following years.

The Italian polymath Ulisse Aldrovandi was one of the most prolific and celebrated authors of natural history. He provided a comprehensive, integrated depiction of the Toucan in his *Ornithologiae hoc est de avibus libri xii*.[125] Published in 1599 by Giovanni Battista Bellagamba for Francesco de' Franceschi, this volume was intended for distribution across the learned communities of Europe. However, the publishers also envisaged a much broader dissemination. The volume is packed with intricately made images and a seriously impressive lexicon of names in classical and vernacular languages. As the description is extensive, we will focus on two excerpts in conjunction with the two images in Aldrovandi's text.

> Picam Bressilicam appellant Avem, cuius modo iconem exhibebimus, cum quod Picæ variæ, si rostrum demas, quodammodo similis sit, tum quod in Bressilia reperiatur. Ramphastos, et Hipporynchos, seu Burynchos dici possit a rostri magnitudine, a qua pariter Pelicanum kiranides etiam Ramphonem vocavit. Latinis Avis piperivora a piperis esu appellatur, et Germanis verbo ad verbum reddito Pfeffer voghel, et Pfefferfracsz: Roberto Constantino, qui perperam ruberrimum colorem illi tribuit, Pica barbara: Italis Gaza di Bressilia, Incolis Americe Toucham, ut refert Andreas Thevettus, qui eam pergravit, et literis mandavit.[126]

[125] Ulisse Aldrovandi, *Ornithologiae hoc est de avibus historiae libri xii* (Bologna: Franciscum de Franciscis, 1599) <https://www-proquest-com.ezproxy-prd.bodleian.ox.ac.uk/books/vlyssis-aldrovandi-ornithologiae-hoc-est-de/docview/2090363540/se-2> [accessed 8 Mar 2023].
[126] Aldrovandi, p. 801.

> [They call this bird *Picam Bressilicam* [Brazilian Magpie] -- whose image we will present here -- first because if the beak is taken away, it resembles other species of magpie, and second because it can be found in Brazil. It can be called Ramphastos [Big-beak], and Hipporynchos [Horse-snout], or Burynchos [Beautiful-snout] for the size of its beak, from which, being equal to that of *Pelicanum kiranides*, we called it Ramphones [Beak]. The Latin name is *Avis piperivora* [Pepper-eating bird] as they feed on pepper, and the German word for it is *Pfeffer voghel* [Pepper bird], and *Pfefferfracsz* [Pepper-eater]: Robert Constantin, who mistakenly confers a red colour on the bird, calls it *Pica barbara* [Savage Magpie]; the Italians call it *Gaza di Bressilia* [Brazilian Magpie], and the indigenous people of America, the *Toucham*, as André Thevet reports, having travelled in that country and sent letters back from there.]

One of Aldrovandi's main critical preoccupations was classifying the bird. The *Picam Bressilicam* ('Brazilian Magpie') -- a name he derives from Gessner -- belongs in the twelfth order with other species of crow, and it sits directly between a waxwing and a hornbill. The *Ornithologiae* therefore offers a precise categorisation which appears to be based on visual similarity. However, as we can tell from the many *Manucodiata* (Birds of Paradise) in the same category, Aldrovandi's classification also clustered together recently 'discovered' species from across the globe.[127]

Nomenclature is the chief concern of the first paragraph. The profusion of names is remarkable and there are several which had not appeared in natural-historical writing before. In addition to those already mentioned, Aldrovandi offers a new term in Greek (*Hipporynchus* -- 'Horse-snout'), two in Latin (*Avis piperivora* -- 'Pepper-eating bird' and *Pica barbara* -- 'Savage Magpie') and one in his native Italian (*Gaza di Bressilia* -- 'Brazilian Magpie'). As Aldrovandi's passage shows, the correct use of lexicographical information was becoming central to natural history. He mentions consulting Robert Constantin (a notable lexicographer) and shows an astute awareness of the other names in contemporary accounts.[128] Just as he collected physical samples in his *studiolo*, the natural historian also assembled an abundance of names in his book. The technique of collecting and compiling made the *Ornithologiae* 'powerfully attentive to local detail' and able to capture multiple

[127] Aldrovandi, pp. 809-817.
[128] Constantin was a well-known lexicographer, publishing his *Lexicon Graeco-latinum* with Jean Crespin in Geneva, 1566. He had collaborated previously with Conrad Gessner and Leonhart Fuchs. Michel Magnien, 'Robert Constantin, éditeur de Jules César Scaliger', in *Esculape et Dionysos: Mélanges en l'honneur de Jean Céard* (Geneva: Droz, 2008), pp. 1045-1064.

cultural and linguistic interpretations.[129] For Aldrovandi, naming is bound up with the epistemic questions of size and proportion further down:

> Magnitudo Picæ Bressilicæ inter Picam et Merulam media. Tanto enim Pica minor, quanto Merula maior. Rostrum reliquo corpore crassius, et longius ferè esse Thevetus refert. Ego non tantùm totius avis picturam ad vivum expressam, sed ipsummet rostrum quoque in musæo meo appensum reservo, quod olim magnificus D. Nicolaus Espiletus Insulanus optimæ spei, multæque lectionis iuvenis, et discipulus meus charissimus dono mihi è Belgio transmisit.[130]
>
> [The size of the Pica Bressilica is halfway between that of a magpie and a blackbird. Indeed, it is that much smaller than a magpie than it is bigger than a blackbird. The beak is thicker and almost longer than the body, as Thevet mentions. As for myself, I own privately not only the depiction from the life of the whole bird, but the beak itself too, hung in my museum, that the eminent D. Nicolaus Espiletus Insulanus, a youth of the greatest promise and of much learning, and a much-loved student of mine, sent from Belgium as a present to me.]

In the same way as many of the natural historians who preceded him, Aldrovandi incorporated both textual and material evidence. He mentions receiving a beak specimen from (and gives significant praise to) a former pupil in Belgium (D. Nicolaus Espiletus Insulanus); this rhetoric of sociability indicates a growing community of natural historians and collectors across Europe.

Furthermore, following on from Gessner's 1585 *Historia animalium*, Aldrovandi recognises two species of Toucan in both text and image. The first image -- a very large copperplate engraving occupying an entire page of the volume -- is an adaptation of Gessner's *Pica Bressillica* (Fig. 11); the second, which appears on the following page, is a reworking of the image in Thevet's *Cosmographie* (Fig. 12). Comparing each image to the originals, we notice that Aldrovandi's Toucans face in the opposite direction (the beaks point to the left). The reversals speak to a specific technique for copying adopted by printers and engravers at the time. To create the 'new' image, a picture would be cut out of a text and stuck onto the blank surface of a copperplate or woodblock. The engraver would then recut the image, using the snippet as a stencil. As the block was flipped over in the printing process, the resulting image would be reversed in the text.[131]

---

[129] John Considine, *Small Dictionaries and Curiosity: Lexicography and Fieldwork in Post-Medieval Europe* (Oxford: Oxford University Press, 2016) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1093/acprof:oso/9780198785019.001.0001> [accessed 8 Mar 2023], p. 100.
[130] Aldrovandi, p. 802.
[131] Kusukawa, *Picturing the Book of Nature*, p. 64.



Figure 11. *Picam Bresillicam*.[132]



Figure 12. *Tocam ex Theveto et Pareo*.[133]

[132] Aldrovandi, p. 802.
[133] Aldrovandi, p. 803.

Aldrovandi's iconography proves the continued resonance of Gessner, Thevet and Paré. Yet the engravings are also a prime example of how an image could take flight beyond its original (con)text and embark on an autonomous, discursive life of its own: in addition to copying the image, the engraver also had the chance to alter it. As we can see, Aldrovandi's images display numerous stylistic revisions which reveal aesthetic concerns. In Figure 11, the shading is subtle, which brings out the rounded, hollow dimensions of the beak. The pattern of the breast includes a much greater proportion of white, which draws further attention to the colours discussed in the text and, potentially, leaves space for a copy-specific edition to be coloured in. Furthermore, the bird in Aldrovandi perches on a thick branch that bears what appear to be the iconic leaves of an oak tree, which generates the impression of increased familiarity. In Figure 12, the beak becomes curved and marginally shorter in proportion to the body, which anchors the bird back in a more normal range: the pronounced bipartite division (or *difformité*) of Thevet's bird is diminished. Each of the engravings reflect a stylistic alteration which attempts to bring the Toucan into the realm of the familiar -- and, therefore, away from an aesthetics of the monstrous.

Referring back to the text, we notice that Aldrovandi mentions another mode of depicting the Toucan visually: he claims to own an 'ad vivum' ('from the life') painting of the whole bird in his *studiolo*. Although the *Ornithologiae* clearly reworks the engravings of Thevet and Gessner -- which further reinforces their critical significance -- the claim underlines the growing value of painted images in natural-historical discourse.[134] The phrase 'ad vivum' refers to the specific technique of depicting natural-historical specimens from a live specimen; it therefore carries the epistemic concern of faithfulness to the real. Yet it also contains a fundamentally aesthetic preoccupation. As Balfe and Woodall have shown, the effectiveness of an 'ad vivum' representation was grounded in the skill of the artist, specifically their ability to mimic the look of a subject with precision.[135]

---

[134] Davide Domenici, 'Rediscovery of a Mesoamerican Greenstone Sculpture from the Collection of Ulisse Aldrovandi', *Journal of the History of Collections*, 34 (2022), 1-22 <https://doi.org/10.1093/jhc/fhab001> [accessed 9 Mar 2023] (p. 5).

[135] Thomas Balfe and Joanna Woodhall, 'Introduction: From Living Presence to Lively Likeness–The Lives of *ad vivum*', in *Ad vivum? Visual Materials and the Vocabulary of Life-likeness in Europe before 1800*, ed. by

Indeed, the text echoes the 'ad vivum' picture. Aldrovandi is the first to mention that the end of the beak turns yellow, and he provides a precise description of colouration around the eye and on the belly further down. The specific outlining of colour (which reflects the aesthetic concern) is framed as a response to another depiction, that of the Italian writer Giovanni Botero. In his *Relationi universali*, he wrote 'La Toca e un'uccello della grandezza della cornacchia: ma ha il petto bianco, e'l becco dorato, è di lunghezza uguale a tutto il corpo.'[136] [The Toucan is a bird the size of a crow, but it has a white breast and a golden beak, which is equal in length to the whole body.] The aesthetic concern with colour therefore becomes epistemically contentious in the text. We therefore notice a significant shift in Aldrovandi. The epistemic concern with *autopsia* that we witness in the French sources is displaced by the at once epistemic and aesthetic principle of 'ad vivum' in the *Ornithologiae*.

As Aldrovandi proves, despite the continued reliance on iconographical evidence from French natural history, new descriptive methods were beginning to take shape beyond France at the turn of the seventeenth century. Yet, despite such a development, the natural-historical privileging of visual and haptic analysis meant the sound of the bird continued to remain unheard.

ii. Johann Faber: *Animalia Mexicana* (1628)

One source illustrating this shift is the *Animalia Mexicana descriptionibus* of the German doctor and botanist Johann Faber.[137] Faber was a member of the Accademia dei Lincei, whose foundation by the Italian natural historian Federico Cesi in 1603 coincided with the formation of several other scientific communities across Europe.[138] Printed in Rome by Giacomo Mascardi, the *Animalia Mexicana* gave

---

Thomas Balfe, Joanna Woodhall and Claus Zittel (Leiden: Brill, 2019) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004393998> [accessed 8 Mar 2023], pp. 1-43 (p. 4).

[136] Giovanni Botero, *Le relationi universali di Giovanni Botero benese* (Venice: Nicolò Polo, 1597) <https://books.google.co.uk/books?id=4poDZabilgUC&hl=it&source=gbs_slider_cls_metadata_7_mylibrary> [accessed 8 Mar 2023], p. 237.

[137] Johann Faber, *Animalia Mexicana descriptionibus, scholijsque exposita* (Rome: Jacobum Mascardum, 1628) <https://www.google.co.uk/books/edition/Ioannis_Fabri_Lyncei_Bambergensis_Animal/cW3g9gzIdd4C?hl=en> [accessed 8 Mar 2023].

[138] Simone Testa, *Italian Academies and their Networks, 1525-1700: From Local to Global* (Basingstoke: Houndmills, 2015) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=4828505> [accessed 8 Mar 2023], p. 5. Guiseppe Gabrieli, *Contribuiti alla Storia della Accademia dei Lincei* (Rome: Accademia Nazionale dei Lincei, 1989) <https://catalog.hathitrust.org/Record/002472150?> [accessed 8 Mar 2023].

an overview of the natural world in the developing Spanish colony of Mexico. Faber's description of the Toucan is extremely precise and minute in its detail, and it focuses closely on chromatism.[139]

> Nomen hic nullum adscriptum est. Rostrum in ave nulla maius reperiri existimo. Superior autem huius pars rostri, inferior dimidio latior est, variegantibus multa cum venustate coloribus ex viridi, albo, cæruleo, croceo, rubro, flavo versus extrema tamen, et acumen ipsius, magis magisque rubello. Est et hoc cum admiratione quadam spectandum, medietatem capitis, adeoque frontem integram in rostrum absumi. Oculorum pupilla nigerrima, reliqua tunicarum pars flava circulus has ambiens puniceus, et extra hunc area alba est. Colli inferior pars corcei diluti coloris, pectus vero castanei saturati, inter hoc tamen et collum rubedo levis apparet. Dorsum nigriusculum. Alæ ex triplici colore constant, fusco nempe, subfusco et castaneo mixtæ, qui in extremis magis diluitur. Inferior ventris et posterior pars nivea, et caudam versus rubella colore scintillat. Cauda autem nigerrima simulque solito longior id quod à sculptore hic non observatum fuit. Pedum digiti ante ac retro bini, ijque duplo, quam in hactenus descriptis avibus videre licet, longiores, coloris subalbidi sunt, et recurvis unguibus. Crura per intervalla cæruelo colore notantur.[140]
>
> [This one was not ascribed any name. I believe that a bigger beak cannot be found in any bird. The top part of the beak is larger than the lower one by half, with changing colours of great beauty from green, white, light blue, saffron, red, yet yellow towards its extremities, and redder than red at its very end. And one must gaze upon it with some wonder, given that half the head and the whole forehead are taken up in the beak. The pupil of the eyes is very black, the remaining part of their membranes is yellow, with a purple circle going around these, and beyond it, the skin is white. The lower part of the neck is a washed-out yellow in colour, but the breast is a rich brown, yet between it and the neck, a light red shows. The back, nearly black. The wings involved three colours; namely tawny, brownish, and rich brown mixed together, which are much washed out in the extremities. The lower and upper parts of the belly are white, and towards the tail it shines with red colour. The tail itself is jet black and also longer than usual, a feature which was not attended to by the engraver here. The toes are two apiece at the front and back, twice longer than what it was possible to see in depictions of the bird – they are whitish in colour, with curved claws. The legs are streaked by intervals of light blue.]

In the engraving that appears above the text (Fig. 13), Faber suggests a new name for the bird: 'Picus Americanus' ('American Woodpecker'). Although crows, magpies and woodpeckers often appeared in the same classificatory order in the period -- as we can see in Aldrovandi's *Ornithologiae*, for example -- Faber's name does entail an epistemic (if not classificatory) shift.[141] Faber could have made this leap for a number of reasons. First, it could have resulted from a closer attention to the bird's feet. Unlike Old World crows and magpies, the 'Picus Americanus' had four toes with two facing forward

[139] Precision and attention were cornerstones of the Accademia dei Lincei's practice. See David Freedberg, *The Eye of the Lynx: Galileo, His Friends, and the Beginnings of Modern Natural History* (Chicago: University of Chicago Press, 2002) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=3038245> [accessed 8 Mar 2023], pp. 35-37.
[140] Faber, p. 697.
[141] Aldrovandi, pp. 684-890.

and two facing back. If we look at the later *Ornithology* of John Ray, which translated and compiled material from Faber, Aldrovandi and Thevet, we notice how natural historians continued to discuss the anatomical similarities between the two species: 'I suspect that the Toes in this Bird are disposed after the manner of the *Woodpecker*, *viz*. two forwards, and two backwards.'[142] Another possibility is that Faber revived the early account of Gonzalo de Oviedo. In the very first depiction, Oviedo argues that his Picudo 'hace agujeros con el pico en los árboles' ('makes holes in trees with the beak'). Faber appears to accept Oviedo's claim -- while implicitly rejecting the frail beak structure narrative developed by Gessner and Thevet -- and turns it into a classification. Like the European woodpecker, this American one carves and crafts its own nest cavity. In this sense, the impression of a nascent nonhuman creative agency in the Toucan returns in Faber's nomenclature.

Furthermore, Faber's Picus proves that the epistemic debate around the bird continued to shift and change. His discourse is marked with the signs of rhetorical tentativeness which have been visible since the early accounts. His phrase 'I *believe* that a bigger beak cannot be found' (which softens the claim about the size of the beak using a comparative) proves how epistemic uncertainty and intellectual wonder continued to feature prominently in discussions of the bird. Moreover, the term 'Americanus' is important, as it disrupts the idea that the Toucan was predominantly a Brazilian bird.

[142] John Ray, *The Ornithology of Francis Willughby of Middleton in the County of Warwick Esq, Fellow of the Royal Society* (London: Andrew Clarke for John Martyn, 1678) <https://archive.org/details/ornithologyFran00Will> [accessed 8 Mar 2023], pp. 128-129.



Figure 13. *Picus Americanus*.[143]

Faber never visited the New World himself. Nor had he seen a live Toucan. His description reinterprets the correspondence of another of the Accademia's members: Cassiano dal Pozzo. Dal Pozzo had witnessed a living bird in the menagerie of Louis XIII at Fontainebleau.[144] France continued to play a vital role in the European history of the Toucan, not only as a major site where material specimens were imported or textual knowledge produced, but also as a place where living Toucans could now be seen. Practically every French monarch in the period showed a special interest in collecting living specimens. It was Henri IV who first cultivated the *volière* at Fontainebleau, which stemmed from Henri III's menagerie at the Palais du Louvre.[145] In an important development, Faber's text exhibits a reinstated sense of wonder at the visual spectacle of the bird. As one now

[143] Faber, p. 697.
[144] Henrietta McBurney, 'Cassiano dal Pozzo as Scientific Commentator: Ornithological Texts, and Images of Birds from the Museo Cartaceo', in *Documentary Culture: Florence and Rome from Grand-Duke Ferdinand I to Pope Alexander VII: Papers from a Colloquium held at the Villa Spelman, Florence, 1990*, ed. by Elizabeth Cropper, Giovanna Perini and Francesco Solinas (Bologna: Nuova Alfa Editoriale, 1992) <https://catalog.hathitrust.org/Record/002606345> [accessed 9 Mar 2023], pp. 349-363 (p. 350).
[145] Pierre Dan, *Le Tresor des merveilles de la maison royale de Fontainebleau* (Paris: Sebastien Cramoisy, 1642) <https://catalogue.bnf.fr/ark:/12148/cb302974591> [accessed 9 Mar 2023], p. 156. Gustave Loisel, *Histoire des ménageries de l'Antiquité à nos jours* (Paris: Octave Doin and Henri Laurens, 1912), p. 274.

resided in the courtly collection of a French monarch (where it had also happily reproduced) the Toucan had become an accommodated, domestic (albeit still exotic) animal in Europe.

As Faber's description shows, there were many advantages in being able to inspect a living specimen. Perhaps the most obvious of these is the ability to see the bird in vivid colour. Colouration is the main preoccupation of Faber's description. The name itself ('Picus'), which has a close etymological proximity with 'pictus' ('painted' or 'coloured'), evokes the colourful aspect of the bird and every single anatomical feature is framed -- and therefore defined -- in terms of its colour. From the presentation of the beak in the first sentence, Faber shows a clear intention to draw out the copious chromaticism of the bird in aesthetic terms. The various colours of the body are 'of great beauty'; the tip of the bill is 'redder than red'. As the passage develops, we notice how dedicated the natural historian was to outlining the vicissitudes of colour in his descriptive language. The hitherto 'black' back and wings become 'tawny, brownish, and rich brown', and terms such as 'light-blue', 'saffron' and 'whitish' are preferred to block hues. Of course, the descriptive technique of evoking colour shading is visible in Gessner, Aldrovandi and others. Yet it becomes extremely specific in the *Animalia Mexicana*, producing a bird that is uniquely colourful.

Furthermore, Faber describes the intricacies of colour through active verb forms ('scintillat' -- 'shimmers' or 'shines') which, following the example of Thevet's *Cosmographie*, intimates a form of agency in colour itself. Yet the attention to colour is thwarted at the rhetorical level by the monochromatic medium of the printed text. Faber shows a clear frustration at the inability of words to fully capture colour, and he even makes a point about the limits of woodblock (or copperplate) engraving in one of the final lines: 'quod à sculptore hic non observatum fuit' ('which was not attended to by the engraver here'). Depicting colour in a book could only go so far. Now that painters such as Rubens (with whom the natural historian had a close connection), Van Breughel and Van Kessel were beginning to present the Toucan in full colour themselves, an epistemic and aesthetic anxiety began to emerge in natural-historical texts.[146] Faber makes a case for the importance of colour and suggests that the black-and-white volumes of natural history could shortly begin to fall behind -- in terms of both

[146] Alexander Marr, *Rubens's Spirit: From Ingenuity to Genius* (London: Reaktion Books, 2021), pp. 90-91. We return to pictorial representations in the conclusion.

aesthetic appeal and epistemic accuracy. Indeed, as other species of Toucan began to appear, the need for specificity with colour would become even more acute.

Despite the fact that Faber's description comes from an eyewitness account of a live bird in Europe (Dal Pozzo), the question of sound remains distinctly ancillary. Although the epistemic shift to 'Picus' hints at the echoes of woodpeckers, there is still no direct mention of a call or noise. The impression of wonder comes only from what can be seen: in Faber's case, the copious colours of the bird's feathers.

Conclusion

From the very first account of Oviedo, the Toucan's life in natural-historical writing offers a detailed insight into the incorporation of New World mirabilia into established discourses in Europe. It was in France that the principal epistemic debate around the bird took place. In the texts of Belon, Thevet, Gessner and Paré, semiotic ascriptions around the Toucan encouraged intense reflection on different modes of witnessing, testimony and how to assess the reliability of information. With its enormous beak and relatively small body, the bird raised the question of monstrosity and *difformité* in the New World and sparked an intense debate between Belon and Thevet on the most suitable conception of nature (that is, nature as following harmonious patterns or nature as following *copia*). Indeed, the bill, bearing no nasal cavity, confounded anatomical analysts like Belon and Gessner, generating new ideas about the way birds breathe and the very structures and material substances of beaks themselves. The serrated edges of the mandibles initiated a debate about the bird's diet and classification: starting life as an aquatic species in Belon, it shortly became an arboreal, pepper-eating creature with Thevet and Gessner. By the turn of the seventeenth century, natural historians recognised two distinct species of Toucan in both text and image.

The epistemic debates in French natural-historical discourses established a set of salient characteristics which would appear time and again in successive volumes across the continent. In the *Historia naturae, maxima peregrina* (printed by Plantin in Antwerp, 1635), for example, the Spanish natural historian Juan Eusebio Nieremberg claimed three species of Toucan could be found in New

Spain.[147] Although he transcribed the Nahua name -- *Xochitenacatl* -- thereby distinguishing the Mexican birds from their southern counterparts, he reproduced the same engravings we see in Aldrovandi, Paré, Gessner and Thevet (see Fig. 14 and Fig. 15). Indeed, over a decade later in Jan Jonston's natural-historical volume on birds, we find the same engravings again, this time in reverse (Fig. 16).[148] The images of Thevet's *Cosmographie* and Gessner's *Icones* went a long way, and they each stemmed (as we have shown) from quite possibly the very same beak specimen passed between the two men by Giovanni Ferrerio.

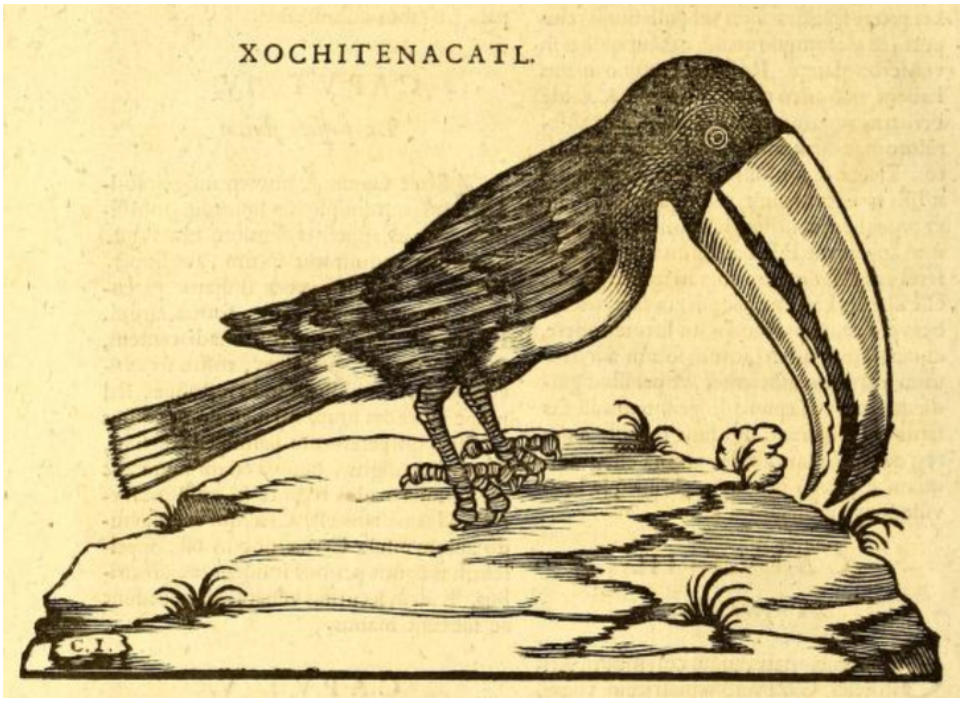


Figure 14. *De passere longi-rostro: Xochitenacatl*.[149]

[147] Juan Eusebio Nieremberg, *Historia naturæ, maxime peregrinæ* (Antwerp: Plantin, 1635) <https://archive.org/details/ioanniseusebiini00nier_0/mode/2up> [accessed 9 Mar 2023].
[148] Jan Jonston, *Historiæ naturalis de avibus libri vi* (Amsterdam: J. J. Schipperi, 1657) <https://archive.org/details/bub_gb_iES6mT9zVt8C_2> [accessed 9 Mar 2023].
[149] Nieremberg, p. 208.



Figure 15. *Altera Xochitenacatl*.[150]

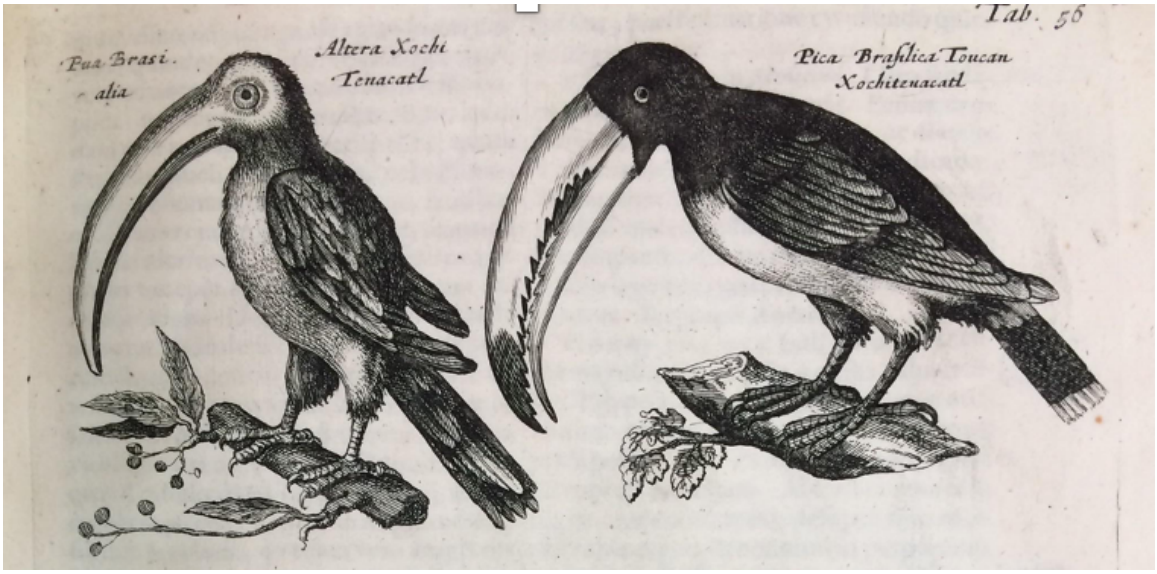


Figure 16. Jonston's many-named birds.[151]

Furthermore, as the bird moved across the continent, it generated a series of aesthetic responses in natural-historical discourse. Beginning its life as 'monstrueux' and 'difforme' in the accounts of Thevet and Paré, ascriptions that indicated a Renaissance aesthetics of wonder, the Toucan became part of a

[150] Nieremberg, p. 209.
[151] Jonston, p. 125.

discourse of chromaticism in Gessner, Aldrovandi and Faber. An interest in the colour of the Toucan's plumage took root in the French accounts and developed considerably in the years to follow. Natural historians attempted to paint with words, gradually increasing the palate by attending to the different shadings of colour. Indeed, the very Latin names 'Pica' and 'Picus', with their etymological proximity to 'pictus', hinted at the Toucan's association with colour. Finally, by following the Toucan's movement through early modern natural history, we gain a critical insight into the growing epistemic and aesthetic anxiety of depicting colour in the printed book.

The question of sound is a curious one in the context of natural history. While we begin with a noisy, feisty bird which makes 'grandes silbos' ('big whistling sounds') in Oviedo's first depiction, sound is all but lost in the successive accounts. Eyewitness observations -- whether in the New World or at home -- pay very little attention to the noise the bird makes and, while we catch echoes and ambient sounds, the auditory aspect of the Toucan does not carry properly in natural history. This was a discipline that privileged visual and haptic modes of analysis. However, as we will see, other genres of writing allowed much more space for sound; the noise of the Toucan returned, for example, in confessional polemic.

Thus, as we have seen, semiotic ascriptions around the bird transformed a series of discourses, many of which would reach beyond the generic bounds of natural history. In the following chapter, our focus shifts to another genre in which the Toucan's impact in early modern European thought can be keenly felt -- religious writing.

Chapter II. *Beaks and Feathers*: The Toucan in Confessional Discourses

Introduction: Wonders, Marvels and Miracles

Following its arrival in Europe, the Toucan quickly became a subject of interest for writers of many different stripes. This chapter focuses on the texts of avowedly Christian writers in France and beyond. Our initial questions are simple: what did writers of confessional texts make of the Toucan? How did they interpret the bird, and how did they relate it to specific aspects of Christian thought?

Early Modern France remained in the grip of a fierce confessional conflict which spanned the sixteenth and seventeenth centuries. From the posting of anti-Eucharistic pamphlets in the streets of Paris and indeed on the door of the king's bedchamber one October morning in 1534 (*l'affaire des Placards*) all the way through to the revocation of the edict of Nantes, the French people suffered through a protracted period of popular unrest, social violence and almost continual civil war.[152] The confessional landscape was fragmented, constantly shifting, and the political and religious instability it fomented reached every area of French society. Schisms opened up not only between Catholics and Reformers, but also internally within each confession. It was not only from the pulpit, or on the battlefield, but also in and through print that confessional strife was intensified in this period. Confessional polemical writing and the formation of a Reformed exegetical canon led to opposing positions becoming more clearly, indeed starkly, defined.

Many writers of confessional polemic incorporated the Toucan into their texts. Each author interpreted the bird in a unique way and these interpretations indicated specific beliefs, practices and doctrines. Investigating the lives of the Toucan in confessional writing therefore gives us critical insight into confessional stances (intellectual, social and political) in the early modern period. It allows us to see how religious texts engaged with natural-historical knowledge -- the different modes of semiotic ascription that took place -- and, crucially, to appreciate how creatures from the New World breathed new and different life into confessional discourses (and vice versa).

---

[152] The only period of relative peace came following the crowning of Henri IV (1589) and the signing of the Édit de Nantes (1598). This pause in confessional hostility ended with Henri's assassination in 1610. For an excellent survey of the Wars of Religion, see Mack P. Holt, *The French Wars of Religion, 1562-1629* (Cambridge: Cambridge University Press, 1995) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1017/CBO9781139163682> [accessed 6 Mar 2023].

As we have shown, the Toucan had a significant impact in early modern natural history. In this chapter, we argue that confessional writers in France revisited natural-historical material and reworked it in unique ways. Inspired by the Toucan, they used its beak and feathers as part of their own confessional movements. Together, their texts transformed perceptions about the Toucan across Europe. Our discussion draws attention to a series of works on both sides of the confessional divide. The first part returns to (and provides a close reading of) Jean de Léry's *Histoire d'un voyage*. In the 1611 edition of his book, the Reformed pastor amended his earlier description of the bird (specifically the beak) to include a remarkable satirical polemic about relics. This section explores both Léry's intervention into confessional satire and the Calvinist exegetical framework he adopts. The second part focuses on the different Catholic interpretations of the bird. From the emblematic text of a French Jesuit (Nicolas Caussin) to the missionary narrative of a French Capuchin (Claude d'Abbeville) and, finally, to the part-natural-historical part-ethnographic treatise of a Portuguese Jesuit (Fernão Cardim), this section outlines the shifting Catholic views on Toucan beaks and feathers.

Although wonder, marvel and the 'monstrous' have played an important role in our discussion so far, we now return to the question of wonders and marvels in relation to the 'miraculous'. The uptake of the Toucan in confessional writing is part of the conjoined early modern discourses of wonders, marvels and miracles. One of the central points of reference in determining the distinction between 'wonders' and 'miracles' as it was understood in the early modern period is the thirteenth-century theologian Thomas Aquinas. Aquinas's understanding of 'wonder' itself derived from Aristotle's *Metaphysics*. According to the classical philosopher, 'wonder' arises from ignorance about the causes of natural phenomena. It is a state of mind, an intellectual passion, which serves as the starting point of philosophical inquiry.[153]

In his *Summa contra gentiles*, Aquinas argued that wonder may be inspired by two categories of physical occurrences: the *preternatural* (things that happen by chance, accident or by unforeseeable

[153] *Metaphysics*, I. ii. Aristotle, *Metaphysics*, trans. by G. Cyril Armstrong and Hugh Tredennick (Cambridge, MA: Harvard University Press, 2014) <https://www.loebclassics.com/view/aristotle-metaphysics/1933/pb_LCL271.3.xml> [accessed 9 Mar 2023], pp. 10-11.

circumstances) and the *supernatural* (things that are performed directly by God with no secondary cause).[154] Although the two categories are difficult to distinguish, the key difference is that the supernatural involves a divine suspension of natural laws, whereas the preternatural does not. Thus, proper miracles belong only in the category of the supernatural. 'Wonders' or 'marvels' exist only within the preternatural, as they do not involve such a suspension of natural laws; rather, they can be explained by natural causes.

What was troubling for Aquinas was the fact that many writers conflated the 'wondrous' with the 'miraculous':

> Things that are at times divinely accomplished, apart from the generally established order in things, are customarily called *miracles*; for we observe the effect but do not know its cause. And since one and the same cause is at times known to some people and unknown to others, the result is that, of several who see an effect at the same time, some wonder, while others do not. [...] And so, a certain event is wondrous [*mirum*] to one person, but not so to another. So, a thing that has a completely hidden cause is wondrous in an unqualified way, and this the name, *miracle*, suggests; namely, *what is of itself filled with admirable wonder*, not simply in relation to one person or another. Now, absolutely speaking, the cause hidden from every man is God.[155]

The theologian therefore sets out the distinctions clearly in his treatise. True miracles are of themselves 'filled with admirable wonder': they involve a suspension of natural laws which no-one can explain. In other words, the cause (God) remains hidden to all. Wonders, on the other hand, do not involve such a divine suspension of natural laws. While they do incite the intellectual passion of wonder in some, there *is* -- fundamentally -- a natural cause. If you know what that natural cause is, then it is not a wonder; if you do not, however, then it is wonderful -- it gets you thinking and serves as the starting point of inquiry. As Daston and Park put it, 'the preternatural world is wonderful only to the uninstructed, whereas the miraculous is wonderful to all.'[156]

During the Reformation, theologians revisited and began to reshape Aquinas's distinctions for polemical purposes. For Reformers, the age of miracles ended with the death of Christ: we do not need new 'miracles', they reasoned, to confirm what has already been recorded in scripture.[157]

---

[154] Daston and Park, p. 121.
[155] Thomas Aquinas, *Summa contra gentiles: Book three: Providence*, trans. by Vernon J. Bourke (London: University of Notre Dame Press, 1975), p. 82.
[156] Daston and Park, p. 121.
[157] Daston and Park, p. 247.

Contemporary claims of miraculous occurrences were viewed as an example of Catholic 'superstition'.[158] Furthermore, in his *Institution de la Religion Chrestienne*, the Reformer Jean Calvin argued:

> Et nous doibt aussi souvenir que Satan ha ses miracles: Lesquelz combien qu'ilz soient illusions plustost que vrayes vertus: toutesfois ilz sont de telle sorte qu'ilz pourroient abuser les simples et les rudes. L'ydolatrie des Gentilz a esté nourrie par miracles merveilleux: lesquelz toutesfois ne sont suffisans pour nous approuver la superstition ne des Magiciens ne des ydolatres.[159]

In his treatise, Calvin is making a point about misinterpretation and the wrongful conflation of miracles with wonders. He argues that idolatry is being spread among the laity by 'miracles merveilleux': that is, wonders that are being mistakenly interpreted (and sold to their audience) as miracles. Furthermore, he claims that Satan, too, 'ha ses miracles': that these so-called 'miracles' (which are only wonders by Aquinas's definition) are no more than a devilish illusion.

Wonder and marvel have a longstanding association with travel narrative. As the known *oikumene* expanded dramatically in the early modern period, an abundance of wonders and marvels flowed back to the Old World in the written accounts and material collections of travellers.[160] As one of the main sources of the new forms of wonder and marvel in the sixteenth century, the New World is implied, by association, in Calvin's argument.

The New World traveller-turned-Reformed pastor Jean de Léry developed Calvin's point further. In the first edition of his *Histoire d'un voyage*, Léry described his Toucan as 'le plus prodigieux et monstrueux qui se puisse trouver entre tous les oyseaux de l'univers.'[161] He therefore located the bird firmly within a discourse of wonder. Yet in his final edition of 1611, Léry glosses the description -- this time, he not only frames the Toucan beak as 'wondrous' and 'marvellous', but also

---

[158] Julie Crawford, *Marvelous Protestantism: Monstrous Births in Post-Reformation England* (Baltimore, MD: The Johns Hopkins University Press, 2005), p. 12.
[159] Jean Calvin, *Institution de la Religion Chrétienne (1541)*, ed. by Olivier Millet (Geneva: Droz, 2008), p. 155.
[160] Mark A. Meadow, 'Merchants and Marvels: Hans Jacob Fugger and the Origins of the Wunderkammer', in *Merchants and Marvels: Commerce, Science, and Art in Early Modern Europe*, ed. by Pamela Smith (New York: Routledge, 2002) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=1487203> [accessed 9 Mar 2023], pp. 182-200 (pp. 182-184). Mary B. Campbell, *Wonder and Science: Imagining Worlds in Early Modern Europe* (Ithaca, NY: Cornell University Press, 1999) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.7591/9781501705069> [accessed 9 Mar 2023], p. 4. Greenblatt, p. 14.
[161] Jean de Léry, *Histoire d'un voyage fait en la terre du Bresil, autrement dite Amerique* (Geneva: Antoine Chuppin, 1578) <https://gallica.bnf.fr/ark:/12148/btv1b525073912> [accessed 9 Mar 2023], p. 175.

as 'miraculous': the beak is able to perform miracles.[162] Through the amendment, which we read as the author's intervention in confessional satire, Léry explicitly conflated 'wonders' and 'marvels' with the 'miraculous' and, therefore, showed how New World wonders -- forms of wonder Europeans had not experienced before -- could easily be interpreted as 'miracles'.

Catharine Randall's *The Wisdom of Animals* argues that the different confessional approaches to animals in early modern France were grounded in the theology of transubstantiation.[163] According to her account, Reformers adopted a *representational* model -- the idea that 'nature *displays* grace.' That is, nature is a symbolic representation of divine work. Moreover, these symbols are meant to teach us something: Reformers mostly configured the representational meaning of animals to didactic or pedagogical ends. In contrast, Catholics tended to embrace an *incarnational* model. Their view 'exemplifies the traditional dictum of Thomas Aquinas that "grace *builds on* nature."' More than merely representing God, nature was said to embody the divine in Catholic thought. If we pay close attention to nature, we become better acquainted with God Himself. Catholics therefore viewed the study of nature as an act of devotion, something intimately connected with admiring and augmenting the work of the Creator -- an act that was 'aimed at achieving a desired spiritual state.'[164]

Centred on the works of the Reformed poet Guillaume de Salluste Du Bartas and the Catholic bishop François de Sales, Randall's representational-incarnational model is largely convincing. However, multiple factors complicate the analytical model Randall proposes. More broadly, many scholars have challenged the rhetorical privileging of confessional difference.[165] One of the greatest challenges to Randall's distinction is the emblem. Constructing an emblem, by definition, involved seeking out the representational (symbolic) meaning of animals and other natural-historical signs.

---

[162] '[...] touchant les miracles qui ont esté faits par un maistre Bec.' Jean de Léry, *Histoire d'un voyage fait en la terre du Bresil, dite Amerique* (Geneva: Jean Vignon, 1611) <https://gallica.bnf.fr/ark:/12148/bpt6k580169> [accessed 9 Mar 2023], p. 178.
[163] Catharine Randall, *The Wisdom of Animals: Creatureliness in Early Modern French Spirituality* (Notre Dame, IN: University of Notre Dame Press, 2014) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=3441158> [accessed 9 Mar 2023], p. 76.
[164] Randall, p. 76.
[165] Randall's position thus extends Harrison's earlier view that Reformed and Catholic writers thought very differently in their interpretation of nature. Peter Harrison, *The Bible, Protestantism, and the Rise of Natural Science* (Cambridge: Cambridge University Press, 1998) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1017/CBO9780511585524> [accessed 9 Mar 2023], pp. 4-5.

Since the genre's inception by the Italian jurist Andrea Alciato in 1531, both Catholics and Reformers showed a keen interest in emblems.[166] Both adopted an emblematic view of nature in this sense -- both read nature in a representational way. As emblems were made for mostly educational purposes, we can also say that both Reformers and Catholics believed nature was meant to teach us something. In fact, this was no new idea in Christian thought. As Simona Cohen has shown, even the Church fathers (Basil, Ambrose and Augustine) 'emphasised that the world of nature and its creatures was meant to educate man.'[167] The view of nature as a didactic tool was already long-established in theological discourse.

Moreover, confessional writing that deals with the New World complicates matters further. Jesuit texts, for example, challenge the idea that Catholics viewed the study of nature as a purely spiritual exercise. For Jesuit missionaries, the study of nature in the New World was also practical. It was grounded in the need to make dictionaries of indigenous language for the purposes of preaching and catechesis, in colonial administrative concerns and, more basically, in the need to survive.[168] More recently, historians have begun to recognise the New World as a space full of 'Catholic-Protestant entanglements, resemblances, and continuities.'[169] As Anne McGinness has shown, Portuguese settlers in northern Brazil opportunistically switched confessional allegiance in order to navigate the shifting colonial landscape.[170] The boundaries between Catholic and Calvinist

---

[166] Andrea Alciato, *Emblematum liber* (Augsburg: Heinrich Steyner, 1531) <https://www.emblems.arts.gla.ac.uk/alciato/books.php?id=A31a> [accessed 9 Mar 2023].
[167] Simona Cohen, *Animals as Disguised Symbols in Renaissance Art* (Leiden: Brill, 2008) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=467997> [accessed 9 Mar 2023], p. 45.
[168] Natural-historical works produced by Jesuits gave an overview of edible, as well as poisonous (or venomous) plants and animals. They were also treatises of *materia medica*, detailing which of the New World plants could be used for medicinal purposes. Miguel de Asúa, *Science in the Vanished Arcadia: Knowledge of Nature in the Jesuit Missions of Paraguay and Río de la Plata* (Leiden: Brill, 2014) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=1730277> [accessed 9 Mar 2023], p. 1. See also Miguel de Asúa, 'Natural History in the Jesuit Missions', in *The Oxford Handbook of the Jesuits*, ed. by Ines G. Županov (Oxford: Oxford University Press, 2018) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1093/oxfordhb/9780190639631.001.0001> [accessed 9 Mar 2023], pp. 708-736 (p. 710).
[169] Jorge Cañizares-Esguerra, 'Introduction: Jesuit Liminal Space in Liberal Protestant Modernity', in *Encounters between Jesuits and Protestants in Asia and the Americas*, ed. by Jorge Cañizares-Esguerra, Robert Aleksander Maryks, and Ronnie Po-Chia Hsia (Leiden: Brill, 2018) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004373822> [accessed 9 Mar 2023], pp. 177-184 (p. 183).
[170] Anne B. McGinness, 'Negotiating Confessional Divide in Dutch Brazil and the Republic: The Case of Manoel de Morães', in *Encounters between Jesuits and Protestants*, pp. 228-252 (p. 230).

colonialism in the New World, as Cañizares-Esguerra remarks, were 'wafer thin.'[171] As we will see, Catholic and Reformed interpretations of New World mirabilia frequently intersected. If we insist on confessional difference, in this case, we ignore the complex religious and political landscape in the early modern Americas and, moreover, deny that individual authors adapted the signs of the natural world to their own confessional stances.[172]

In this chapter, we bring our semiotic reading to bear on the Reformed and Catholic perspectives in order to understand how they diverged and intersected in a different light. The first part assesses how the Reformed Léry used the Toucan as a conduit to stage a series of confessionally-oriented polemics about (among other subjects) relics, *Nicodémisme* and flair. The first polemic focuses on authority. How did writers garner authority as they communicated information about wonders, marvels and miracles to an audience? Why did people believe in such stories, even when they appeared incoherent or fanciful? In short, what generated this belief? The second polemic relates to trade, exchange and the activities of merchants. Why did wonders, marvels and miracles have such a high economic value? How did the activities of merchants affect religious ideas, discourses and practices? More broadly, why were commercial ideas so prevalent in religious cultures? The third polemic invoked the Calvinist discourse of anti-sensualism. How do we perceive wonders, marvels and miracles -- by which faculties? How can we justify our perceptions? What is the effect of over-indulgence in sensory perception?

Reformed writers like Léry, Calvin and Philippe de Marnix de Sainte Aldegonde used the distinction between wonders, marvels and miracles against certain aspects of Catholic belief. For Catholic writers, however, the distinctions between these terms and the passions associated with them were less salient. This is not to say that Catholics did not participate in the discourses of wonder and marvel. Indeed, as Alexander Marr reminds us, 'rapturous admiration at the handiwork of God' -- something most of the Catholic texts show -- is a key subtheme within this discourse.[173] However, as

[171] Cañizares-Esguerra, p. 182.
[172] Keith P. Luria, *Sacred Boundaries: Religious Coexistence and Conflict in Early-Modern France* (Washington, D.C.: Catholic University of America Press, 2005) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=3134708> [accessed 9 Mar 2023], p. xv.
[173] Alexander Marr, 'Introduction', in *Curiosity and Wonder*, ed. by Marr and Evans, pp. 1-20 (p. 6).

we will see, Catholic writers appeared to be more concerned with incorporating New World wonders and marvels into their own structures of thought. They spent considerable time figuring out where wonders and marvels fitted in their doctrines and practices, rather than distinguishing them from 'miracles'. Outlining such a distinction was unique to Reformed polemic. The distinction between wonders, marvels and miracles therefore only informs the first part of the chapter.

I. 'Un maistre Bec': The Toucan in Reformed Confessional Satire

i. Jean de Léry: *Histoire d'un voyage* (1611)

In 1611, Jean de Léry published the fifth and final edition of his *Histoire d'un voyage faict en la terre du Brésil*. The date of publication is important. From 1589 to 1610, France had enjoyed a period of relative peace under Henri IV. The king sought to appease his Reformed subjects through the edict of Nantes and Protestants were well represented at court. However, this pause in confessional hostility ended dramatically with Henri's assassination by the Catholic zealot François Ravaillac. The following years witnessed a severe reescalation in confessional tensions.[174] Léry's 1611 *Histoire* was therefore published at a significant juncture. As the book included numerous revisions, many of which were polemical in nature, we can read it as a response -- in large measure -- to the confessional and political events of the time.

In the 1611 edition, Léry casts aside his former rhetorical concern with reliable testimony and reappropriates his natural-historical material for the purposes of polemic. The book, printed by Jean Vignon in Geneva, includes a radical reassessment of the Toucan, characterised by a drastic shift into satire. The text becomes challenging, dense and, at times, utterly bizarre. We begin by paraphrasing the 1611 passage.

> Mais pour ne point frustrer l'Eglise Cacochisme Romaine des droits et privileges qui lui appartiennent, ce deffendant du Bec et des ongles (comme on dit) contre tous ceux qui lui en veulent, il faut adjouster ici ce que dit le sieur de Saincte Aldegonde au premier Tome du Tableau des differens de la Religion pag. 255. touchant les miracles qui ont esté faits par un maistre Bec, qui ne peut estre autre que celui de nostre *Toucan*.[175]

[174] Holt, p. 172.
[175] Léry, *Histoire* (1611), p. 178.

Not wishing to deprive the *Eglise Cacochyme Romaine* of its rights and privileges (given that it is currently defending itself against those who wish it ill), the narrator mentions a series of *miracles* performed by a *maistre Bec* ('master Beak'). This Beak, he claims, which appears in the work of *Sainte Aldegonde*, is none other than a Toucan beak.

We notice the shift into satire immediately; the first marker of irony is in the expression *Eglise Cacochyme Romaine*. The phrase is a caricature which clearly refers to the Roman Catholic Church -- the word *Catholique* provocatively turned into *Cacochyme*, a medical term indicating frailness from old age. The narrator wishes to pay reverence to this Church, a phrase that is once again inflected with irony given Léry's known confessional stance. We therefore quickly notice the satirical style: Léry's technique is to caricature and ventriloquise Catholic perspectives from a distance. The narrator then uses an expression which includes another *Bec* ('du Bec et des ongles') to describe how the Church is currently *fighting tooth and nail to defend itself*, a clear allusion to the confessional conflict.

What is the reader to make of this 'master Beak'? How does Sainte Aldegonde describe it in his *Tableau des differens de la Religion*? The opening sentence satirically poses a series of questions for the reader to ponder. Indeed, the lack of further explanation, which deliberately scatters holes and inconsistencies in the story, is part of the satirical technique. In the second sentence, the narrator moves quickly to the backstory of the Beak itself:

> Et en voici la venerable histoire, cest que le bon Nicodeme (ainsi abusent les Romanisques du nom des vrais serviteurs de Dieu) ayant recueilli en son gand du sang (faut il presupposer de Jesus Christ) il en fit une infinite de beaux miracles, dequoy les Juifs estans fachez, il s'advisa pour eviter leur furie de l'enfermer dedans le bec d'un grand Oyseau (je ne sçai dit le sieur de Saincte Aldegonde si c'estoit du grand Papegay de Rome ou de quelque autre harpie ou Gryphon cornu, mais moy pour esclaircir la matiere je di que cestoit de nostre *Toucan*) avec le parchemin, auquel il avoit particulierement escrit tous les susdits miracles: et ainsi les jettant dedans la mer à la garde de Dieu, ce venerable Bec s'alla pourmener par lespace d'onze ou douze cens ans par toute la mer d'Orient et d'Occident; pensez le beau voyage qu'il fit et les belles choses qu'il y apprint: Principalement s'il eut vent propice pour aller jusques au Bresil afin de savoir son origine.[176]

[176] Léry, *Histoire* (1611), pp. 178-179.

The following section outlines the 'venerable' history of the *good* Nicodemus (the *Romanisques* misappropriate his name), who collected a sample of blood -- presumably that of Christ -- in his glove. Nicodemus used the blood to perform an 'infinity' of miracles. To avoid the anger of the Jews at this recusant activity, Nicodemus enclosed the glove (as well as a piece of parchment on which the miracles had been recorded) inside the beak of a 'great Bird'. Under God's guard, he threw the Beak into the ocean. Sainte Aldegonde cannot identify the origin of the Beak. It may have a mythical provenance, being that of the *Great Parrot of Rome*, of a harpy, or of a horned Gryphon. The narrator, however, does know the origin: it comes from a New World Toucan.

Cast into the sea, the Beak embarks on an eleven- to twelve-hundred-year journey across the oceans of the East and the West. Imagine, the narrator invites us, the Beak's journey and the 'beautiful' lessons it learned along the way, particularly if a favourable wind had carried it to Brazil, where it could have encountered its own origin.

The Beak thus belonged to Nicodemus, a pharisee and rabbinical pastor living in the time of Christ.[177] The narrator momentarily adopts a sincere tone to say that the 'Romanisques' (a Calvinist term for Roman Catholics) misuse his name. A succession of points about Nicodemus then follows, namely that he was *good*, that he renounced his vocation on the death of Christ to perform miracles with His blood, and that he was, in some manner, under the protection of God. These claims are plausible, if not controversial.

But the reader stumbles again around the idea that Nicodemus owned a Toucan beak. It is not at all clear where the pharisee found the beak, how it could have travelled across the ocean or, indeed, 'learned' things on its voyage. Yet perhaps the most obvious question in mind is: if the New World was unknown to Europeans prior to the fifteenth and sixteenth centuries, how could a Toucan beak have existed in the Old World before then?

As he animates the Beak in satirical fashion, the narrator once again leaves a series of questions unanswered. Moreover, if the reader had seen a natural-historical description of the Toucan, they would have known that the denticulated edges of the mandibles prevent the beak from closing

[177] We will return to Nicodemus in more detail in the following section.

fully.[178] How, then, did Nicodemus imagine the Toucan beak to be a suitably watertight container? What happened to the glove, blood and parchment once the Beak was cast into the ocean? The passage draws out natural-historical questions about anatomy, materials and mechanics to develop the sense of irony further. The following segment marks the Beak's return to the Old World.

> Mais quoy que s'en soit il vint finalement surgir en Normandie, où il fut descouvert à Robert de Neufbourg, premier eschanson dudit pays, homme tresdevot: et ce par le jugement et prudence d'un maistre Cerf, et des chiens de chasse, lesquels estans venus sur la trace de ce precieux Bec se mirent d'un accord à genoux en grande devotion, et ne sait on pas bien s'ils dirent leur chappelet ou les heures de nostre Dame: tant y a qu'ils n'en penserent pas moins.[179]

Whatever happened on the long voyage, he claims, the Beak eventually came to land in Normandy where it was discovered by the local nobleman Robert de Neufbourg (the first 'eschanson' ['cup-bearer'; a person of high political standing] of that land). But Neufbourg did not find the Beak on his own. Rather, it was by the 'jugement' and 'prudence' of a 'maistre Cerf' ('master Stag') and a pack of hunting dogs that the precious Beak was unearthed. Coming upon the 'trace' of the Beak, the animals cease the hunt and prostrate themselves before it in 'great devotion'. One could not really tell what the creatures were saying, the narrator claims, whether it was a 'chappelet' (rosary) or 'les heures de Nostre Dame' (a form of prayer). But there was at least some thinking going on.

As the Beak returns to Europe, the voyage is complete. Once again, the specific geographic detail invites question: why did the Beak land in Normandy, and who is the Norman nobleman? We know stags and dogs have a keen sense of smell, but we are left wondering why the animals bow in reverence before the Beak. Indeed, the Beak appears to make them think, behave and, crucially, speak (in prayer) in a certain way. The story then continues with Neufbourg's reaction to the spectacle.

> Tellement que ledit sieur voyant ce miracle bestial, y fit bastir à ses despens une belle Abbaye, que l'on nomme encor aujourd'huy l'Abbaye du Bec, en laquelle estans devenu malade, il se rendit Moine, et y finit ses jours apres qu'il l'eut douee de force beaux et grands revenus: voire en telle sorte que les histoires disent qu'il y posa la bosse du Chameau: c'est à dire qu'il vuida tous ses thresors.[180]

[178] See Belon's *Histoire de la nature des oyseaux* and Gessner's *Icones*.
[179] Léry, *Histoire* (1611), p. 179.
[180] Léry, *Histoire* (1611), pp. 179-180.

Witnessing this 'miracle bestial', the nobleman decides to consecrate the site by building an abbey on it: L'Abbaye du Bec. Then, having become ill, Neufbourg spends the last of his days there as a monk. But not without first endowing the institution with considerable wealth. Indeed, the histories say that he 'placed the camel's hump there' -- another creaturely proverb meaning he handed over all of his treasures.

The phrase 'miracle bestial' is contentious: it opens up a series of questions about wonders, miracles and witnessing. The reader is left asking what constitutes a true 'miracle' and how we can tell when we are witnessing one. Moreover, in a report about a 'miracle', which of the characters in the scene should we trust -- the witness (Neufbourg), the 'histoires' or the narrator? The nobleman, for his part, has a strong affective response to the events taking place. He is so convinced that he is witnessing a miracle, in fact, that he dedicates all of his wealth (and the rest of his life) to the foundation of the abbey. The ironic narration culminates with the onomastic: this medieval Abbaye is named after a Toucan beak.

The final part of the story is the most challenging of all. The perspective shifts, and the reader is left puzzling which of the points to take seriously:

> Et ainsi ce n'est pas sans cause que je solemnise ici le Bec de nostre *Toucan* (car, comme j'ai dit, ce ne peut estre un autre) veu qu'ayant fait tant de belles choses au deçà de la mer en faveur du Pape et des siens, ils ne pouvoyent moins que de lui eriger et bastir une Abbaye bien rentee, où je le laisse enchassé en quelque beau Reliquiere d'or ou d'argent comme il le merite, quoy que les Huguenots s'en moquent et ne le vueillent croire, tant sont-ils camus quant on leur parle de ce sainct mirelifique Bec qui a esté canonisé hors de son pays, où on n'en eut pas fait si grand cas, tant les Bresiliens tiennent-ils peu de conte d'adorer jusques aux Becs d'oyseaux comme les Papistes qui font leur profit de tout pour faire bouillir la marmite.[181]

The Abbaye's foundation tale finished, the narrator returns to first-person commentary. *It is not without reason that I regard the Beak of our Toucan with such solemnity, as it could be no other*. Given the Beak had done so many beautiful deeds on this side of the ocean in favour of the Pope and his followers, the least one could do in return is to establish a well-furnished abbey, where I leave it enshrined in a reliquary of gold or silver (as it deserves to be).

[181] Léry, *Histoire* (1611), p. 180.

In other words, we should take this story about a miraculous Beak seriously, the narrator claims. Irony comes once again through the ventriloquising of a Catholic perspective. It is significant that the narrator describes the Beak in the context of the *au deçà*. Instead of beginning life in the *au delà* (as all real Toucan beaks did), the story begins at home. It then travels to the New World to 'discover its origin'. The reversal is comically nonsensical and creates the impression of a world turned upside down. Furthermore, the idea that the Beak worked for the Pope satirically animates the object even further, and the hyperbolic inflection of 'the least one could do for it' plays with a hagiographical mode to compound the irony.

However, what is the reader to make of the return of the first-person narrator in the final clause? Surely he did not deposit the Beak in the reliquary himself. It makes more sense, then, to read the claim as a metanarrative intervention: 'this is where I leave the Beak in my story'. The narrator's position continues to be elusive, and it remains so in the final line. Huguenots make a mockery of the Beak and do not want to believe the story, he claims. How 'camus' (literally 'flat-nosed' or, figuratively, 'browbeaten') they are when we tell them the story about the 'sainct mirelifique Bec' which had been canonised 'hors de son pays' (Brazil) where 'on n'en eut pas fait si grand cas' ('nobody would have made a big deal of it').

Once again, the tone shifts into the sincere. Not even the native Brazilians go so far as to worship the beaks of birds like Papists, who will take advantage of anything to 'faire bouillir la marmite' ('make the pot boil' or 'get by'). The final lines appear to contain multiple voices: Huguenots, Papists and Brazilians, all of whom remain distinct from the narrator's 'Je'. What does become clear in all of this, however, is the shift from ironic narration to clearly satirical commentary at the end of the passage. The unfavourable comparison between Catholics and indigenous people in Brazil reinforces the author's own confessional stance.

Throughout the passage, Léry distances himself from the text by ventriloquising aspects of Catholic belief. He creates logical inconsistencies as a satirical strategy to highlight the unbelievable as wondrous and to call into question structures of belief. His satire is multifaceted, rhetorically sophisticated and concludes with a sincere polemical argument about a Catholic practice. The revision is rich. It reflects the development of both Léry's confessional thinking and his writing. The Toucan

beak acts as a writerly 'affordance' -- it gives Léry the chance to experiment, to try his hand at satire and irony and, ultimately, to make a direct intervention in the Reformed polemic of the time.[182]

a. Authority

One of the key debates Léry invokes in his revision is that of authority. Who provides reports about wonders, marvels and miracles? Who might we trust and what generates belief in such stories? Léry opens each of these questions in turn as he shifts into the satirical mode. Indeed, satire itself offers a means to critically reassess what one takes to be true.

In his opening sentence, the narrator references the Reformed satirist Philippe de Marnix de Sainte-Aldegonde. Born in Brussels in 1540, Marnix studied under Calvin before returning to the Netherlands, where he wrote numerous works of Reformed polemic in Dutch and French.[183] The book Léry cites, *Tableau des differens de la religion* (printed in Leiden by Jan Paets in 1600), is a satirical mock-praise of the Catholic Church.[184] The *Histoire*'s 1611 amendment paraphrases the story of a miraculous Beak discussed by Marnix.[185] Léry therefore evokes the testimony of a "Saint" who

[182] We might read the Toucan beak as Léry's 'literary affordance' by Terence Cave's definition. As Cave notes, 'language itself is for humans the key empowering affordance, allowing the development of secondary language-based affordances, artefacts or instruments made out of language, such as metaphors, literary genres, poetic and narrative forms, and individual literary works.' Cave, *Thinking with Literature*, p. 52.
[183] See, for example: *Den byencorf der H. roomsche kercke* (Amsterdam: Nicolaes III Biestkens, 1597); *Traicté du sacrament de la saincte Cene du Seigneur* (Leiden: Jan Paets and Jean Baudouin, 1599). Marnix also wrote one of the first Dutch translations of the Bible.
[184] Philippe de Marnix de Sainte Aldegonde, *Premier tome du tableau des differens de la religion* (Leiden: Jan Paets, 1600).
[185] 'Tu doibs sçavoir, que comme les Juifs furent faschez de ce que Nicodeme faisoit tant de beaux miracles avec ce sang, il s'advisa pour eviter leur furie, de l'enfermer dedans le bec d'un grand oiseau (je ne sçai si c'estoit du grand Papegay de Rome, ou de quelque autre harpie ou Gryphon cornu: car le deposant n'en specifie rien) ensemble avec le parchemin, auquel il avoit particulierement escrit tous les susdits miracles: et ainsi le jetta dedans la mer à la garde de Dieu: Or ce venerable bec s'alla pourmener par l'espace de onze ou douze cens ans par toute la mer d'Orient et d'Occident: pensez le beau voyage qu'il feit, et les belles choses qu'il y apprint. Finallement il vint surgir en Normandie, ou il fut descouvert à Robert de Neufbourg, premier eschanson de Normandie, homme tres-devot: et ce par le bon jugement et prudence d'un maistre cerf, et des chiens de chasse, lesquels estans venus sur la trace de ce precieux bec, se meirent d'un accord à genoux en grande devotion: je ne sçai s'ils dirent leur chappelet ou les heures de nostre Dame: tant y a qu'ils n'en penserent pas moins. Et ledit Sieur voyant ce miracle bestial, y feit bastir à ses despens une bien belle Abbaye, que l'on nomme encor pour le jour d'aujourd'hui l'Abbaye du bec, en laquelle estant devenu malade, il se rendit moine, et y fina ses jours, apres qu'il l'eut doüee de force beaux revenus et rentes voire tellement que les histoires escrivent, qu'il posa illecques la bousse du chameau, c'est à dire, qu'il vuida ses thresors. De sorte que ce n'est pas une chose pour en faire peu de cas, comme font ces heretiques: puis mesmes que ce sang fait encor aujourd'hui force beaux miracles. Et cependant les Evangelistes n'en font non plus de mention, que de la queuë de l'asne, sur lequel nostre Seigneur feit son entree en Jerusalem, laquelle lui estant couppee tout rasibus a esté conservee par tant de certaines

sounds medieval (Sainte Aldegonde) in order to tell a story about a miracle. But, as we know, this is no medieval Saint, but actually a Reformed satirist. Marnix, for his part, relies on information from the popular 1160 *Chronicon* of Sigebert de Gembloux.[186] What Léry references is therefore a Reformed satirical retelling of a medieval chronicle. He updates the story with his own knowledge gathered from the New World, thus combining multiple strands of information in satirical fashion to call into question the construction of textual authority.

Both Marnix and Léry are satirically interrogating the construction of belief in their passages, but each one deploys a different rhetorical approach. Marnix, for instance, has frequent recourse to legal terminology. When Marnix's narrator discusses the identity of the great Beak used to enclose Nicodemus's blood relic, he states in parentheses: 'je ne sçay [...] car le deposant n'en specifie rien.'[187] He claims to have been informed by an unreliable witness, and the 'deposant' remains anonymous. In Léry's retelling, however, the narrator is far more assertive. He displaces Marnix's ignorant informant to triumphally claim: 'mais moy, pour esclairir la matiere je di que que c'estoit nostre Toucan.'[188] Léry's rhetoric, which structures the entire account, stems from personal eyewitness information -- *trust me reader, for I have seen things in the New World*.[189] But given the new context in which this claim appears, the phrase reads instead as a satirical deconstruction of the rhetoric of autopsy.

Indeed, the opening line of the 1611 passage indicates the shift into irony. The narrator's dogged insistence that an ancient, miraculous beak used by Nicodemus was that of a New World bird opens the passage to ridicule. As the narrator continues to rely on *autopsia* in the satire, Léry displays a rhetorical self-awareness.[190] He implicitly asks why we should believe this version of the story over any other. We are confronted by different rhetorical conventions, he states, and we must be careful interpreting such stories about 'miracles'. Léry reflects on autoptical claims in particular. The

---

d'annees, pour estre mise en reliquaire, et gardee pretieusement en la ville de Genes en Italie.' Marnix, *Tableau*, fol. 255^{v}-256^{r}.

[186] Sigebert's *Chronicon* was popular during the Middle Ages and is heavily reprinted from 1513. It discusses events and locations of historical importance. Marnix, *Tableau*, fol. 256^{r}.

[187] Marnix, *Tableau*, fol. 255^{v}.

[188] Léry, *Histoire* (1611), pp. 179.

[189] Frisch, p. 173. Lestringant, *Le Huguenot et le sauvage*, p. 81.

[190] Hoffmann argues that Léry exhibits an astute awareness of different genres and styles as he flits between satire and sincerity. George Hoffmann, *Reforming French Culture: Satire, Spiritual Alienation, and Connection to Strangers* (Oxford: Oxford University Press, 2017) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1093/oso/9780198808763.001.0001> [accessed 9 Mar 2023], p. 129.

repetition of *je di -- j'ay dit* contrasts with the account of another eyewitness observer: the natural historian Pierre Belon.[191] A polemic with Belon occurs at multiple levels in Léry's passage. The reference to parchment (inside the Beak) recalls Belon's haptic analysis of the beak specimen and the proposition that the Beak can swim satirically deconstructs the natural historian's claim that the Toucan was a water bird. Furthermore, as Belon frames his description of the Toucan within a larger point about New World wonders and marvels flowing back to Europe as trade commodities, the idea of a Toucan beak starting life in the Old World before revisiting the Americas mocks this convention.

Yet the polemic with Belon was only a recent development. If we revisit the text preceding the addition of 1611, we see that Léry was far more conciliatory towards the natural historian: 'ce n'est point sans raison que Belon en ayant recouvré un [a beak], l'a par singularité fait pourtraire à la fin de son troisième livre des oyseaux.'[192] In a tone of agreement, Léry states that Belon was quite right to note the Toucan as a singularity. What is it, then, that incites the subtle mockery of the 1611 edition? Belon was a committed Catholic. He dedicated each of his books either to the Cardinals (whose patronage he received) or to the Catholic kings. These facts alone, however, are not enough to make the case for a confessionally-inflected polemic between the two authors. Belon had, after all, never publicly rebuked Léry: in fact, he died several years prior to the *Histoire*'s first printing.[193]

We could argue, as Hoffmann does, that Léry and Belon moved in different directions in perceiving the distinction between religious 'observance' and empirical 'observation'.[194] Both writers relied on first-hand witnessing. However, for Belon, 'observation' in the sense of empirical investigation no longer carried the older religious meaning of 'observance' as complying with a duty or ceremony. In fact, as Hoffmann shows, he dismisses religious dietary observances as mere 'superstitions' in his travel account to the Levant: *Les Observations de plusieurs singularitez et choses memorables*.[195] For the Reformer Léry, a much closer affinity existed between the two terms. To

[191] Belon's presentation of the toucan in his 1555 *Histoire de la nature des oyseaux* is far more hesitant: 'Et nous n'ayant veu l'oyseau qui l'a produit, n'en pouvons dire autre chose, sinon que par soupçon le pensons estre de pied plat.' Belon, *Histoire de la nature des oyseaux*, p. 184. In other words: 'as we have not seen the whole bird, we cannot *say* anything, but we can assume that it is a water bird.'
[192] Léry, *Histoire* (1611), p. 178.
[193] Belon died in 1564. Léry's *Histoire* was first published in 1578.
[194] Hoffmann, p. 145.
[195] Hoffmann, p. 145.

observe the phenomena of the New World was to 'endure the difficulties of travelling afar, to offer the sacrifice of oneself, and thereby to pay reverence to the infinite variety of God's wonders.'[196] The contemporary sense of 'observation' thus retained at least some of the older religious 'observance' in Léry's *Histoire*.

However, the dichotomy between the two writers was not as stark as this. For both Léry and Belon, eyewitness observation (particularly of natural-historical phenomena) involved showing discipline, looking closely and describing things carefully -- all to show admiration for God's Creation. Belon's book on fish, for example, opens in the natural-theological mode. As both writers present their findings in a devotional way, we can see how both Reformers and Catholics followed the principle of religious observance in their texts.

Léry's polemic is therefore not a confessionally-inflected interrogation of the Catholic natural historian's view of observance. Rather, it seeks to parody the analysis and inferences produced by a particular form of (stay-at-home) eyewitness observation. Yet, within the satire Léry raises a more serious point that does carry a confessional polemical charge. To recognise wonders and marvels for what they are, you have to understand them in relation to their original context. You cannot simply guess. Léry's parody contains a warning: while Belon, in this case, does not claim to have seen a 'miracle' in the Toucan beak, in the hands of someone else, a more serious misinterpretation could occur -- one with religious implications. *Just look how far I can go with the marvellous Toucan beak,* he shows us. In other words, we must be careful in presenting wonders and marvels to an audience. The uninitiated can easily get carried away. Rhetorical framing matters.

The amendment shows how multiple voices, interpretations and rhetorical conventions frame marvels. Léry even uses a series of metanarrative overlays in parentheses, both to emphasise the irony and to give the impression of multiple voices speaking at once. The term 'Romanisques', for instance, which appears in the second set of parentheses, rings of Calvin.[197] Furthermore, as Lestringant argues,

[196] Hoffmann, p. 145.
[197] Jean Calvin, *Three French Treatises*, ed. by Francis M. Higman (London: The Athlone Press, 1970).

with all of its eccentricity and exoticism, travel narrative rather lent itself to satire.[198] Few texts exploit the connection between travel writing and satire better than the *Quart Livre* of François Rabelais. Reading Léry's satirical intervention around the Toucan, one cannot help but feel a Rabelaisian inflection in the *Histoire*'s 1611 edition.

Rabelais's influence on both Marnix and Léry has been well documented.[199] In the *Quart Livre*, Rabelais uses a satirical device known as the 'liar's tale'. The device, which is first found in Lucian, works on the basis of a paradoxical convention between narrator and reader. The more the narrator stresses his own reliability and truthfulness, the more his tale turns out to be a lie.[200] The *Andouilles* episode provides a good example of the device in action. Recounting the origin stories of the Andouilles in Chapter 38, the narrator states: 'Vous truphez icy, Beuveurs, et ne croyez que ainsi soit en verité comme je vous raconte. Je ne sçaurois que vous en faire. Croyez si vous voulez: si ne voulez, allez y veoir. Mais je sçay bien ce que je veidz.'[201] As in Léry, Rabelais's narrator invokes autoptical knowledge. But the claims of *autopsia* becomes ridiculous in the context of satire and they essentially debunk the rhetorical ability of autopsy to foster authority.

It is the insistence on authenticity through personal experience -- the 'Je' as reliable witness -- that Léry mocks in the 1611 edition. The revised description of the Toucan contains its own version of the liar's tale. It is made particularly effective as the reader gets to see (within the space of only a few pages) the same rhetoric of *autopsia* adopted in both satirical and sincere contexts. Where parenthetical interjections read as sincere clarifications elsewhere in the *Histoire*, they read, by contrast, as a humorous insistence on a falsehood in the gloss. The elucidatory becomes the ironic. Shifting into satire, Léry outlines two different readings of the same narrative structure. He therefore

[198] Frank Lestringant, 'Rabelais and Travel Literature', in *A Companion to François Rabelais*, ed. by Bernd Renner (Leiden: Brill, 2021) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004460232> [accessed 9 Mar 2023], pp. 185-215 (p. 212).
[199] Gustave Cohen, 'Rabelais et Marnix de Sainte-Aldegonde', *Revue des Études Rabelaisiennes*, 6 (1908), 64-65 <https://gallica.bnf.fr/ark:/12148/bpt6k19482m/f86.item> [accessed 9 Mar 2023] (pp. 64-65). Lestringant, 'Préface: Léry ou le rire de l'Indien', p. 16.
[200] Paul J. Smith, 'Interpreting the *Quart Livre*', in *Companion to Rabelais*, ed. by Renner, pp. 325-356 (p. 334).
[201] *QL*. XXXVIII 'Comment Andouilles ne sont à mépriser entre les humains'. François Rabelais, *Œuvres complètes*, ed. by Mireille Huchon (Paris: Gallimard, 1994), p. 628.

cautions the reader to be discerning with stories about New World mirabilia: the travel writer might lay claim to autoptical authenticity, but that is no guarantee of truth.

Rabelais was behind many, though certainly not all Reformed satirical commonplaces.[202] Yet we should be wary of taking Rabelais as a Reformer himself, or indeed sympathetic to it, on account of the 'hermeneutical slipperiness' of his texts.[203] Léry's Papegay de Rome surely emerges from the same Reformist circles as the huge, surly Papegaut of the *Isles Sonnantes* in Rabelais's *Cinquiesme Livre* -- itself another anti-Papal satire.[204] The Parrot is an important figure in the context of a story about authority. As noted in the introduction, the bird was a well-known symbol of mimicry, mindless speech and repetition. Marnix describes the mythical papal Parrot as a potential source of the Beak and, as Léry reproduces (or parrots) Marnix's line himself, he makes an important point about the repetition and reproduction of stories: we should not simply repeat what we have been told without pausing to reflect. In the context of the anti-Catholic satire, the point takes aim at what the Reformer views as the mindless transmission of Catholic superstition. The Parrot is therefore no idle figure in the narrative, it makes an important point about authority and the transmission of stories.

Another Rabelaisian feature in Léry's revision is the manipulation of the toponym: L'Abbaye du Bec. The Abbaye du Bec was real: it had a prominent role in local medieval monastic culture.[205] The narrator calls upon a known religious institution, but he reimagines the name as being rooted in a pun. The name has nothing to do with the geographical toponym, he claims, it comes from the 'miraculous' beak of a bird. Moreover, this is not the beak of a mythical creature from poetic fiction (as suggested by Marnix's *harpie* and *Gryphon cornu*), it is a Toucan beak. He therefore engages with

---

[202] Hoffmann, p. 93.
[203] Anne-Pascale Pouey-Mounou, 'Rabelais and Religion', in *Companion to Rabelais*, ed. by Renner, pp. 75-98 (p. 98). Edwin Duval, 'Putting Religion in its Place', in *The Cambridge Companion to Rabelais*, ed. by John O'Brien (Cambridge: Cambridge University Press, 2011) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1017/CCOL9780521867863> [accessed 9 Mar 2023], pp. 93-106 (p. 94).
[204] *CL*. III. 'Comment en l'Isle sonnante n'est qu'un Papegaut'. Rabelais, *Œuvres complètes*, pp. 732-734.
[205] Supposedly founded by the legendary knight Herluin, the *Abbaye* has been described as 'the fulcrum of administrative monastic policy and manuscript culture.' Laura Gathagan and Benjamin Pohl, 'Introduction', in *A Companion to the Abbey of Le Bec in the Central Middle Ages (11th-13th Centuries)*, ed. by Laura Gathagan and Benjamin Pohl (Leiden: Brill, 2018) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=5124288> [accessed 12 Mar 2023], pp. 1-10 (p. 4).

what Tom Conley has labelled the 'spatio-hagiographic' mode in order to humorously rewrite the origin story of a medieval monastery.[206]

The pun reminds us of Rabelais's satirical rewriting of the etymology of Paris in *Gargantua*.[207] Fascinated by the visual appearance of Gargantua, the inhabitants of the city press upon the giant in great crowds. He is forced to sit upon the towers of the cathedral, where he reaches the conclusion that he must pay the spectators to leave him alone. He decides to pay them with 'wine'. Thus, he pulls down his breeches and drowns the crowd in urine: 'Je leur voys donner le vin. Mais ce ne sera que par rys.'[208] Once the flood subsides, the survivors arise to proclaim 'Carymary, carymara! Par saincte Mamye, nous son baignez par rys.'[209] Drowned in pee 'par rys' (for a laugh), the city is thus named, as the narrator explains, *Paris*.

Although this episode in Rabelais is not a religious polemic, Léry mimics the procedure in his own confessional satire. Both writers are making a point about etymological interpretation and the rediscovery of toponyms. As Léry reworks the origin story of the Abbaye du Bec, he highlights the epistemic power of etymology (as well as local histories and genealogical stories) as able to generate fictions. Furthermore, Léry uses the pun to underline the issue of trickery (or ruse) in storytelling. It is quite a feat to believe that a 'miraculous' beak from Brazil had genuine topographical and religious significance in France. Indeed, 'miracles' were -- as God's direct intervention in the world -- unbelievable by any standard of believability.

By turning a New World wonder into a miracle through a series of deceitful fictions himself, Léry calls into question the interpretation of wonders, the process of semiotic ascription that takes places around 'miracles' and, ultimately, the fostering of belief. He explores these conjoined issues further in the main origin story of the passage -- that of Nicodemus. Nicodemus was a contested character in confessional polemic. Of the many different interpretations of the Pharisee in the period,

---

[206] Tom Conley, *The Self-Made Map: Cartographic Writing in Early Modern France* (Minneapolis, MN: University of Minnesota Press, 1996) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=310378> [accessed 12 Mar 2023], p. 152.
[207] *G*. XVII 'Comment Gargantua paya sa bienvenue es Parisiens, et comment il print les grosses cloches de l'eglise Nostre Dame'. Rabelais, *Gargantua*, pp. 98-100.
[208] Rabelais, *Gargantua*, p. 98.
[209] Rabelais, *Gargantua*, p. 99.

one of the most prominent in Reformed circles was that of Jean Calvin. In his 1544 pamphlet, *Excuse à Messieurs les Nicodémites*, he wrote a scathing critique of French Huguenots who claimed to be emulating Nicodemus by keeping their Reformed faith a secret.[210] These self-styled *Nicodémites*, Calvin argues, misread scripture:

> Le peuple est esmeu aussi bien: en sorte que Nicodeme estoit asseuré, qu'en se monstrant disciple ou amateur de Jesus Christ, il suscitoit la fureur de tout le monde contre soy. Neantmoins il en faict profession evidente, devant tous. Il ne craint point la honte et l'opprobre. Il ne craint point la haine. Il ne craint point le tumulte. Il ne craint point les persecutions. Voila Nicodemiser: si nous prenons Nicodeme Chrestien, et non pas en son ignorance, devant qu'il sceust que c'estoit de Jesus Christ.[211]

In this rebuttal from Calvin's treatise, Nicodemus publicly reveals his true identity as a follower of Christ when he knows it will incite the anger of everyone in the crowd. Bringing our attention to this particular moment, Calvin shows how we should define Nicodemus in terms of his courage and constancy. The true follower of Nicodemus is one who proclaims their true faith without fear of recrimination. In his own passage, Léry appears to adopt the same stance towards Nicodemism as Calvin. However, in the ironic narrative construction, Léry rewrites the character of Nicodemus. Léry's Nicodemus is a furtive figure. While he does perform 'miracles' with the blood (which proves he abjured his vocation as a rabbi), the moment he gets wind of the Jews' anger, he quickly distances himself from the relic. Such behaviour shows nothing of the courage and constancy in Calvin's Nicodemus. Rather, as soon as the threat of persecution becomes clear, Nicodemus takes flight. In Léry's ironic miracle story, Nicodemus becomes a bad *Nicodémite*.

Léry's satire provides another interpretation of Nicodemus and, as it does, the narrator calls into question the early modern retellings and reinterpretations of the Pharisee. Léry recognised that the only information on Nicodemus could be found in scripture. Thus, Léry's amendment can be read as a straightforward satire of late Catholic apocryphal traditions about Nicodemus -- both textual (the

---

[210] Jean Calvin, *Excuse a messieurs les nicodemites sur la complaincte qu'ils font de sa trop grand rigueur* (Geneva: Jean Girard, 1544).

[211] Jean Calvin, *Petit traicté monstrant que doit faire un homme fidele congnoissant la verité de l'evangile quand il est entre les papistes, Avec un epistre du mesme argument. Ensemble l'excuse faicte sur cela aux Nicodemites* (Geneva: Jean Girard, 1545) <https://www.e-rara.ch/gep_g/content/titleinfo/686304> [accessed 12 Mar 2023], p. 147. See also Jean Calvin, *Traité des Reliques suivi de l'Excuse à Messieurs les Nicodémites*, ed. by Albert Autin (Paris: Bossard, 1921), pp. 240-2.

Gospel of Nicodemus in the Apocryphal New Testament, for example) and material (such as the *Volto Santo di Lucca* -- a crucifix said to have been carved by Nicodemus). Catholics had no basis for reinterpreting the tale of Nicodemus, Léry claims, and any reframing of the narrative about the Pharisee can be read as fanciful. The point, satirically made by Léry, therefore drives back to a core tenet of Reformed thinking: the primacy and authority of Scripture alone.

In a broader sense, Léry's satire takes aim at non-Biblical tales. He fundamentally problematises legends and traditions such as the lives of Saints, stories about miracles and, specifically, the overreliance on objects (as symbolised by the miracle Beak relic) to support belief. As well as advocating for a critical exercise of reading, the 1611 revision mocks a set of specifically Catholic discursive and material practices. Léry uses the Toucan -- the epitome of a New World wonder -- to explore the limits of the credible and redress the polemic about authority. But authority, witnessing and storytelling are not the only issues at stake.

b. Trade

As Léry revisits his natural-historical description of the Toucan, he returns to the discourses of trade, exchange and commercial activities, and semiotically ascribes a new and different set of (Reformed) values to it. The Toucan had a longstanding association with trade. Belon framed his description of the bird in terms of New World commercial activity, Thevet highlighted the economic value of aesthetic Toucan feathers and Léry himself, by comparing the yellow breast plumes to 'saffran', invoked a discourse of luxury commodities in his earlier editions.[212] Léry's confessional polemic of 1611 calls into question the economic value of New World wonders and marvels. Why are objects deemed to be 'wondrous' or 'marvellous' so valuable? What effect is the huge expansion in commercial activity in the New World having on religious practices in Europe?

That Léry selects the Toucan beak to address such questions is no idle choice. Toucan beaks had a known economic value in the cultures of curiosity and wonder in Europe. From the early

[212] See above (Belon pp. 54-56), above (Thevet pp. 57-60) and above (Léry pp. 44-46). We develop the question of commodities, luxury and fashion further in Chapter III (see below pp. 163-166).

sixteenth century, they appeared in the studies of natural historians, in the *cabinets* of collectors and in the hands of the nobility. Transforming his Toucan beak into a relic in the text, the Reformer outlines a confessional polemic in two senses. First, he challenges the cultures of trade, curiosity and wonder in a moral sense and, second, he criticises the commercial attitudes apparent in religious (Catholic) material cultures.

Firstly, in Léry's version of the story, Nicodemus encloses the glove that contains the blood of Christ, and the parchment on which the miracles have been recorded, inside the beak. As the narrator ironically claims that it deserves a place inside the Abbey, he transforms the Toucan beak into both a reliquary in that it contains the blood of Christ, and a relic itself, worthy of its own sanctuary and reliquary. Yet he also describes the unearthed object as emitting a 'trace', which we can read satirically as the written and printed trace of apocryphal tradition that is followed by a Catholic.

By transforming a New World wonder into a relic, Léry taps into Reformed confessional polemics against relics and the commodification of the sacred. The connection between relics and commodification was an old one, however, far predating the Reformation. As relics were inscribed with significant spiritual and religious value, they had been objects of commerce, trade and exchange throughout history and across the globe -- they were a form of 'sacred commodity'.[213] Reformers launched a scathing polemic against the Catholic enthusiasm for relics in the sixteenth century. The early Protestant pamphlet *Le Livre des marchans* [(Neufchâtel: Pierre de Vingle, 1533)] is among the first of such polemical works.[214] Initially, the text appears to offer economic advice to prospective traders. But it soon becomes clear that the 'marchans' in the account are actually priests, and the objects they are selling, relics. The anonymous pamphleteer thus takes aim at Catholic relic culture, admonishing the seepage of commercial attitudes into religious practices. But, as Williams shows, the

[213] Alexandra Walsham, 'Introduction: Relics and Remains', *Past & Present*, 206 (2010), 9-36 <https://doi.org/10.1093/pastj/gtq026> [accessed 12 Mar 2023] (p. 31). Patrick Geary, 'Sacred Commodities: The Circulation of Medieval Relics', in *The Social Life of Things: Commodities in Cultural Perspective*, ed. by Arjun Appadurai (Cambridge: Cambridge University Press, 1986) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1017/CBO9780511819582> [accessed 12 Mar 2023], pp. 169-192 (p.169). Holger A. Klein, 'Eastern Objects and Western Desires: Relics and Reliquaries between Byzantium and the West', *Dumbarton Oaks Papers*, 58 (2004), 283-314 <https://www.jstor.org/stable/3591389> [accessed 12 Mar 2023] (p. 283).

[214] The author remains anonymous, but the text has since been attributed to Antoine Marcourt. [Antoine Marcourt], *Le Livre des marchans: Fort utile a toutes gens* (Neufchâtel: Pierre de Vingle, 1533) <https://www.e-rara.ch/zuz/doi/10.3931/e-rara-539> [accessed 12 Mar 2023].

main argument is that the Church has commodified perception itself, and that 'we no longer read the world as scripture, but as if it were a shopping list.'[215]

Transforming his Toucan beak into a relic, Léry revisits this polemic against religious commodification. Indeed, by taking a New World wonder as his example, Léry pushes the argument even further: the Church has now commodified perception to such a degree that even the Americas are fair game. Thus, the satirical Toucan-beak-as-relic carries a sincere warning, which cautions against the fanciful ascription of certain 'miraculous' qualities to wondrous New World objects.

Relics had always invited criticism. Many hundreds of relics had been in circulation in Europe since the Middle Ages and such a profusion led early moderns to ask how the authenticity of any one relic could be guaranteed.[216] For Reformers, one of the main issues was that the relic itself was no guarantee of authority; unlike Catholics, they believed that the testimony of the relic could not be received by the physical senses.[217] Reformers like Calvin downright rejected relics. Although keeping one might seem like an act of good Christian devotion, he argued, one invariably ended up directing one's veneration towards the material object rather than to Christ himself. Paying reverence to relics was therefore never without superstition and, most importantly, risked idolatry.[218]

After discovering the 'trace' of the beak and understanding its religious significance through the animals, Neufbourg decides to consecrate the site by founding the Abbaye du Bec upon it. He ensures it is well-endowed with income ('de force beaux et grands revenus') and is so persuaded by the sanctity of the beak that he pours all of his wealth into it. Not only does Léry take aim at Catholic

---

[215] Wes Williams, *Pilgrimage and Narrative in the French Renaissance: 'The Undiscovered Country'* (Oxford: Oxford University Press, 1998), p. 280.
[216] Erasmus, for example, had railed against the sheer abundance of 'relics'. Hoffmann, p. 146.
[217] Frisch, p. 145. We revisit the discourse of anti-sensualism in the following section.
[218] Calvin's treatise on relics was first printed as *Advertissement tresutile du grand profit qui reviendront a la Chrestienté s'il se faisoit inventaire de tous les corps saincts et reliques* by Jean Girard in Geneva in 1543. 'Je scay bien que cela a quelque espece et couleur de bonne devotion et zele, quand on allegue qu'on garde les reliques de Jesus Christ pour l'honneur qu'on luy porte, et pour en avoir meilleure memoyre, et pareillement des Sainctz; mais il falloit considerer ce que dit sainct Paul, que tout service de Dieu inventé en la teste de l'homme, quelque apparence de sagesse qu'il ait, n'est que vanité et follie, s'il n'a meilleur fondement et plus certain, que nostre semblant. Outre plus, il falloit contrepeser le proffit qui en peut venir, avec le dangier; et en ce faisant, il se fust trouvé que c'estoit une chose bien peu utile, ou du tout superflue et frivole, que d'avoir ainsi des reliquiaires; au contraire, qu'il est bien difficile, ou du tout impossible, que de là on ne decline, petit à petit, à idolatrie. Car on ne se peut tenir de les regarder et manier, sans les honnorer; et en les honnorant, il n'y a nulle mesure que incontinent on ne leur attribue l'honneur qui estoit deu à Jesus Christ. Ainsi, pour dire en brief ce qui en est, la convoitise d'avoir des reliques n'est quasi jamais sans superstition; et, qui pis est, elle est mere d'idolatrie, laquelle est ordinairement conjoincte avec.' Calvin, *Three French Treatises*, pp. 49-50.

monastic cultures and their ability to attract handsome donations, then, he also makes the wider point, once again, about the false ascription of religious meaning to objects.

For Léry, the veneration of relics amounts to the misguided ascription of animation, agency -- indeed, a supernatural power -- to an object with no such quality. He makes this point explicitly as he transitions to sincere polemic in the phrase 'ce sainct mirelifique Bec'. 'Mirelifique' stems from the Rabelaisian 'mirificque', which appears at several moments in the *Quart Livre*. The term already has a strong connection with anti-Papal satire in Rabelais -- it appears twice, for example, in the Papimanes episode.[219] In the first instance, it refers to a hidden clause in the Decretales that allows Homenaz and the other Papimanes to use money collected from the congregation for feasting and drinking.[220] In the second instance, the term qualifies the Pope's slippers ('la *mirificque* pantophle'), before which everyone must bow and that everyone must kiss.[221]

Léry's 'mirelifique' transposes the sense of the Rabelaisian 'mirifique' onto the Beak. As in Rabelais's first example, the term has a clear anti-mercantile meaning. The 'mirificque' secret clause of the Decretales and the 'mirelificque' Beak are both objects of veneration, yet they are both used to deceive and defraud the zealous and over-generous church community. The notion of trickery or ruse therefore rests at the core of both 'mirificque' and 'mirelifique'. As Cotgrave defines it, 'mirelifique' is connected to wonder and marvel ('exceeding wonderful, passing admirable') but also has an ironic undertone: 'a word of ironicall commendation, or amplification.'[222] Thus, 'mirelifique', in Léry's case, indicates the commodification of wonders and marvel as a way of exploiting people's superstition. The beak is no miracle, but a natural-historical wonder wrongly ascribed as such. It is only 'miraculous' if we are naive enough to believe it and, ultimately, something designed to make us open our purses.

---

[219] Many have interpreted this episode as pushing anti-Papal satire to its limits. Lestringant, 'Rabelais and Travel Literature', p. 212. Duval, p. 104. Frank Lestringant, 'De la barbe au voyage de Panurge (*Tiers livre*, XXVIII, et *Quart Livre*, XLVIII-LIV): Le Savoir cosmographique dans l'œuvre de Rabelais', in *Inextinguible Rabelais*, ed. by Mireille Huchon, Nicolas Le Cadet, Romain Menini, and Marie-Claire Thomine (Paris: Classiques Garnier, 2021), pp. 609-630 (p. 624).
[220] *QL*. LI 'Menuz devis durant le dipner, à la louange des Decretales'. 'Et que de ceste contribution et taillon l'une partie seroit employée à bien boyre, l'aultre à bien manger, suyvant une mirifique glosse cachée en un certain coignet de leurs sainctes Decretales.' Rabelais, *Œuvres complètes*, p. 656.
[221] *QL*. LIII 'Comment par la vertus des Decretales est l'or subtilement tire de France en Rome'. Rabelais, *Œuvres complètes*, p. 664.
[222] Cotgrave, s.v. mirelifique.

c. Anti-sensualism

Léry's satirical intervention revisits the Calvinist discourse on relics and makes a clear point about the false ascription of agency and animation to wondrous material objects. Yet Calvin's influence on Léry can be found in more than his polemic about relics. In this final section, we explore Léry's discourse of anti-sensualism. At several points in the 1611 amendment, the narrator asks how we perceive wonders and marvels -- and by which sensory faculties. Who may discern between a marvel and a miracle, for instance, and what is the effect of overreliance on sensory perception?

The final line of the passage contains a twofold polemic which takes aim at both commodification and sensualism in Catholic thought: '[…] comme les Papistes qui font leur profit de tout pour faire bouillir la marmite.' The line reads literally as: Papists will take advantage of anything to make the pot boil, but the figurative sense is that Catholics will try to turn an economic profit from anything to 'get by'. Léry's discussion of 'marmite' evokes a major trope in Reformed satirical polemic. The *marmite* was the image of a giant church bell that had been turned upside down and transformed into a huge cooking pot. Reformers used the image as a way of depicting the ecclesiastical greed of the Catholic Church, and it had a strong association with cannibalistic practices.[223] Léry reevokes the *marmite* as a way of accentuating the similarities between *Catholiques* and *Cannibales*: indeed, as we have already seen, he frequently returned to this comparison throughout the *Histoire*, even in the earliest editions. Yet here in the 1611 amendment, he colours the comparison by the conventions (and iconography) of Reformed satire. Both the image of the *marmite*, and the comparison between Papistes and Bresiliens in the final line, reanimate one of the *Histoire*'s core themes.[224]

---

[223] For an excellent survey of uses of 'la marmite' in Reformed satire, see Vincent Robert-Nicoud, *The World Upside Down in 16th-Century French Literature and Visual Culture* (Leiden: Brill, 2018) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004381827> [accessed 12 Mar 2023], pp. 169-202. See also Lestringant, *Le Huguenot et le Sauvage*, pp. 425-427. Hoffmann, p. 37.

[224] See Lestringant's extensive work on the *Catholique-cannibale* relation: Frank Lestringant, 'Calvinistes et cannibales: Les Écrits protestants sur le Brésil français (1555-1560)', *Bulletin de la Société du protestantisme français*, 126 (1980), 9-26. Frank Lestringant, 'Catholiques et cannibales: Le Thème du cannibalisme dans le discours protestant au temps des Guerres de religion', in *Pratiques et discours alimentaires à la Renaissance: Actes du colloque de Tours de mars 1979, Centre d'études supérieurs de la Renaissance*, ed. by Jean-Claude Margolin and Robert Sauzet (Paris: Maisonneuve and Larose, 1982), pp. 233-45. Hoffmann, p. 134.

Furthermore, Léry's discussion of the *marmite* makes another point about consumption and the seeking of gustatory pleasure. As we witnessed in the episode with the Tupinamba woman and her *Cherimbavé* (parrot), we already have the impression that Léry perceived a close kinship between indigenous people and certain species of bird in Brazil. There is no mention of eating a Toucan, a parrot or parakeet, for example, and plenty of evidence to suggest the indigenous aversion to doing so. Thus, when Léry claims that Catholics willingly add the Toucan beak to their giant cooking pot, he constructs a critical separation between the indigenous interpretation and the Catholic one. Where Léry semiotically ascribes a profound cosmological value to the bird in Tupinamba culture, he claims here that, for Catholics, it is merely another object to be exploited for sensory pleasure and economic profit. Placing the beak into the *marmite*, Léry extrapolates his critique of the perceived Catholic propensities towards consumption and commodification.

Moreover, Léry ties his polemic against Catholic greed to another commonplace of Reformed satire -- the sick body of the Catholic subject who suffers from digestive stress. The notion of corporeal weakness brought about by old age is suggested in the very first line through the invocation of *cacochymie*. However, unlike in other Reformed satires such as *La Comédie du Pape Malade* (Geneva: Badius, 1561) Léry transposes the metaphor of the sick body not onto any specific individual, but rather onto the Catholic Church as a whole: the Pope stands for the Church in Beza.[225] Now the sickness lies at the core of the institution. The 'body' becomes that of the Church itself. The metaphor of the sick body is not specific to Reformed polemic. Nor, indeed, is it a particularly new idea. As Charles Parker shows, writers on both sides of the confessional divide used the metaphor to make the point that physical disfunction reflected a form of moral disorder.[226] Yet Léry combines the body metaphor with the image of the *marmite* to illustrate the effects of overindulgence in sensory pleasure.[227] Indeed, sensory perception is one of the main concerns in the 1611 amendment -- not only tasting but also, crucially, smelling.

---

[225] Théodore de Bèze, *La Comédie du Pape malade et tirant à la fin où ses regrets et complaintes sont au vif exprimées* (Geneva: n. pub, 1859) <https://catalog.hathitrust.org/Record/008427099> [accessed 12 Mar 2023].
[226] Charles H. Parker, 'Diseased Bodies, Defiled Souls: Corporality and Religious Difference in the Reformation', *Renaissance Quarterly*, 67 (2014), 1265-1297 <https://www.jstor.org/stable/10.1086/679783> [accessed 12 Mar 2023] (p. 1275).
[227] Robert-Nicoud, p. 175.

There are two key moments in which Léry evokes the tropes of scent and smell in the passage. Firstly, the animals of the hunting party scent the 'trace' of the Beak and, secondly, the narrator describes Huguenots as 'camus' ('flat-nosed') in his final line. In both cases, what is at stake is the notion of *flair*. The vernacular *flair* comes from the Latin 'sagacitas' which, according to Robert Estienne's 1538 *Dictionarium latinogallicum*, denotes someone 'qui conjecture et prevoit bien les choses advenir' -- but it is also tied to 'vivacité d'esprit.'[228] The association of *flair* with hunting and hounds is an old one, which Léry himself reinforces. For instance, Estienne includes a sub-definition for 'Canes sagaces' who 'scentent incontinent la trace de la beste.'[229]

Writers in the sixteenth century linked the notion of *flair* with the ability to perceive and read signs well. As we mentioned in the introduction, for example, Rabelais uses the analogy of a dog diligently sucking the marrow from a piece of bone to implore his reader to show a similar degree of care interpreting his book. Rabelais therefore construes *flair* as an ability to interpret text: 'À l'exemple d'icelluy vous convient estre saiges pour fleurir, sentir, et estimer ces beaulx livre de haulte gresse, legiers au prochaz: et hardiz à la rencontre.'[230] Léry deploys the notion of *flair* in a similar sense. But in the *Histoire*, the Reformer connects it back to perceiving (and drawing the distinctions between) signs as wonders, marvels or miracles.

In the satirical narrative construction, Léry describes the Huguenots as 'flat-nosed'. Unlike the animals in the scene, who have a keen ability to sniff out the 'trace' of the pointy Beak, they lack any form of *flair* or perceptive agency themselves. Even when we tell them the story about the miraculous beak, they simply refuse to accept it. In this sense, they cannot perceive any religious significance in it. Conversely, the creatures in the scene really do understand the 'true' meaning. The 'maistre Cerf' and the hunting dogs scent the Beak easily and know precisely how to behave in front of the 'sacred' sign: '[ils] se mirent d'un accord à genoux en grande devotion.' Where the beasts are shown to be

[228] Robert Estienne, *Dictionarium Latinogallicum* (Paris: Robert Estienne, 1538) <https://www.google.co.uk/books/edition/Dictionarium_latino_gallicum/rbtKAAAAcAAJ?hl=en&gbpv=0> [accessed 12 Mar 2023], p. 639.
[229] Estienne, p. 639. Bichon traces the term's lineage to the medieval hunting treatise *Le Livre du Roy Modus*. J. Bichon, 'Sagesse humaine ou sagesse canine?: Sur un passage du *Prologue* du *Gargantua*', *Études Rabelaisiennes*, 8 (1969), 87-90 (p. 88).
[230] Rabelais, *Œuvres complètes*, p. 7.

perceptive and pointy-nosed, the Huguenots remain dull, inattentive and ignorant. But given the ironic construction of the story, we come to realise that being 'flat-nosed' may not be such a bad thing after all. If, as we have said, the 'trace' can be read as the late apocryphal tradition that Catholics so readily follow, then turning one's nose up at it as the Huguenots do, is really the right thing to do. It is possible, it seems, to have too keen a sense of *flair*.

Furthermore, in Robert de Neufbourg we have another figure through which the narrator explores the notion of *flair*. Watching the scene play out before him, Neufbourg believes himself to be witnessing a 'miracle bestial'. The sense of irony is clear in the phrase 'miracle bestial': it can mean, at once, a miracle involving animals and a miracle that is 'beastly' or 'filthie' (Cotgrave), in other words tainted or corrupted in some way.[231] Clearly, this is no true miracle. Thus, when Neufbourg interprets the scene as such, he falls into the same old trap of misreading what is merely a marvellous or wondrous spectacle. Neufbourg's indiscriminate *flair* ultimately leads to a misunderstanding.

Moreover, as the creatures come into contact with the 'trace', they acquire the ability to speak. But the narrator cannot make out what they are saying. He assumes that some form of Catholic ritual is taking place -- either the recitation of the 'chappelet' (rosary) or 'les heures de nostre Dame' (a form of prayer). As they bow in prayer, the animals are transformed into Catholic subjects in the satirical narrative -- the voice of the praying Catholic thus becomes an indistinct, creaturely muttering, which the narrator struggles to understand. As well as drawing on the tradition of condemning mechanical recitation and inattention to prayer, this part of Léry's story also marks the return of sound in relation to the Toucan.[232]

By miraculously endowing the creatures with the ability to speak, the beak makes its own kind of noise -- that is, a barely audible creaturely prattle, which is really a Catholic prayer. In this sense, Léry returns to his personal experience of witnessing the bird. Although he never mentions the Toucan's call in his earlier natural-historical or ethnographic descriptions, it seems unlikely -- given the time he spent living in the Tupinamba village -- that he did not hear one. Léry therefore replays

[231] Cotgrave, s.v. bestial.
[232] Hilmar Pabel, *Conversing with God: Prayer in Erasmus's Pastoral Writing* (Toronto: University of Toronto Press, 1997) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.3138/9781442673465> [accessed 12 Mar 2023], pp. 30-31.

his experience of both seeing and hearing the bizarre bird through his confessional satire; read in this way, we can appreciate how both the visual and auditory aspects of witnessing a Toucan inspired the Reformer to return and rework his material for satirical purposes.

Yet what is crucial is that neither the nobleman nor the narrator can perceive what the animals are really saying. The lack of understanding between parties invokes yet another Reformed satirical commonplace -- the parody of St Francis's communion with animals. In the preface to the *Histoire*, Léry cites one of the best-known satirical texts deriding the life of St Francis: *L'Alcoran des cordeliers*.[233] The *Alcoran*, an essential work of anti-Papal satire, raised a series of questions about supposedly 'miraculous' communication with animals.[234] In one episode, one of St Francis's accomplices scares a flock of birds that are being trained by the saint in the woods. *Do the birds take off on command as if by some miracle, or are they just spooked?* the editor, Conrad Badius, asks in a footnote.[235] Another episode references the story of Brother Antoine, who entices a shoal of fish close to the bank of a river with his preaching. Once again, the editor asks: can we not attract fish by throwing bait?[236] Badius calls each of these professed miracles into question in his commentary, eventually concluding: 'Comme si on sait à croire que les choses disent telle chanson qu'on veut: aussi est-il aisé d'interpreter les gestes des bestes en tels sens qu'on veut: car elles n'ont garde de dire que non.'[237] One can interpret the actions and signs of animals in any which way, then, as they cannot 'speak back' to refute it.

Léry's 'miracle bestial' invokes this aspect of anti-Franciscan polemic. As the animals begin to speak in prayer, Neufbourg interprets the situation as a form of miracle and founds a lavish monastery on the site. However, the satirical construction mocks Neufbourg's response. While the animals might appear to be praying from a Catholic perspective, the noise they are making is no more than a babbling from the Reformed perspective. It is not the Huguenots, but actually Catholics who lack *flair*

[233] See Lestringant's manchette in: Jean de Léry, *Histoire d'un voyage faict en la terre du Brésil*, ed. by Frank Lestringant (Paris: Librairie Générale Française, 1994), p. 78. *L'Alcoran des cordeliers* (or *Cordelier's Qur'an*) was a Lutheran parody of Pisa's *Life of St Francis*, written by Erasmus Alber. Erasmus Alber, *L'Alcoran des cordeliers* (Geneva: Conrad Badius, 1556).
[234] Hoffmann, p. 80.
[235] Alberus, p. 95.
[236] Alberus, p. 129.
[237] Alberus, p, 220.

in this instance. Moreover, the physical form of the beak itself makes a further point about *flair*. Fashioned from the pointed bill of a New World Toucan, the beak reminds us of all the pointy-nosed *flair* the Catholic nobleman does not (figuratively speaking) possess. In a final blow, the beak -- in its very form -- makes a mockery of the perceptive ability of Catholics, serving as a visual reminder for the lack of *flair*.

Finally, the approximation between beaks, noses and flair, particularly in the context of a discussion about a Toucan, reopens a fundamentally natural-historical question that was considered at length by Belon, Thevet and Gessner. Namely, the breathing conundrum. Did the Toucan use its beak for smelling? What does a large beak tell us about a bird's ability to perceive or think? Through his confessional satire, Léry reevokes yet another debate, this time one that is rooted in natural-historical discourse.[238]

Léry's 1611 revision therefore reshapes a great number of the discourses and debates around the Toucan (in confessional polemic, in natural history and beyond) from the sixteenth century. The bird itself serves as a writerly affordance for the Reformed pastor, allowing him to revisit his own corpus from the perspective of confessional polemic and to experiment with a very different mode of writing. The bird's beak allows Léry to retell a Catholic story about a miracle from a satirical distance and, therefore, to mock late Catholic apocryphal traditions of the period. But behind the straightforward satire, the Toucan also allows Léry to revisit questions about authority, the critical exercise of reading and to explore the limits of the credible in his own way. It brings him back, once again, to the question of trade, commerce and religious material cultures, to the notion of *flair* and the interpretation of religious signs. In short, Léry uses the Toucan's beak to make a disruptive, and highly imaginative intervention in confessional discourse just as it was brought back to life in the early seventeenth century.

[238] Belon, *Histoire de la nature des oyseaux*, p. 184. Gessner, *Icones*, p. 130.

II. 'Les Plumes de sa mauvaise coustume': The Toucan in Catholic Texts

Our focus now shifts to Catholic interpretations of the Toucan in the early modern period. As we have said, this shift does not imply a stark opposition between Catholic and Reformed perspectives. In fact, the two confessional standpoints intersected significantly and the sources we discuss in the following section similarly reveal intra-confessional contradictions. Catholic writers of many stripes discussed the Toucan; just as Reformed writers breathed new and different life into the Toucan, so too did Catholics. The texts we discuss reflect an impressive breadth of genre on the part of Catholic writers. They include the emblematic manual of a French Jesuit, the missionary narrative of a French Capuchin, the devotional account of a Portuguese Franciscan and the part-ethnographic, part-natural-historical treatise of a Portuguese Jesuit. Through each account, we witness the process of semiotic ascription taking place -- ascription that allows us to perceive the different attempts to incorporate and accommodate the bird into Catholic modes of thought, doctrine, belief and practice.

i. Nicolas Caussin: *Polyhistor Symbolicus* (1618)

We begin our exploration of Catholic sources with the French Jesuit father Nicolas Caussin. Caussin was a renowned teacher of rhetoric and a respected preacher at the French court. His published works include a textbook on rhetoric in Latin, the *Eloquentiae sacrae et humanae parallela*, which he revised continually over the course of his life, and a popular manual of conduct in the vernacular, *La Cour sainte*, which was first published in 1624, then translated into English in 1626.[239] Caussin was therefore a leading pedagogue in the early seventeenth century. In 1618, he published the *Polyhistor symbolicus*, a compilation of parables organised into twelve books, which was designed to mirror the

[239] Nicolas Caussin, *Eloquentiae sacrae et humanae parallela libri xvi* (Paris: Sébastien Chappelet, 1619); Nicolas Caussin, *La Cour sainte, ou l'institution chrestienne des grands, avec les exemples de ceux qui dans les cours ont fleury dans la saincteté* (Paris: Sébastien Chappelet, 1624); Nicolas Caussin, *The Holy Court, or the Christian Institution of Men of Quality with Examples of Those who in Court have Flourished in Sanctity: By Nicolas Caussin of the Society of Jesus: Written in French and Translated into English by T. H.* (Paris: English College Press, 1626).

'natural order' of the world.[240] Caussin's text thus followed the structure of a natural-historical volume, but its predominant concern was moral pedagogy.[241]

The *Polyhistor* bridges the gap between natural history and emblematics. We have touched on emblems at several points in this thesis -- notably in the case of Belon's *Portraits* and Gessner's *Icones*. Emblems are a didactic genre 'intended to reveal religious and moral truths' to the literate reader.[242] It was the intention of the inventor of the genre, Andrea Alciato, to 'devise epigrams that were especially enigmatic, so that readers would get a sudden and pleasing illumination when they figured them out.'[243] Emblems were therefore perceived as useful in religious teaching. Jesuits, in particular, recognised the value of emblem books: they were an important affective device for 'spiritual reflection, instruction, and renewal.'[244]

Although images were not essential to emblems (early emblem books did not include them), they became an increasingly popular aspect as the genre flourished over the course of the sixteenth century.[245] Indeed, one of the reasons behind the success of emblems, as Enenkel and Smith argue, was their power to stimulate the mind through the 'combination of attractive and/or easily recognisable images [(*res significantes*)] and thoughtful messages [(*res significatae*)].'[246] To construct an emblem, the emblematist drew on an extensive iconographical repertoire (widely available in the European frame of reference) and carefully put them into dialogue with a specific moral, religious or political message. The absence of images in Caussin's text therefore raises the question of form. Rather than depicting a set of complete emblems, the *Polyhistor* 'updated natural-historical material

---

[240] The *Polyhistor symbolicus* similarly enjoyed a wide dissemination. It was first published by Romain Beauvais in Paris in 1618, then in Cologne by Johann Kinck in 1623 and 1631.
[241] See Raphaële Garrod, 'The Natural-Historical Rejuvenation of Emblematics: The Moral Pedagogy of Nicolas Caussin's *Polyhistor Symbolicus*', in *Natural History in Early Modern France*, ed. by Garrod and Smith, pp. 120-139 (pp. 120-121).
[242] Elizabeth K. Hill, 'What is an Emblem?', *The Journal of Aesthetics and Art Criticism*, 29 (1970), 261-265 <https://www.jstor.org/stable/428607> [accessed 12 Mar 2023] (p. 261).
[243] William B. Ashworth, 'Natural History and the Emblematic World View', in *Reappraisals of the Scientific Revolution*, ed. by David Lindberg and Robert Westman (Cambridge: Cambridge University Press, 1990), pp. 303-332 (p. 311).
[244] Walter S. Melion and Ralph Dekoninck, 'Jesuit Illustrated Books', in *The Oxford Handbook of the Jesuits*, ed. by Županov, pp. 521-552 (p. 527).
[245] Alciato's *Emblemata* of 1531, for example, contains a total of 104 emblems, 98 of which have images. In the 1621 edition (Padua: Petro Paulo Tozzi), the number of emblems rises to 212. All emblems have a visual accompaniment and the engravings, moreover, contain much finer detail.
[246] Enenkel and Smith, 'Introduction: Emblems and the Natural World', p. 4.

for the making of new emblems.'[247] In this sense, Caussin's animals are proto-emblems, the stock material to be turned into an 'emblem' proper at a later time.

If we read the construction of emblems from a semiotic perspective, we may argue that the process involved the ascription of a specific symbolic meaning to an image or, more broadly, a recognisable object or thing from the cultural repertoire. Emblems therefore reflect what Jan Westerhoff describes as the baroque 'pansemiotic world view': the idea that things (whether natural or artificial) contain unique symbolic meaning.[248] In other words, the emblem writers viewed natural things in a representational mode -- their role was to figure out the symbolic meanings of natural things and present them to their audience. As both Catholics and Reformers engaged in the writing of emblematic works, both groups can be viewed as exhibiting a representational view of nature. Our semiotic reading of the emblem therefore destabilises Randall's assertion that only Reformers adopted the representational (symbolic) view of nature.

A counter to the argument that all emblematists viewed the world in a representational way would suggest that the writing of emblems did not really involve actively constructing meaning in things. Most of the animals that appeared in emblems, for example, already had intricate networks of symbolic association in classical sources, medieval bestiaries and contemporary natural histories. The emblematist's role was only to compile these symbolic meanings (rather than construct them) in a fairly objective fashion.[249] Certainly, this argument holds for species of animal already familiar to Europeans -- that is, creatures already ingrained in the cultural repertoire. However, animals from the New World had no emblematic or symbolic meaning previously ascribed in the Western mode. To fashion an emblem from a bird like the Toucan, emblematists could not rely on a preestablished set of symbolic meanings. Rather, they had to transcribe information from natural-historical discourse which had yet to be defined in terms of its symbolic significance. The process of semiotic ascription was therefore an active one -- emblematists had to construct the symbolic meaning themselves.

---

[247] Garrod, 'The Natural-Historical Rejuvenation of Emblematics', p. 127.
[248] Jan C. Westerhoff, 'A World of Signs: Baroque Pansemioticism, the Polyhistor and the Early Modern Wunderkammer', *Journal of the History of Ideas*, 62 (2001), 633-650 <https://www.jstor.org/stable/3654331> [accessed 12 Mar 2023] (p. 633).
[249] Westerhoff, p. 639.

In his *Polyhistor*, Caussin actively constructed a symbolic meaning in the Toucan. The emblem of the bird is located at the tail end of the sixth book (dedicated to avian species), between 'Struthiocameli ova' (ostrich eggs) and 'Trochilus in faucibus crocodili illæsus' (the legendary bird that lives in the mouths of crocodiles unharmed).

> CVII. TOCCA. Deformis facundus.
>
> In novo orbe invenitur Tocca avis, Cornici similis, præterquam quod est albo pectore et aureo rostro, cuius longitudo totum corpus adæquat. Ap Belle παροιμιακῶs (paroimiakos) dicitur in facundum et candidum moribus, sed nigrum et deformem oratoré. Rostrum enim aureum eloquentiæ aureo flumine verborum effluentis typus est, albedo pectoris candorem animi significat: Cætera quæ Cornicis colorem referent ad deformitatem corporis spectant. Sæpe sub sordido palliolo latet sapientia. Mores sibi fingere quisque; potest, faciem nemo.[250]
>
> [CVII. TOCCA. Misshapen and eloquent.
>
> The Toucan is found in the New World: it is similar to the crow, except for its white breast and golden beak, whose length amounts to that of the whole body. Lesson: in the proverbial mode, it is nicely said of the orator who is eloquent and splendid in his mores, yet dark and physically misshapen. Indeed, the golden beak is the archetype of verbal eloquence flowing in a golden stream; the whiteness of the chest signifies the brightness of his soul, while the other features which relate to the colour of the crow point to the deformity of the body.
> Wisdom often lies hidden under a tattered cloak.
> One can shape one's behaviour by oneself, but no one can shape/alter their own appearance by themselves.]

How does Caussin structure his proto-emblem of the Toucan? Which of the bird's features does he select, and how does he use them to construct the symbolic significance? In the first two lines, Caussin locates the Toucan in the New World, reevokes the common comparison with crows which we see in many natural-historical accounts and grasps the salient characteristics of beak and breast. Furthermore, colouration is a key feature in the passage: the breast is white, the beak is golden and the body is black. The opening sentence therefore closely resembles a natural-historical description.

Then, the lesson begins. Caussin starts with a proverb: 'it is nicely said of the orator who is eloquent and splendid in his mores, yet dark and physically misshapen.' The line establishes a conceptual opposition between interior and exterior: the orator may be 'physically misshapen' on the outside, but the 'splendid mores' that exist within make him 'beautiful'. In the following sentence,

[250] Nicolas Caussin, *Polyhistor Symbolicus: Electorum Symbolorum, et Parabolarum historicarum Stromata, XII. Libris complectens* (Cologne: Johann Kinck, 1623) <https://archive.org/details/polyhistorsymbol00caus> [accessed 12 Mar 2023], p. 303.

Caussin grafts the conceptual opposition of the proverb onto the anatomy of the bird. The golden beak, which is evoked in hyperbolic terms, becomes a symbol of oratorical eloquence, 'flowing into a golden stream.' The white breast reflects the 'brightness of his soul.' Together, the beak and breast represent the interior. The body, however, which is similar to the crow's, represents deformity -- the 'physically misshapen' exterior. In other words, speech is for others, and eloquence can make the misshapen orator beautiful by revealing the brightness of the soul within.

Although it draws on natural-historical information, Caussin's symbolic construction appears to contradict some of the central claims about the Toucan in natural history. So often it is the beak (or the uneasy combination of beak and body) that is deformed. The body, which is covered in colourful plumage, is where the 'beauty' of the bird resides. In the emblem, that equation is reversed: now it is the body that represents deformity whereas the beak is a symbol of eloquence. As Caussin shifts into the symbolic register, he disrupts some of the most basic and commonly held natural-historical opinions about the bird. To a degree, Caussin's *Tocca* reinforces Garrod's point that the *Polyhistor* emulated and supplemented humanist natural-historical description.[251] This is certainly true in the case of Caussin's bird of paradise: he draws on source material from Gessner's *Historia animalium* and does not seek to challenge the natural historian. However, as we see in the case of the Toucan, Caussin also appears to contradict the claims of humanist description.

The *Polyhistor* also emulates major methodological procedure of humanist natural-historical description: that is, textual parsing. As we have shown, textual parsing was central to early modern natural history. Anatomical investigators such as Belon, Gessner and Paré probed and broke down the physical samples they received. In their texts, they divided, parsed and assessed each anatomical detail line by line.[252] The Toucan first arrived in Europe in the form of disjointed and dismembered material fragments. Natural historians had only partial specimens of the bird at this point -- their descriptions cobbled together the remainder from snippets of information in travellers' accounts and

[251] Garrod, 'The Natural-Historical Rejuvenation of Emblematics', p. 131.
[252] For a classic study in the Renaissance meaning of dissection, see Jonathan Sawday, *The Body Emblazoned: Dissection and the Human Body in Renaissance Culture* (London: Routledge, 1995).

natural histories. Parsing up, and creatively reassembling the pieces, were therefore the necessary steps to take in depicting the Toucan in sixteenth-century natural history.

By the turn of the seventeenth century, living Toucans began to arrive in Europe.[253] The sixteenth-century accounts of Thevet, Gessner and Aldrovandi had established a set of images which continued to be reproduced in the seventeenth-century natural histories of Nieremberg, Jonston and others. By the time of the *Polyhistor*'s publication, a fairly stable, complete picture of the bird existed in the European cultural repertoire. However, Caussin continues to insist on the unnatural, hybrid nature of the bird in the manner of a sixteenth-century natural historian, reinforcing the uneasy, bipartite structure. As the bird is broken down into its constituent parts, Caussin inscribes each part with a unique symbolic meaning. When the parts are reassembled, they reveal the symbolic interplay between interior and exterior that is the basis of the moral lesson. The symbols of eloquence and moral purity meet that of deformity on the body of the Toucan, and herein lies the point: *'Deformis facundus*' ('Misshapen yet eloquent'). Caussin's construction of the emblem therefore mimics the material and textual processes (both parsing and reassembly) of natural history.

For the Jesuit, one of the overarching characteristics of the Toucan is 'deformity'. As we know, deformity (*difformité*) had a rich and complex story in natural-historical description. The theme was continually revisited in the French sources. For writers like Thevet, Paré and Léry, the term *difforme* located the Toucan within the discourses of the wondrous and the monstrous. Yet *difformité* is also a useful term for us to think about the bird's structural composition (*di-formed*, made of two parts that are uneasily combined) in natural history. As we argued in our discussion of Gessner's *Icones*, natural-historical practice could itself construct *difformité* by combining two categories of information (material samples and textual descriptions) which often contradicted one another. Caussin's mention of deformity as the salient, symbolic characteristic of the Toucan therefore assumes a rich tradition in natural-historical description: indeed, he also constructs *difformité* by parsing and reassembling the bird's parts in the symbolic register.

---

[253] Marrigje Rikken, 'Exotic Animal Painting by Jan Brueghel and Roelant Savery', in *Zoology in Early Modern Culture: Intersections of Science, Theology, Philology and Religious Education*, ed. by Karl A. E. Enenkel and Paul J. Smith (Leiden: Brill, 2014) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004279179> [accessed 12 Mar 2023], pp. 401-433 (p. 418).

However, Caussin also transforms the discourse of *difformité* in his emblem by putting it into dialogue with the theme of eloquence. The combination of the two terms conveys a series of moral messages and reveals something about the way we should behave. The emblematist unveils the lesson in the final sentence of the passage: 'Wisdom often lies hidden under a tattered cloak.' The line is proverbial already in Cicero, who describes it as Caecilius's well-known line.[254] Cicero uses it himself in his *Tusculan Disputations* where it features in a philosophical reflection on how to comfort mourners.[255] We must anticipate death in order to alleviate it, the philosopher argues, and wisdom, moreover, is the true source of wealth and happiness. The parable follows: '*Sæpe est etiam sub palliolo sordido sapientia*' ['Even under the tattered mantle oft doth wisdom hide.'][256] The quote reinforces the claim: even if outside circumstances appear unfavourable, the true good (wisdom) can still be found within, and it must help us to bear misfortunes. Cicero uses the proverb to construct the conceptual opposition between exterior (situation) and interior (wisdom), which is precisely what Caussin appropriates in his emblematic construction of the Toucan. In the *Polyhistor*, however, the referents are different. Exterior refers to the (deformed) physical appearance, which is symbolically reflected in the Toucan's body, where interior refers to the 'splendid mores' that exist within, which is represented by the breast. The beak, symbolically constructed, bridges the gap between interior and exterior. It represents eloquence, or the outward performance of good internal mores to an outside audience through oratory.

Caussin's final addition reinforces the opposition and turns it into a model for behaviour: '*Mores sibi fingere quisque potest, faciem nemo*' ('One can shape one's behaviour by oneself, but no one can shape/alter their own appearance by themselves'). The complete lesson can be read in several ways. Firstly, ethics are the true manner of one's being. We should spend time carefully cultivating

---

[254] Caecilius Statius was a Roman comic poet and playwright (d. 168 B.C.). An Insubrian Gaul by origin, Caecilius was known for adapting lost Greek plays; he was a contemporary of (and was influenced by) Plautus. See Wolfgang David Cirilo de Melo, 'Plautus's Dramatic Predecessors and Contemporaries in Rome', in *The Oxford Handbook of Greek and Roman Comedy*, ed. by Michael Fontaine and Adele C. Scafuro (Oxford: Oxford University Press, 2014) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1093/oxfordhb/9780199743544.001.0001> [accessed 12 Mar 2023], pp. 447-461 (pp. 448-456).

[255] Cicero, *Tusculan Disputations*, trans. by J. E. King (Cambridge, MA: Harvard University Press, 1927) <https://www.loebclassics.com/view/marcus_tullius_cicero-tusculan_disputations/1927/pb_LCL141.291.xml> [accessed 12 Mar 2023], pp. 290-293.

[256] Cicero, pp. 292-293.

our mores, rather than trying to change our physical appearance. Secondly, a deformed or unappealing appearance does not indicate an impropriety of spirit. We should avoid passing judgement on someone based on their external look alone. Thirdly, there is a more implicit lesson about futility. We should not waste energy trying to change the things we cannot; our efforts are better directed in changing what we can. The lesson therefore delivers a sharp, multi-layered message which makes the case for a modest, spiritual and pragmatic approach to life. Finally, Caussin makes a significant case for eloquence. Eloquence is the external projection of our mores. If we speak well, we demonstrate that we have sound ethical judgement. In other words, the eloquent man is surely the good man. There is an aesthetic dimension to eloquence too; the 'golden flow' of eloquence may reveal the beauty of the soul inside.

Caussin's emblem displays a process of symbolic accretion taking place through the anatomy of the Toucan. The beak, in particular, is counter-valorised by the *Polyhistor*. From a sign of *difformité* in natural history, it becomes a symbol of eloquence that has a key function within the apparatus of the emblem. The Toucan beak instructs us to speak well in order to display the good mores that exist within us. Therefore, just as Léry does in his 1611 *Histoire*, Caussin symbolically ascribes a form of sound to the Toucan's beak. Where, for Léry, the noise is one of indistinct creaturely muttering (masquerading as Catholic prayer), for Caussin it is quite the opposite -- the 'golden stream' of oratory which projects the beauty within.

Overall, Caussin's *Tocca* contains many of the features and performs the function of an emblem. But the Toucan itself resists configuration within an accepted, seventeenth-century emblematic mould. Indeed, the bird did not appear in another emblem book until the first Latin edition of Filippo Picinelli's *Mondo Simbolico* in 1687.[257] For the Augustinian canon, the Toucan's beak symbolised unregulated and excessive speech.[258] Although Picinelli's account proves how the bird ultimately resisted the emblematic tradition (the examples were sparse and, moreover, contradicted one another), it indicates, once again, how the Toucan's beak served as a key affordance

[257] Filippo Picinelli, *Mundus Symbolicus* (Cologne: Herman Demen, 1681) <https://www.google.co.uk/books/edition/Mundus_Symbolicus/l89KAAAAcAAJ?q=&gbpv=0#f=false> [accessed 12 Mar 2023].
[258] Picinelli, p. 326.

for thinking about voice, sound and noise in the symbolic register of religious texts. In the Reformed polemic of Léry, the beak produces the satirical prattle of animals and makes a sincere point about mechanical and inattentive prayer. In Caussin, the beak invites us to be eloquent and show the 'splendid mores' that exist within. And finally, in Picinelli, we return to the sense of superfluous babbling and the need to be economical in speech. Across three different Christian traditions on both sides of the confessional divide, we witness both diverging and converging symbolic interpretations of the Toucan's beak around the subjects of voice and sound.

ii. Claude d'Abbeville: *Histoire de la mission des peres Capucins* (1614)

The emblematic construction of the Toucan by a Jesuit pedagogue in France is one Catholic interpretation of the bird. But there are many other examples in Catholic confessional writing. The following section marks a return to the New World proper, this time in the missionary narrative of the French Capuchin father Claude d'Abbeville. Printed in 1614 in Paris by François Huby, the *Histoire de la mission des peres Capucins en l'isle de Maragnan* recounts the French Capuchin expedition to northern Brazil in the early seventeenth century. The mission formed part of an attempt by the French monarchy to colonise the region of *Maragnan*.[259] However, the settlement of *France équinoxiale*, as it was named, had only a short life. In 1615, Portuguese colonists from the south arrived in force, displaced the French settlers and incorporated Maragnan (now Maranhão) into their own colonial territory.

The history in print of d'Abbeville's mission is rich. Prior to the major *Histoire*, he published two preliminary works: *L'Arrivee des Peres Capucins* (Paris: Jean Nigaut, 1613) and *Les Fruicts de la mission des reverends Peres Capucins* (Lille: Christofle Beys, 1614).[260] Both of these texts indicate the extent to which the work of missionaries was aligned with the colonial endeavour, and the descriptions of missionary activity are heavily inflected by a mercantile attitude toward indigenous

[259] The Queen Regent, Marie de Medici, commissioned the expedition in 1612, placing it under the command of Daniel de la Touche, Seigneur de la Ravardière.
[260] Claude d'Abbeville, *L'Arrivee des Peres Capucins, et la conversion des sauvages à nostre saincte foy* (Paris: Jean Nigaut, 1613); Claude d'Abbeville, *Les Fruicts de la mission des reverends peres Capucins en l'Isle de Maragnan* (Lille: Christofle Beys, 1614).

people. Just as the colonial administrators sought material commodities to export to Europe, so too did missionaries seek new souls, described as 'pierres pretieuses', to join in their Capuchin order.[261] The conquest was, at once, spiritual, political and material.

Histoire de la mission seems to borrow from multiple genres. It is part colonial history, part natural-historical survey, part ethnographic observation and part missionary narrative. Indeed, as we will see, d'Abbeville's text shows the influence of natural-historical accounts to a significant degree. Texts created in the Old World thus began to have an important bearing on the accounts of travellers in the New World at the start of the seventeenth century. The overarching framework of the *Histoire* is natural theological. As in the books of fellow Catholic and, indeed, Reformed travellers to the New World, d'Abbeville drew on the abundance of natural forms to depict a quasi-Edenic landscape in Brazil. For him, the variety of wonders and marvels was proof of God's presence in Maragnan.

> C'est ce qui fait qu'en cette Region il se trouve des animaux inombrables et merveilleux, tant qu'il semble à voir que Dieu et Nature se soient estudiez particulierement à prouvoir ce Pays d'animaux admirables sur toutes les autres Regions.[262]

The profusion of marvels, d'Abbeville claims, underlines the privileged status of this region in the eyes of God. The Toucan, whose description follows shortly after, is a prime example of such a marvel. D'Abbeville adapts the Thomist precept that, since Creation was a mirror of the infinity and splendour of God, but ultimately unable to match Him, it strove to do so through the profusion and variety of natural kinds.[263] Abounding in natural forms hitherto unseen by Europeans, the New World illustrated the creation richly for d'Abbeville. Indeed, the Capuchin was also captivated (as Léry was) by the interspecies interactions which took place between indigenous people and American fauna. The Tupinamba relationships with birds, in particular, reminded him of God's bounty and reinforced the idea that animals were placed on Earth for human use and enjoyment:

---

[261] D'Abbeville, *L'Arrivée*, p. 6.
[262] Claude d'Abbeville, *Histoire de la mission des peres Capucins en l'isle de Maragnan et terres circonvoisines ou est traicte des singularitez admirables et des meurs merveilleuses des indiens habitans de ce pais avec les missives et advis qui ont este envoyez de nouveau* (Paris: François Huby, 1614), fol. 231^{r}.
[263] Kellman shows how d'Abbeville read Aquinas attentively. See Jordan Kellman, 'Environmentalism, Ethnography and Franciscan Natural Theology on the French Colonial Frontier: Claude d'Abbeville's Tupinambá Encounter, 1612-1613', *Journal of the Western Society for French History*, 39 (2011), 22-34 <http://hdl.handle.net/2027/spo.0642292.0039.004> [accessed 12 Mar 2023] (p. 28).

> Il se trouve plusieurs des Oyseaux susdidts que les Indiens apprivoisent fort facilement, et les rendent domestiques, tant pour leur plaisir que pour en manger et user selon que bon leur semble. Il n'y a personne qui ne demeure tout ravy et qui n'aye bien sujet d'admirer la Sapience et la Providence de Dieu voyant une telle varieté et la beauté si grande des Oiseaux que Dieu a mis en tout ce païs de *Maragnan*.[264]

For d'Abbeville, animal life in the New World displayed the Wisdom and Providence of God. Birds, in particular, in all their 'varieté' and 'beauté', reflected the presence of Grace. Grace was a keyword in the early modern period. As Ita Mac Carthy shows, grace was 'uncompromisingly plural' -- it evolved in both secular and religious contexts.[265] The term comes from the Greek χάρις (*charis*), which designates 'that which brings joy (a *factum lætificans*) and a pleasure-bearing power (a *vis lætificatrix*)' in the Roman tradition.[266] In the sixteenth century, grace became a mark of distinction for works of art, something that designated the measure of an artist and a highly contested term in art theory. Of course, grace also had a religious dimension. The early Church Fathers perceived it as something dispensed by God into the human soul to facilitate redemption.[267] In the Reformation, debates emerged as to who, in particular, was endowed with such grace.[268] Thus, in the early modern period, grace was a term whose meaning was in flux. Among other things, it straddled secular and religious contexts and brought together aesthetic and confessional discourses.

The theme of grace was continually revisited by Catholics in Brazil. For missionaries such as d'Abbeville (and Fernão Cardim, as we will see), the abundance of aesthetic wonders in the New World became part of a discourse of grace. D'Abbeville, for his part, invoked the discourse in his description of the Toucan.

> Il y a le *Toucan* lequel n'est pas plus grand qu'un Ramier ayant un bec bien disproportionné à sa grandeur; car il est long de huict à dix poulces, et large de trois doigts. Il porte au devant de son estomach comme un poitrail large environ de trois ou quatre doigts, qui est d'un tres-beau jaune orangé, tout environné de rouge cramoisi; le reste de son ventre est tout blanc; le dessus

[264] D'Abbeville, *Histoire*, fol. 242^{v}-243^{r}. We should note that the group of coastal Tupinambas d'Abbeville encounters in northern Brazil is not the same as the one Léry finds in the south.
[265] Ita Mac Carthy, *The Grace of the Italian Renaissance* (Princeton, NJ: University of Princeton Press, 2020) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1515/9780691189796> [accessed 12 Mar 2023], p. 29.
[266] Ita Mac Carthy, 'Grace', in *Renaissance Keywords*, edited by Ita Mac Carthy (London: Routledge, 2013) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.4324/9781315088907> [accessed 12 Mar 2023], pp. 63-78 (p. 65).
[267] Mac Carthy, *Renaissance Keywords*, p. 67.
[268] Mac Carthy, *Renaissance Keywords*, p. 70.

> du dos d'un beau rouge, ayant les aisles et la queuë noires, tant qu'il est merveilleusement beau et des meilleurs à manger.[269]

Perhaps surprisingly, d'Abbeville's eyewitness account of the Toucan closely resembles the formulaic description of a natural-historical text. In fact, the *Histoire*'s Toucan reads almost identically to Aldrovandi's *Picam Bressilicam*; the description is compressed, rearranged and translated into the vernacular.[270] Appropriating Aldrovandi, d'Abbeville taps into the core epistemic and aesthetic debates surrounding the Toucan in the period. He compares the bird to a 'ramier' (a *queest* or *ringdove* [wood pigeon]) (Cotgrave) and he echoes the discourse of *difformité* by evoking the 'disproportion' of the beak.[271]

To the Capuchin's credit, he does contribute to the epistemic debate by introducing a new species of Toucan to the European frame of reference. This second bird is named 'Ouaycho' by the indigenous inhabitants. It is almost identical to the Toucan in form but different in its colouration.[272] However, as d'Abbeville's description of the Ouaycho follows practically the same structure as that of his Toucan, we might argue that he is simply repeating and adjusting, once again, the same descriptive framework. D'Abbeville's text therefore raises the question of why an eyewitness observer in the New World would choose to replicate the account of an armchair natural historian in Europe. The rhetorical strategy seems to be at odds with those of fellow travellers.

Although d'Abbeville's two Toucans follow a repeated descriptive model, the translation of colour marks an important development. Framed by the black body and wings, the white stomach and red tailfeathers, the breast is a 'jaune-orangé' (*orangey-yellow*), bordered with 'rouge cramoisi' (*crimson red*). As we have shown, descriptions in Latin spend considerable time with colour by way of an expansive vocabulary (*aureus*, *croceus*, and *luteus*, for example, each evoke a different shade of

---

[269] D'Abbeville, *Histoire*, fol. 237ᵛ.
[270] 'Magnitudo Picae Bressilicae inter Picam, et Merula media. [...] Rostrum reliquo corpore crassius, et longius [...] Quod sane duos palmos longum est, unum fermè latum [...] Collum, dorsum, atque alę nigra. Pectus aureo, seu croceo colore splendidissimo pulcherrimoque; cum quadam rubedine prope initium micat, venter verò, et femora cinnabarino, seu miniaceo venustissimo.' Aldrovandi, pp. 801-803.
[271] Cotgrave, s.v. ramier.
[272] 'Il y a encore une autre espece de *Toucan* que les Indiens appellent *Ouaycho*, qui est de mesme grandeur que le precedent; ayant le bec semblable, excepté qu'il est rouge et jaune, son estomach est d'un tres-beau blanc, bordé de rouge; les aisles noires; la queuë jaulne et tout le reste de son plumage partout le corps, d'un tres-beau blanc, non moins delicieux à manger qu'il est agreable à voir.' D'Abbeville, *Histoire*, fol. 237ᵛ.

yellow). In order to reproduce this specificity, d'Abbeville combines colour to elicit a specific shade. Whether the Capuchin is translating Aldrovandi directly or not, we may read his depiction of colour as a vernacular response, both to the colour-description in Latin and, more broadly, to the increased attention to colour in contemporary natural-historical texts. Furthermore, d'Abbeville's insistence on the beauty of Toucan (and Ouaycho) feather colouration furnishes his discourse of grace -- the idea that there is a distinct aesthetic pleasure to be found in the bird.

One of the principal shifts in d'Abbeville's account is the claim of edibility. The Toucan, he contends, is comestible. Moreover, it is one of 'des meilleurs à manger'. This claim appears particularly surprising in light of Léry's *Histoire d'un voyage*. As we have shown, the Reformed traveller identified a form of kinship as existing between birds and the Tupinamba.[273] There was no mention of eating a Toucan in Léry's book, and plenty of evidence to suggest that indigenous people would never do so.

Initially, we might read d'Abbeville's edibility claim as forming part of the rhetoric of prospect literature. One of the main roles of the *Histoire* was to construct a favourable image of the fledgling colony to an audience of prospective settlers and patrons in France. By outlining the abundance of edible commodities, d'Abbeville creates an image of colonial affluence: *France équinoxiale*, he argues, is a place where nobody goes hungry.

This colonial discourse is compounded by a natural theological one about Bounty. Alongside the many other edible animals in Maragnan, the Toucan shows that God provides. Moreover, His provision reaches the far side of the world. No-one, either indigenous or European, wants for food.[274] Situated within the discourse of bounty is the notion of taste. The Toucan shows that provision is a seemingly universal phenomenon, but also that God has placed creatures in the Americas that allow

[273] The parrot of the Tupi woman in Léry's failed trade transaction is named '*Cherimbavé*' -- 'chose que j'aime bien.' Léry, *Histoire* (1580), p. 153. See also Norton, p. 39.
[274] Other Capuchin missionary narratives of the time use the rich foodstuffs of the Americas to make a case for Divine Provision. See, for example, Pacifique de Provins: 'Et au lieu de pain il y a une certaine racine, grosse comme un navet, qui vient comme par dépit lors qu'on la plante, laquelle estant boüillie ou rostie, nourrit extremement. Cette racine s'appelle *Patates*: c'est une si bonne manne, qu'il n'y a aucun animal, ny oyseau qui n'en mange, tant de la racine que de l'herbe, ou feüilles, qui se mangent comme espinars. Les chevaux en mangent, les vaches, les porceaux, les chiens, les poulles, les perroquets, et autres animauz.' Pacifique de Provins, *Brieve relation du voyage des isles de l'Amerique* (Paris: Nicolas and Jean de la Coste, 1646), pp. 15-16.

us to experience pleasure: the Toucan is tasty. If we refer back to our definitions of grace in the Greco-Latin tradition as something that brings joy (*factum lætificans*) and a pleasure-bearing power (*vis lætificatrix*), then the Toucan may be considered 'graceful' through both the gustatory and visual pleasure it elicits. The claim of edibility thus fits within the discourse of grace. Just as the bird's feathers display a form of visual grace through their colouration, the Toucan also appeals literally to our sense of taste.

D'Abbeville's account of the Toucan may be brief and formulaic but the claim of edibility marks a considerable development in the discourse on the bird, and it reveals a distinct colonial and theological perspective in the account. Before we assess the Capuchin friar's depiction of Toucan feathers further, we must address the paradox in his natural-historical description. If d'Abbeville had seen the Toucan with his own eyes, why did he rely on Aldrovandi's text? In other words, why would an eyewitness observer (re)produce a bookish account from the Old World?

Throughout the natural-historical sections of *Histoire de la mission*, d'Abbeville does not spend a great deal of time describing the flora and fauna of Brazil. The chapter on birds reads as a kind of list; it moves rapidly from bird to bird, only pausing to give a couple of lines of detail.[275] An initial reaction to the natural-historical section would be to assume that d'Abbeville had not actually seen the majority of the creatures he describes. Focussed predominantly on the missionary activity, the book outlines the natural-historical features d'Abbeville knows to exist in Maragnan and uses contemporary sources from Europe to fill in the detail. His replication of Aldrovandi's Toucan description thus proves how natural-historical works written in Europe began to inflect the perception of nature in the New World by seventeenth-century travellers.

Yet we should also acknowledge that one of the principal concerns of the natural-historical survey is the material usefulness of each animal and, more specifically, the degree to which each animal appeals to European taste. Referring, once again, to d'Abbeville's chapter on birds, we notice that practically every species-specific description finishes either by evaluating the aesthetic properties

[275] Chap. XXXIX. *Des Animaux qui se retrouvent en l'Isle de Maragnan et lieux voisins et premieremen des oyseaux*. D'Abbeville, *Histoire*, fol. 230^{v}-243^{r}.

of the feathers or by assessing the edibility (and also flavour) of the flesh.[276] D'Abbeville therefore uses his natural-historical information to illustrate universal Provision and Bounty. Yet, framed within this illustration is also a discourse of Grace. At stake here is not only use but, crucially, pleasure (either gustatory or aesthetic). In this sense, d'Abbeville's presentation can be read (in a similar fashion to Léry and Caussin) as revisiting previous natural-historical material from a confessional perspective and reworking it to launch a discourse of divine provision, bounty and grace in the New World.

We conclude our discussion of d'Abbeville's *Histoire* with the story of the baptism of an old Tupinamba man. In this story, d'Abbeville shows a distinct interest in symbolic meanings of bird parts. Although he does not mention the Toucan directly, the friar shows a detailed understanding of the uses of Toucan feathers in Tupinamba material culture. The symbolic feathers in the conversion narrative are therefore implicitly yet closely associated with real Toucan feathers.

> De mesme ce pauvre Indien Vieillard, ne pouvant plus supporter la vieillesse de son aage si grand, ayant le bec de ses affections tout crochu, et les plumes de ses mauvaises coutumes, et diaboliques conversations inveterées en l'infidelité, et envieillies au Paganisme, estant plus aveugle en l'Ame, que non pas au corps, apres s'estre lavé dans cette Claire Fontaine du Baptesme, qu'il avoit tant desiré: Ce grand Dieu, remplissant en Biens, le desir d'iceluy, luy renouvella tellement sa jeunesse, qu'à la façon de l'Aigle, il commença à manger, voler en haut, et regarder fixement Ce Beau Soleil Divin. Car il n'eust pas si tost receu le sainct Baptesme, que ses affections devindrent toutes Cœlestes, s'esjoüissant continuellement en son interieur, avec action de graces, pour le benefice infiniment grand, qu'il avoit receu de Dieu.[277]

In his description of the baptism ritual, d'Abbeville transforms the elderly Tupinamba man into the allegorical *Aigle*. He can no longer bear the weight of his great age, his great crooked beak (which represents his 'affections', 'passions' or 'troubles of mind' [Cotgrave]) and the feathers of his

[276] To give a few examples: 'Le *Iuruve*, autre espece de Perroquet [...] portant au lieu de creste un beau plumage de couleur toute bleuë en forme de Couronne dessus la teste, ce qui est merveilleusement agreable à voir' (fol. 234^{v}); 'Le *Touin miry* n'est plus gros qu'un moineau [...] ayant le plumage du corps tout vert, et le dessus de la teste comme aussi tout le rond des yeux pleins de plumes d'un jaulne tres-beau' (fol. 235^{r}); 'Entre autres il y a le *Moyton*, qui est grand comme le Paon [...] c'est un tres-bel Oiseau et tres excellent à manger' (fol. 236^{r}); 'Il y a le *Nanbou* [...] Il s'en trouve là en grande quantité et sont tres-excellentes à manger' (fol. 237^{r}); 'Il y a le *Iapy Ouässou* [...] non moins beau au regard qu'il est savoureux au goust' (fol. 238^{r}).
[277] D'Abbeville, *Histoire*, fol. 146^{r}-146^{v}.

'mauvaises coustumes' ('bad', but also 'wicked', 'depraved' customs).[278] Aged by his paganism and blinded in his soul, this 'pauvre Indien Vieillard' suffers the physical effects of his misguided spiritual beliefs. However, by submerging himself in the 'Claire Fontaine du Baptesme' -- undertaking the baptism ritual, in real terms -- the *Aigle*-Tupi man is restored to good physical and spiritual health.

To formulate the allegory, d'Abbeville draws on symbolic animal meanings from an established text of Christian teaching: the story of the *Aigle* comes from the *Physiologus*. In the Saint Epiphanius telling, it is said that when the eagle grows old, its eyes weaken, its wings become heavy and its beak becomes crooked and misshapen, preventing the bird from eating.[279] Thus, the eagle flies high into the air and dives down to break its old beak on a cliff. The bird then submerges itself in cold water and stares directly at the sun. By doing this, the bird restores its vision. In Epiphanius's interpretation, the eagle teaches us that though our sins may oppress us, we are renewed through tears of repentance.[280] The deformed beak and weighty wings represent sin itself; the restorative waters are symbolised by the Christian subject's repenting tears.

D'Abbeville reappropriates the Christian fable of the eagle to describe the baptism ritual in the New World. The allegorical transformation of the Tupinamba man into a bird is of particular resonance, as the Capuchin friar knew the Tupi had a close affinity with avian species. He notes, for instance, that bird feathers feature prominently in Tupinamba material culture and ritual practice. Worn in most public ceremonies, feathers pervade practically every aspect of indigenous custom.[281] Multiple kinds of ritual objects are fashioned from bird feathers, including capes (*Assoyave*), collars (*Aiouacara*), bonnets (*Acangaop*), and diadems (*Akangétar*).[282] On occasion, d'Abbeville states, the Tupinamba have a tendency to 'se parer la teste avec les plus petites plumes que les *Aras*, *Canidés*,

[278] Cotgrave, s.v. affections, mauvais.
[279] Epifanio, *Sancti Patris Nostri Epiphanii, Episcopi Constantiae Cypri, ad Physiologum* (Antwerp: Plantin, 1588) <https://spcoll.library.uvic.ca/Digit/physiologum/facsimile/facsimile_img.htm> [accessed 12 Mar 2023], p. 22.
[280] Epifanio, p. 23.
[281] 'Quand tous les hommes de ce païs veulent paroistre braves, comme ils font ordinairement és jours de leur *Caouinnage*, ou lors qu'ils massacrent leurs prisonniers ou esclaves, quand ils percent la levre à leurs petits enfans, ou qu'ils vont à la guerre et autres telles solemnitez, ils se revestent de plumages, ou de certains attours et accoustrements faits de plumes rouges, bleuës, vertes, jaulnes et d'autres diverses couleurs extrémement belles, qu'ils sçavent merveilleusement bien ajancer.' D'Abbeville, *Histoire*, fol. 273[r].
[282] D'Abbeville's mention of the *bonnet* recalls the Toucan-feather hat described by Thevet in both *Singularitez* and *Cosmographie*. We discuss this further below, see pp. 163-166.

Perroquets et autres semblables oiseaux de couleur portent soubs la gorge et sur l'estomach.'[283] The Capuchin thus identifies the species of bird whose feathers are most prominent in Tupinamba material culture. Although he does not mention the Toucan explicitly here, he invokes the bird through the final phrase of the sentence: it, too, bears colourful feathers on the crop and breast.

In the allegorical construction of the baptism ritual, d'Abbeville transforms the real Toucan feathers of indigenous material culture into the symbolic feathers on the body of the *Aigle*. In the symbolic register, these feathers represent the weighty, oppressive mantle of paganistic custom -- 'les plumes de sa mauvaise coustume'. As the *Aigle* is submerged in water (the man passes through the rite of baptism), he removes the feathers from his body. At this point, the literal and symbolic feathers become one. Just as the *Aigle* sheds its old feathers in the allegory, so too does the Tupinamba man in real life: he relinquishes his featherworks and feather ornaments to become a Christian subject. The pagan Toucan is transformed into the Christian *Aigle*.

As the burden of his former custom is removed, the indigenous man experiences a spiritual rebirth. In other words, the removal of real Toucan feathers through baptism contributes to the spiritual revitalisation of the now Christian subject. He begins to eat, to 'fly high' and to behold the 'Beau Soleil Divin'. Upon the removal of the external bodily ornamentation, a transformation takes place inside. The man experiences joy, d'Abbeville argues, and he is thankful ('avec actions de grace') for the favour ('benefice') that he has received from God. Conversion elicits a positive affective response. This is d'Abbeville's justification of missionary practice: indigenous people desire conversion for the positive spiritual, affective and bodily benefits it brings.

D'Abbeville therefore appropriates the Toucan in his missionary narrative and uses its feathers as part of a conversion through baptism and miracle cure story. The bird allows d'Abbeville to discuss the issues of divine provision, bounty and the presence of grace in the Americas. In stark contrast with Léry's satirical story about a fake miracle beak, d'Abbeville's feathers become part of an

[283] D'Abbeville, *Histoire*, fol. 273^{v}. Léry also mentions the Tupinamba practice of covering the head and face with feathers in his *Histoire* (1580), p. 154. In Léry's account, these feathers are explicitly those of the Toucan. See above pp. 44-46.

allegorical narrative in which it is their removal from the indigenous body that justifies (and, indeed, aestheticises) the practice of Catholic conversion in Maragnan.

iii. Fernão Cardim: *Tratados da terra e gente do Brasil* (c. 1585-1590)

Another New World writer to express a view on grace in the Catholic tradition was the Jesuit father Fernão Cardim. Born in Viana do Alentejo (Évora), Cardim joined the Society of Jesus in 1556. In 1583, he was sent to oversee the aldeia at Abrantes, which was situated near the colony of Salvador (Capitania of Bahia).[284] There he remained for practically all his life, only returning to Europe once, as an emissary of the Society to Rome, between 1598 and 1601. The Jesuit was a prolific writer who reported extensively on the growing Brazilian colony in his correspondence. However, Cardim's work did not come to light until much later. Indeed, the publication history of his work is both rich and peculiar.[285]

Returning from Rome to Brazil in 1601, Cardim and his compatriots were captured by English pirates led by Francis Cook. The assailants confiscated the Jesuit's manuscripts and imprisoned him in England. Cardim did not make it back to Brazil until 1603. In 1626, the year after Cardim's death, he appeared in translation in the fourth edition of Samuel Purchas's treatise on the religions of the world, *Purchas, his Pilgrimage*.[286] Purchas does not mention Cardim by name. But he does refer to him indirectly, stating that 'no man hath written so absolute a discourse of Brasile as was that taken from a Portugall Frier.'[287] It is therefore an English-speaking audience, rather than a Portuguese one, that Cardim reached first.

---

[284] Ana Maria de Azevedo, *Tratados da terra e gente do Brasil* (Lisbon: Comissão Nacional para as Comemorações dos Descobrimientos Portugueses, 1997), p. 11.
[285] Azevedo, p. 19.
[286] Samuel Purchas, *Purchas his Pilgrimage, or Relations of the World and the Religions Observed in all Ages and Places Discovered, from the Creation unto this Present* (London: William Stansby for Henrie Fetherstone, 1626). Francis Cook sold the manuscripts to Richard Hakluyt, and it was through the inheritance of Hakluyt's collection that Purchas acquired the works. See Richard Hitchcock, 'Samuel Purchas as Editor: A Case Study: Anthony Knyvett's Journal', *The Modern Language Review*, 99 (2004), 301-312 <https://doi.org/10.2307/3738747> [accessed 12 Mar 2023] (p. 310).
[287] Purchas, p. 912. Cardim's translated work is included in the ninth book of the volume -- 'Relations of the Discoveries, Regions, and Religions, of the New World. Of Cumana, Guiana, Brasill, Chica, Peru, and Other Regions of America, Perwiana, and Of their Religions', pp. 912-914.

In 1746, the Jesuit father Pedro André de Barros recovered a selection of Cardim's written material from the *Colégio da Bahia*.[288] However, a further century would elapse before the letters were attributed to Cardim. In 1847, the Imprensa Nacional at Lisbon published the first of Cardim's texts in Portuguese -- the *Narrativa epistolar de uma viagem e missão jesuitica*.[289] Although the Jesuit father found an audience in the early modern period, it was not until much later that he reached a broad lusophone readership.

In 1925, J. Leite printed Cardim's *Tratados da terra e gente do Brasil* in Rio de Janeiro.[290] The book is a collection of reports and letters written in the years following Cardim's arrival in Brazil (1583). The editor divides the book into two sections: the first is natural-historical in focus, the second is largely ethnographic. Cardim describes the Toucan in different ways in both sections. We will first assess the natural-historical presentation before shifting focus to the ethnographic section.

> *Tucána*. Este pássaro é do tamanho de uma pega: é todo preto, tirando o peito, o qual é todo amarelo com um círculo vermelho; o bico é de um grande palmo, muito grosso e amarelo, e por dentro muito vermelho, tão brunido e lustroso, que parece envernizado; fazem-se domésticos, e criam-se em casa, são bons para comer, e a pena se estima muito por ser fina.[291]
>
> *Tucána*. This bird is the size of a Magpie. It is all black, except the breast, which is all yellow with a circle of red; the beak is the size of a large palm, greatly thick and yellow, greatly red inside, burnished and lustrous such that it appears varnished; they are domesticable and breed inside houses, they are good to eat, and the feathers are highly esteemed for their fineness.

The Jesuit's natural-historical description begins with a common repertoire of epistemic claims, which detail the size, anatomical features and colouration of the bird. As in the accounts of Gessner and Aldrovandi, Cardim prefers the corvid analogy, selecting a 'pega' (magpie) as the comparative species and he measures the beak at 'um grande palmo' ('the size of a large palm'). As in d'Abbeville's description, then, the first two lines appear to follow a popular and frequently repeated natural-historical formula.

---

[288] Azevedo, p. 11.
[289] Fernão Cardim, *Narrativa epistolar de uma viagem e missão jesuitica* (Lisbon: Imprensa Nacional, 1847) <http://dbooks.bodleian.ox.ac.uk/books/PDFs/590202622.pdf> [accessed 12 Mar 2023].
[290] Fernão Cardim, *Tratados da terra e gente do Brasil*, ed. by Baptista Caetano, Capistrano de Abreu and Rodolpho Garcia (Rio de Janeiro: J. Leite, 1925).
[291] Fernão Cardim, *Tratados da terra e gente do Brasil*, ed. by Ana Maria de Azevedo (Lisbon: Comissão Nacional para as Comemorações dos Descobrimientos Portugueses, 1997), pp. 89-90.

Cardim also shows a clear interest in the aesthetic dimension of the Toucan. He spends considerable time describing the colour, both inside and out, and the phrase 'tão brunido e lustroso, que parece invernizado' ('burnished and lustrous such that it appears varnished') emphasises the fineness of the beak material. As Cardim discusses the material properties in the passive voice, he makes a contention about the agency of an absent subject. That is, behind the aesthetic quality of the Toucan beak is an unseen craftsman: the beak is an aesthetic wonder through which we may perceive (and admire) the dexterity and artistry of the Creator.

The assessment is a surprising one in the context of contemporary natural history. As we know, travellers and natural historians often discussed the beak in terms of its disproportion and deformity. But Cardim, in a similar sense to Caussin, interprets the beak as a thing of beauty. This aesthetic appraisal suggests that, once again, the presence of grace in the New World is at stake here. Cardim, like d'Abbeville, shows that we may perceive grace in the aesthetic dimension of natural forms. The Jesuit, moreover, nuances the argument. By re-evaluating a natural-historical feature that is classified elsewhere as *monstrueux* or *difforme* on account of its physical disproportion, he contends that by looking closely at its material properties, we may find a different kind of beauty. In short, the aesthetic appreciation of grace may be found in a great number of natural forms and features (beyond colours and fine feathers), even if, at first glance, they do not appear to be so beautiful.

The passive contentions also outline the devotional framework of Cardim's account. The idea of Jesuit scientific enquiry (particularly natural history) being an inherently devotional practice stems from the theology of Ignatius of Loyola, the Society's founder. As Prieto summarises, Ignatius claimed that 'if the study of philosophy and the natural sciences was done piously and "to the greater glory of God," then it could be considered equivalent to a prayer and divine contemplation.'[292] To the Jesuit mind, enquiring into the diversity of natural kinds brought them a closer understanding of God. In this sense, as Harris explains, Jesuits entwined the traditional definition of *scientia* as 'knowledge

[292] Andrés I. Prieto, *Missionary Scientists: Jesuit science in Spanish South America, 1570-1810* (Nashville, TN: Vanderbilt University Press, 2011) <https://search-ebscohost-com.ezproxy-prd.bodleian.ox.ac.uk/login.aspx?direct=true&AuthType=ip,uid&db=nlebk&AN=360706&site=ehost-live&authtype=ip,uid> [accessed 12 Mar 2023], p. 3.

of God' with an emerging meaning of *scientia* as 'knowledge of Nature.'[293] It therefore makes sense that Cardim's natural-historical description of the bird forms part of a discourse of grace; for the Jesuit, natural-historical enquiry was very much a part of natural theology.

The final lines of Cardim's description offer a rapid-fire set of further claims. First, the Toucan is domesticable: it will breed inside houses. Second, the bird is edible. And third, the feathers are highly valued for their beauty. Contrary to d'Abbeville, Cardim provides no assessment of the bird's taste in his description. While a discourse of universal provision is implied, Cardim's attention to edibility reads more as addressing the practical need to outline what could or could not be eaten for the purposes of survival, rather than as an illustration of Bounty.[294] The final line also raises a question about cultural perspective. We do not know inside whose house the Toucan will breed, nor who, specifically, values the bird's feathers. The lack of specificity implies a commingling and interweaving of indigenous and European values in the emerging intercultural space.

This interweaving of values is facilitated by the Jesuit practice of accommodation. In simple terms, accommodation involved 'adapting the methods of conversion to the culture of those being converted.'[295] Although the Jesuits did not invent accommodation, they assigned it a uniquely central role in their missionary practice, and it became a key principle in their overseas evangelical activity.[296] As Cardim seems to imply in his natural-historical description, both indigenous and European people placed a high value on Toucan feathers in Brazil. This claim is crucial, for when Cardim discusses indigenous featherwork in the second section of his account, we know that he is referring to Toucan feathers -- and, therefore, the Toucan itself -- by association.

---

[293] Steven J. Harris, 'Jesuit Scientific Activity in the Overseas Missions, 1540-1773', *Isis*, 96 (2005), 71-79 <https://www.jstor.org/stable/10.1086/430680> [accessed 12 Mar 2023] (p. 79). For further contextual scholarship, see John W. O'Malley, 'Introduction', in *The Jesuits II: Cultures, Sciences, and the Arts, 1540-1773*, ed. by John W. O'Malley, Gauvin Alexander Bailey, Steven J. Harris, and T. Frank Kennedy (Toronto: University of Toronto Press, 2005) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.3138/9781442681552> [accessed 12 Mar 2023], pp. 287-290.
[294] Asúa, *Arcadia*, p. 1. See also: Prieto, p. 4.
[295] Charlotte de Castelnau-L'Estoile, 'The Uses of Shamanism: Evangelizing Strategies and Missionary Models in Seventeenth-Century Brazil', in *The Jesuits II*, ed. by O'Malley et al, pp. 616-637 (p. 635, note 26).
[296] Stefania Tutino, 'Jesuit Accommodation, Dissimulation, Mental Reservation', in *The Oxford Handbook of the Jesuits*, ed. by Županov, pp. 216-240 (p. 218). See also: Andrés I. Prieto, 'The Perils of Accommodation: Jesuit Missionary Strategies in the Early Modern World', *Journal of Jesuit Studies*, 4 (2017), 395-414 <https://doi.org/10.1163/22141332-00403002> [accessed 12 Mar 2023].

Feathers and featherworks appear at multiple points in the *Tratados*. One of Cardim's principal observations of indigenous featherworks is in the dancing of indigenous boys. He is struck by the intricacy of their ornaments and by the movement of their bodies in performance. The boys seem to mimic birds through dance, the Jesuit claims, and he describes the *mudanças* ('movements', but also 'transitions' or 'changes' in a choreographic sense) of the feathered bodies in aesthetic terms.[297]

> Chégamos á aldeia, que dista cinco léguas da vila, por caminho de uma alegre praia. Foi o padre recebido dos Índios com uma dança mui graciosa de meninos todos empenados, com seus diademas na cabeça, e outros atavios das mesmas penas, que os fazia mui lustrosos, e faziam suas mudanças, e invenções mui graciosas [...].[298]
>
> We reached the aldeia, which was five leagues from the town, walking along a cheerful beach. The priest was received by the Indians with a very graceful dance, performed by boys covered in feathers, with their diadems on their heads, and other adornments made of the same feathers, which made them very lustrous and their changes [dance movements] and inventions very graceful [...].

The boys are 'todos empenados' ('covered in feathers'); they wear feather diadems on their heads and other feather ornaments on their bodies. There is an obscurity to the phrase 'todos empenados'. It allows for the possibility of feathers being adhered or glued to the body, which momentarily recalls Léry's discussion of Toucan feathers in the dancing ritual *Toucan-tabouracé*.[299] The feather ornaments make the boys appear 'mui lustrosos' ('very lustrous'), and their 'mudanças' and 'invenções' ('inventions' or 'evolutions') in dance are 'mui graciosas' ('very gracious'). For Cardim, the performance is a highly pleasing aesthetic spectacle.

As we have shown, there was a long tradition of ascribing aesthetic beauty to the performances of indigenous people in the New World dating back to the early sixteenth century. Pêro Vaz de Caminha mentions the beauty of indigenous featherwork in his letter to Manuel I and Léry discusses the pleasing spectacle of Tupinamba rituals involving feathers in the early editions of his

[297] On the mimicry of birds by indigenous boys: 'Dos seus bailos e cantos. Ainda que são melancólicos, têm seus jogos, principalmente os meninos, muito vários e graciosas, em os quais arremedam muitos géneros de pássaros [...].' Cardim, *Tratados* (1997), p. 178. 'Of their dances and songs. Although they are melancholic, they have their games, especially the boys, which are very varied and graceful, in which they mimic many kinds of birds [...].'
[298] Cardim, *Tratados* (1997), p. 228.
[299] As discussed in the introduction. See Léry, *Histoire* (1580), p. 154.

Histoire. Cardim's account belongs in this tradition, but he also pushes it in a new direction. Rather than being part of an early encounter, the Jesuit father depicts the aesthetic spectacle within a proto-colonial framework. The social context Cardim describes is the 'aldeia': a Jesuit-controlled indigenous village in which inhabitants were converted and made to follow a daily routine of work and worship. Thus, in a similar way to d'Abbeville, Cardim argues that forms of indigenous beauty continued to exist in the emerging intercultural society. Moreover, the 'accommodation' of indigenous people in the colonial setting did not diminish the beauty of the spectacles they produced.

Cardim's use of the term 'invenções' credits the indigenous dancer with the capacity for *inventio* and the twice-adopted adjective 'graciosa' ('gracious') implies that grace itself is visible in indigenous performance. Cardim therefore extrapolates the argument about grace: not only may we find it in natural forms, but also in (certain) indigenous practices. Yet the social context of the ritual Cardim describes is very different from those we have seen before. European actors participate in the scene as well, and the boys perform the dance in front of a European priest as part of a greeting. In other words, this is by no means an 'ethnographic' observation of indigenous ritual.[300] Therefore, grace -- which is identified in the aesthetic dimension of the dance -- may not be a quality innate to indigenous performance. It could just as easily arise from the fact that the dance pays reverence to the visiting priests and, by extension, to God. Only when indigenous performance takes place in an intercultural framework, where (Catholic) Christianity remains the dominant theology, can it be granted an aesthetic value. It is only when indigenous performance is accommodated that it appears as a gracious spectacle.

Jesuit missionaries accommodated and adopted elements of indigenous ritual in order to transform native Brazilians into Christian subjects. As Amy Buono puts it, 'the Jesuits soon realised that multi-sensory performance was a prime conveyor of meaning for the Tupi, and an available path of cross-cultural articulation and consequently, evangelisation.'[301] To retain featherworks (rather than simply remove them) and to allow the multi-sensory performance of the feathered dance ritual to

[300] Of course, even in the most 'original' context, we never know the extent to which the indigenous actor modifies their performance in the presence of an exogenic observer.
[301] Buono, p. 149.

continue in an intercultural milieu was, in the Jesuit view of accommodation, essential to expediting indigenous conversion.

Toucan feathers are a crucial component in indigenous multi-sensory performance. Though we only catch a glimmer of the indigenous meaning in Cardim's text, we sense from Léry and others that the wearing of Toucan feathers in dance had a distinct meaning for the Tupinamba. The Jesuit reappropriates this significance and transforms the feather into an evangelical device. Cardim ascribes aesthetic grace to the indigenous dance, something which momentarily suggests that indigenous people may possess other forms of grace -- notably, spiritual. Through the aesthetic dance, then, Cardim glimpses the potential for Tupinamba salvation, if only ephemerally. In the cross-cultural context in which conversion is the ultimate goal, the Jesuit therefore allows feathered objects to be kept. As the beauty of the feathered dance indicates the potential for salvation, the aesthetic dimension of grace becomes closely aligned with the spiritual meaning of grace.

Our final reading assesses another instance in which Jesuit missionaries accommodate (and thereby transpose) the indigenous meaning of Toucan feathers in ritual. This time, the ritual is a Catholic one which involves the transfer of a relic into a newly founded church in the colony of São Sebasitão.

> Trouxemos no navio uma relíquia do glorioso Sebastião engastada em um braço de prata. Esta ficou no navio para a festejarem os moradores e estudantes como desejavam, por ser esta cidade do seu nome, e ser ele o padroeiro e protector. Uma das oitavas à tarde se fez uma célebre festa. O Sr. Governador com os mais Portugueses fizeram um lustroso alardo de arcabuzaria, e assim juntos com seus tambores, pífaros e bandeiras foram à praia. O padre visitador com o mesmo Governador e os principaes da terra e alguns padres nos embarcámos numa grande barca bem embandeirada e enramada: nella se armou um altar e alcatifou a tolda com um pálio por cima; acudiram algumas vinte bem equipadas, algumas delas pintadas, outras empenadas, e os remos de várias cores. [...] Por onde acabado o diálogo, por a nossa igreja ser pequena lhes preguei no mesmo teatro dos milagres e mercês, que tinham recebido deste gloriosos mártir na tomada deste rio, a qual acabada deu o padre visitador a beijar a relíquia a todo o povo e depois continuámos com a procissão e danças até nossa igreja: era para ver uma dança de meninos índios, o mais velho seria de oito annos, todos nuzinhos, pintados de certas cores aprazíveis, com seus cascavéis nos pés, e braços, pernas, cinta, e cabeças com várias invenções de diademas de penas, colares e braceletes. Parece-me que se os viram nesse reino, que andaram todo o dia atrás eles; foi a mais aprazível dança que destes meninos cá vi. Chegados à igreja foi a santa relíquia colocada no sacrário para consolação dos moradores, que assim o pediram.[302]
>
> We brought from the ship a relic of the glorious Sebastian, mounted in a silver brace. This was left in the ship to allow the residents and students to celebrate as they wished, for this city

[302] Cardim, *Tratados* (1997), pp. 265-266.

> was named after him, him being its patron and protector.[303] On the eighth day of the feast, there was an illustrious party. The Lord Governor and most of the Portuguese made a brilliant display of very loud musket fire, and were on the beach with drums, fifes, and flags. We embarked -- the *Padre Visitador*, the Governor, and the principal persons of that land, along with some other fathers -- in a large boat, decorated with flags and flowers.[304] Inside it, an altar was set up and the awning was covered with rugs and with a canopy on top. Some twenty well-equipped canoes arrived, some of them painted, others befeathered, and with oars of various colours. [...] Because the discourse had finished, and because our church is small, I preached to *them* in the same theatre about the miracles and graces we had received from this glorious martyr in the taking of this river. And when it was finished, the visiting father gave the relic to everyone to kiss, and we continued the procession and the dances all the way to our church. It was pleasant to see a dance by Indian boys, the oldest one of which would be around eight years old, all of them were naked, painted with certain pleasing colours, with their rattles on their feet, and their arms, legs, waists, and heads with various *inventions* of feather diadems, collars, and bracelets. It seems to me that if they lived in this kingdom, everyone would walk all day to accompany them; it was the most pleasant dance these boys did that I saw. We arrived at the church and the holy relic was placed in the shrine for the consolation of the inhabitants, who so asked for it.

On the journey from the ship to the shore and then, eventually, into the shrine of the Misericordia church, the relic is accompanied by great fanfare and spectacle. A large number and diversity of social actors populate the scene. Cardim mentions Portuguese dignitaries, colonial administrators, Jesuit priests, missionaries and soldiers, as well as indigenous headmen, dancers and a large lay community. He therefore constructs an image of anthropological and ethnographic diversity in the settlement of São Sebastião.

Moreover, the scene moves quickly from location to location and, as it does, the composition of people involved changes. The Portuguese bring a relic of Saint Sebastian from their ship to the mainland. On the beach, the Lord Governor and a large contingent of Portuguese settlers make a display of musket fire and play a military fanfare. Cardim, the Governor, the chief dignitaries and some Jesuit fathers embark on a boat in which an altar has been set up underneath an awning to house the relic. Some twenty other boats approach -- some painted, others decorated with feathers, the oars being of various colours -- and a 'grande festa de escaramuça naval' ('great display of naval skirmish') takes place. The soundscape is particularly rich: Cardim hears the cries of the *Indios* in the other boats, Christian songs from the Europeans and musket and artillery fire from the beach.

---

[303] São Sebastião is the present-day Rio de Janeiro. The actors involved were members of the Colégio Jesuíta de São Sebastião.
[304] The *Padre Visitador* was often an ecclesiastical official sent by the Vatican to conduct a visit of relatively short duration and submit a report to the Holy See.

The boat carrying the relic returns to shore near the Misericordia church (which is located by the beach). The relic and its protective canopy are lifted out and carried by the dignitaries to the steps of the church. Here, a small *teatro* has been set up; the bearers place the relic onto 'um rico altar' ('a rich altar') housed within the theatre while a group of 'figuras muito ricamente vestidas' ('richly dressed figures') performs a dramatic rendition of the Saint's life. A young man is tied to a stick and 'asseteado' ('speared'), an act which represents the Saint's martyrdom. Several figures in the crowd shed 'lágrimas de devoção' ('tears of devotion') at the spectacle.

Once the performance ends, Cardim himself takes the stage and preaches to the crowd. A visiting Jesuit father passes the relic around so that everyone might kiss it. Then, the procession resumes, moving around the church. In this part of the ceremony, Cardim draws attention to the dancing of young indigenous boys. The Jesuit emphasises the pleasing spectacle they produce as they are covered in feathers and other indigenous-made objects. Once the party arrives in the church, the relic is placed into a shrine, as specifically requested by the local inhabitants.

There are two instances in which Toucan feathers may be found in the scene. First, they adorn the boats which approach for the mock-naval skirmish and, second, they cover the indigenous boys who dance in the procession from the theatre to the church. In both cases, the feathers enrich and embellish the ritual: they are essential components to the aesthetic dimension of the scene. Moreover, Cardim ascribes a deeper significance to Toucan feathers. We have selected this passage from the *Tratados* as it offers a contrasting confessional perspective to Léry's satirical narrative about a Catholic relic, with which this chapter began. Over the course our discussion, we have shown how the material parts (both beak and feathers) of the Toucan had an important role to play in the different confessional interpretation. Whether by 'maistre Bec' or 'penas', the Toucan allowed both Léry and Cardim to outline their respective stances in relation to relics.

In Cardim's account, the active participation of befeathered indigenous people promotes the status of Catholic relic culture in the New World. Throughout the scene, indigenous people are more than mere witnesses to the spectacle -- they are protagonists. Indigenous men participate enthusiastically in the naval skirmish and indigenous boys perform the dance in the procession. Cardim does not specify who makes up the large crowd gathered in front of the church. He does,

however, take care to underline the moments in which only Portuguese (or, indeed, indigenous) people populate the scene. From this, we may argue that both indigenous and European people make up the lay community. But why does the Jesuit insist on using the pronominal *them*, instead of revealing the identities of those in congregation?

We may read Cardim's lack of specificity in two ways. In one reading, *them* refers loosely to either European or indigenous people. In a second reading, we might take *them* as referring to both kinds of person simultaneously. In this case, Cardim constructs the image of an integrated, cross-cultural society in São Sebastião. The bonds of such a society, he argues, are forged by communal participation in what is a fundamentally Catholic practice -- the veneration of a relic. As Cardim invokes *them*, with increasing specificity, throughout the passage (*they* listen to the priest's oration; *they* -- 'todo' -- kiss the relic as it is passed around; *they* -- the 'moradores' -- ask for the relic to be placed in the church) he makes two important points. First, that Catholicism has the potential to foster harmonious multicultural communities on the far side of the world and, second, that indigenous people happily engage in Catholic practices; they desire and actively promote the word of God.

The Jesuit takes the argument even further as the passage develops. A key moment in the scene is the aesthetic appraisal of the dancing of indigenous boys in the procession. For him, the dance is 'a mais aprazível dança que destes meninos cá vi' ('the most pleasant dance these boys did that I saw'). Given that Cardim mentions indigenous dancing at several points in the *Tratados*, it is clear that the Jesuit wishes to emphasise just how pleasant this particular performance is. Furthermore, he remarks that 'se os viram nesse reino, andaram todo o dia atrás eles' ('if they lived in this kingdom, everyone would walk all day to accompany them'). Once again, the obscurity created by the quick succession of pronouns (*they-everyone-them*) means that we can read this assertion in a number of ways.

Firstly, we can take Cardim's remark as a comparative analysis. Just as young boys lead processions in Portugal, so too do indigenous boys in Brazil (whether part of European-led spectacles or not). The comparison draws out a common cultural core; native Brazilians are not so different from ourselves in terms of ritual and performance. Secondly, we may read it as an aesthetic appreciation of the dance made in hyperbolic terms. The dance is *so* special that even if the indigenous boys were to

perform it at home, it would still elicit the aesthetic pleasure of a predominantly Portuguese audience. The second reading then points to a third: the aesthetic spectacle of the indigenous dance actually exceeds forms of beauty that exist at home. This final interpretation opens a different space of comparison in which Cardim shows how Catholic cultures not only function, but actually flourish in the New World to an extent hitherto unseen in Europe.

Sound has a crucial part to play in the scene. As noted, the auditory landscape of Cardim's relic ritual is rich: sound emanates from the fanfare, the naval skirmish, the musket and artillery fire, the singing of Christian hymns on the beach, the indigenous performances, the preaching outside the church and the theatrical display. Toucan feathers therefore appear in a spectacle marked by noisy conviviality, celebration and joy, and the cacophony contributes to the aesthetic dimension of the scene. Cardim's restoration of a noisy (yet, ultimately, harmonious) spectacle around the relic therefore stands in stark contrast with the muffled creaturely muttering of Léry's satirical relic narrative.

Cardim's depiction of the feathered performance envisages a Catholic audience at home. Indigenous participation, the Jesuit father shows (and especially the aesthetic spectacle of indigenous dancing), enriches Catholic rituals and cultures in the New World. If we apply the principles of accommodation correctly, not only can we attract new individuals to our faith, we can actually foster entirely new and exciting forms of Catholicism.

Jean de Léry and Fernão Cardim each select a specific anatomical part of the Toucan to articulate their position on relics. Where the Reformed pastor uses the beak polemically to ridicule the Catholic attachment to relics and reliquaries, the Jesuit father incorporates the feathers into his argument about the newfound resonance of Catholic relic culture (indeed Catholicism in a broader sense) in the New World. Where Léry revisits and revises his earlier description of the Toucan to engage a troubled and conflicted audience in Europe, Cardim uses the bird to demonstrate the possibilities of the emerging intercultural zone abroad. In both instances, the Toucan enlivens confessional discourses on relics. As we have seen, the Toucan had a profound influence on the way Catholics thought, both at home and in the New World. The bird reinvigorated the Catholic discourses of provision, bounty and grace (in both aesthetic and spiritual senses) and it became part of

confessional polemic. As in Reformed confessional texts, Catholics incorporated natural-historical wonders from the New World and put them to distinct use in their own confessional discourses.

Chapter III. *From the Forest to the Study*: Material Histories of the Toucan

Introduction: The 'Lives' of Objects

As he turned the abnormally large beak in his hands and gazed in astonishment at the vibrant colours of the feathered pelt, the Swiss natural historian Conrad Gessner had a distinctively rich haptic and visual experience of the Toucan. Having received a set of samples from his agent, Giovanni Ferrerio, Gessner transcribes his material encounter in detail in his book -- *Icones avium omnium*:

> Hæc ille qui postea etiam pellem de pectore cum plumis aureo vel croceo colore splendidissimo pulcherrimoque insignibus, (reliquum corpus nigrum est, nisi quod caudæ initium et extremitas rubent,) ad me misit. Rostrum ei fere crassius et longius esse quam reliquum corpus tradit Andreas Thevetus: quod eo facilius credimus, quoniam tenuissimum instar membranæ, et fere pellucidum, levissimumque et cavum est, ærisque interni capax; quamobrem hoc etiam ei peculiare, quod odorandi meatu careat. In tanta enim tenuitate ut facilius penetrant odores.[305]
>
> [I gathered these things from he (Ferrerio) who afterwards even sent me a sample from the breast, with feathers remarkable for their bright golden or saffron colour (the rest of the body is black, except for the beginning and end of the tail turning red). André Thevet says that the beak is sturdier and longer than the body. We would believe him all the more easily since it is as thin as a membrane, and almost transparent, very light and hollow, and able to hold much air inside; hence its peculiar characteristic of being deprived of airways for smelling. It is of such thinness to allow smells to enter it more easily.][306]

From the forests of the New World to the desk of a natural historian in Zurich, the Toucan had covered great physical distance as a material sample. Gessner's records of his encounter with the beak in his text has it circulate even further in written form. The Toucan passes through many sets of hands -- not only those we know about from the book (Gessner and Ferrerio) but also, potentially, a host of actors behind the text (such as Thevet) who are not mentioned: indigenous people, explorers, merchants, collectors and dignitaries across Europe. Although we get only a fleeting glimpse of the physical trajectories of Toucan objects in the *Icones*, we become aware of the profound impact engaging with a material sample had. Gessner's amazement at the feathers conjures new ideas about colour. His careful probing of the beak produces a new perspective on avian anatomy and on the forms and properties of natural materials. The epistemic shock of its peculiar shape generates

[305] Gessner, *Icones*, p. 130.
[306] We have discussed this passage before but, as we are about to see, our focus now shifts.

thoughts about relative believability; reflections on which of the contemporary reports and analyses of the Toucan could be considered reliable.

This chapter draws attention to the lives of the Toucan as a material object in Europe. As we have shown over the course of this thesis, Toucan beaks and feathers acted as key sites of semiotic and representational ascriptions for authors of many different stripes. Yet the transmission of the bird was more than textual -- it was also material. In a discussion about the cultural dissemination of the Toucan across early modern Europe, part of our job is to tell this material history: there are several valuable reasons for doing so.

Firstly, spaces and places mattered in the early modern period. By tracing the physical movement (the geographic transmission) of objects across the continent, we attain a clearer insight into the social dimension of natural-historical knowledge production and exchange. We get to know where these interactions happen, in which social contexts, and how they critically informed other modes of cultural production (textual, pictorial and so on). Secondly, interacting with physical samples -- touching and feeling the material properties, the textures and weights, the way the object interacted with light, for example -- had an important bearing on the way early moderns thought about the Toucan. A different mode of semiotic ascription (one informed by haptic analysis) takes place around an object, which is fundamentally different to one that is grounded in reading texts and images or listening to sounds. Finally, early moderns arranged material samples into physical collections. These sites and spaces (like the *cabinet de curiosités*, for example) were essential to the making of knowledge and to the fostering of communities, whether natural-historical, specifically provincial or even confessional.

Thus, we will return to a series of sources already discussed and turn our attention to moments of material encounter. In which social and cultural contexts did Toucan objects appear? How were they collected, transported, displayed and, finally, transcribed into text? Taking the material specimen as our focal point, we can appreciate the unique mobility of natural-historical objects in the early modern world, the human and nonhuman actors involved in their transmission and the rich sets of meanings they produced. As we will see, the movement of Toucan objects had a transformative impact on the discourses of wonder, marvel, curiosity and travel.

Scholars have transformed the way we view material objects in culture over the past four decades. The anthropologist Arjun Appadurai was first to reimagine objects as having a 'social life'. Humans 'encode *things* with significance', he claims, and 'the things in motion illuminate their human and social context.'[307] In other words, subjects inscribe objects with meaning through interaction and if we examine the trajectories of objects, we learn something about the social and cultural contexts through which they move.

In the following decade, the sociologist Stephen Riggins developed Appadurai's point from a semiotic perspective. In *The Socialness of Things*, Riggins argues that 'just as language is polysemic, open to multiple interpretations, so are material artifacts.'[308] Subjects read meaning into objects by interpreting the signs they produce or that surround them (the object's physical characteristics; its location; the observer's personal experience with similar objects; and texts about them [labels, notes, articles, etc.]).[309] That is, social actors inscribe objects with meaning through a process of semiosis. And as the object moves into different social and cultural contexts, it carries those meanings with it. Thus, subjects and objects are engaged in a socio-semiotic 'dialogue' with one another, Riggins contends, with subjects taking into consideration the rich freight of meaning an object carries in subsequent interpretations. Within this 'dialogue', the object itself has the power to shape the way in which it is perceived, interpreted and represented by the subject.[310]

As we know from our methodological discussion, material agency stems from semiotic ascriptions, their accretions, transfers and modifications through constant reinterpretation. In other words, material agency is interpretative. Material objects from the New World were redolent with semiotic potential. They conveyed a variety of signs (visual, haptic, auditory) to social actors.

---

[307] Arjun Appadurai, 'Introduction', in *The Social Life of Things: Commodities in Cultural Perspective*, ed. by Arjun Appadurai (Cambridge: Cambridge University Press, 1986) <https://hdl.handle.net/2027/heb32141> [accessed 12 Mar 2023], pp. 3-63 (p. 5).
[308] Stephen H. Riggins, 'Introduction', in *The Socialness of Things: Essays on the Socio-Semiotics of Objects*, ed. by Stephen H. Riggins (Berlin: Mouton de Gruyter, 1994) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=3044433> [accessed 12 Mar 2023], pp. 1-6 (p. 3).
[309] Riggins, p. 3.
[310] Riggins, p. 2.

Explorers, collectors, merchants (and, indeed, a host of others) interpreted these signs and sought to make sense of them through textual and visual representation. As they did so, they configured a set of critical questions around semiosis and agency. By paying attention to this process of sign-interpretation as it plays out in text and image, we get a sense of how early moderns interpreted, responded to and, ultimately, created new meaning from Toucan objects.

Material historians of the past decade reworked the notion of object agency in claiming that things have not only 'social lives', but actually 'global lives'.[311] Objects travelled great distances, crossing cultural and political boundaries across the globe. As Paula Findlen notes, 'each exchange becomes an opportunity to observe how things metamorphose from one society to another.'[312] The objects in motion prove that 'the networks through which goods move are no more stable than the meaning of the things themselves.'[313] Thus, objects change and acquire new meanings between contexts, but they also disrupt the networks through which they move. According to these 'global' historians, objects transform social interactions, cultural productions and physical environments.[314] By adopting this framework, Mariana Françozo and Amy Buono have given useful insight on the disruptive impact of New World featherworks in European cultures of collecting and performance.[315]

More recently, scholarship that is part of the 'making turn' has sought to prove just how 'embedded' objects from the New World became in European thought and culture.[316] Historians such as Ulinka Rublack and Stefan Hanß have shown how indigenous featherworks, in particular, reshaped European ideas about aesthetics, craft and making. 'Featherwork forged new understandings of delicacy and ingenuity, as well as new sensory experiences of texture and colour', Rublack argues, and the multi-sensory experience featherworks provided 'surrounded and shaped' early modern

[311] See Gerritsen and Riello.
[312] Paula Findlen, 'Afterword: How (Early Modern) Things Travel', in *The Global Lives of Things*, ed. by Gerritsen and Riello, pp. 241-246 (p. 244).
[313] Findlen, 'Afterword', p. 244.
[314] Findlen, 'Afterword', p. 244.
[315] Mariana Françozo, 'Beyond the Kunstkammer; Brazilian Featherwork in Early Modern Europe', in *The Global Lives of Things*, pp. 105-127. Amy J. Buono, '"Their Treasures are the Feathers of Birds": Tupinambá Featherwork and the Image of America', in *Images Take Flight: Feather Art in Mexico and Europe 1400-1700*, ed. by Alessandra Russo, Gerhard Wolf and Diana Fane (Munich: Hirmer, 2015), pp. 178-189.
[316] Hanß, p. 603.

Europeans.[317] Not only did featherworks inspire reflection on how objects were made, they also generated new ideas about the physical forms objects could take and the material properties they could have. In short, they expanded the European frame of reference considerably, facilitating a 'vibrant climate of empirical, active knowledge production', which reached many areas of early modern discourse.[318]

Although 'making turn' historians like Stefan Hanß argue that the meaning of featherwork in Europe should be sought primarily in material culture, it is important to remember that early moderns were not just interacting physically with objects (handling, crafting, reshaping them, etc.), they were also writing books about them.[319] Objects from the New World had a distinct textuality and by assessing the object in text and image, we gain a clearer insight into their disruptive impact in European thought.

Many thousands of objects from the New World entered into the transatlantic culture of collecting and curiosity in the sixteenth and seventeenth centuries.[320] Many of these were placed into a form of collection known as the *cabinet de curiosités*. The *cabinet* (or *Wunder-* or *Kunstkammer*) was the physical manifestation of curiosity, a distinctive space in which 'curious' objects from across the globe could be assembled. Yet the *cabinet* also had a social function: it was not an immobile space fixed behind glass. Rather, objects could be taken out, handled, replaced or sent on to others. It was both fluid and mobile. Indeed, the *cabinet* itself was either an entire room or a piece of furniture that could be moved around. *Cabinets* were important markers of status in the early modern world -- they allowed a collector to demonstrate just how far they (or their agents) had travelled.

---

[317] Ulinka Rublack, 'Befeathering the European: The Matter of Feathers in the Material Renaissance', *The American Historical Review*, 126 (2021), 19-53 <https://doi.org/10.1093/ahr/rhab006> [accessed 12 Mar 2023] (p. 53).
[318] Ulinka Rublack and Stefan Hanß, 'Knowledge Production, Image Networks, and the Material Significance of Feathers in Late Humanist Heidelberg', *Renaissance Quarterly*, 74 (2021), 412-453 <https://doi.org/10.1017/rqx.2021.2> [accessed 12 Mar 2023] (p. 413).
[319] Hanß, p. 603.
[320] See Bleichmar and Mancall. Elke Bujok, 'Ethnographica in Early Modern *Kunstkammern* and their Perception', *Journal of the History of Collections*, 21 (2009), 17-32 <https://doi.org/10.1093/jhc/fhn031> [accessed 12 Mar 2023]. Findlen, *Possessing Nature*. Christian F. Feest, 'European Collecting of American Indian Artefacts and Art', *Journal of the History of Collections*, 5 (1993), 1-11 <https://doi.org/10.1093/jhc/5.1.1> [accessed 12 Mar 2023].

Cabinets were designed to 'astonish' and to inspire wonder in the viewer through copious assemblage (a Roman coin, a precious gem and a Bird of Paradise pelt could all appear alongside one another).[321] For this reason, many scholars refer to the *cabinet* as a kind of 'microcosm': a space through which the onlooker could cover great geographical and historical distance in the blink of an eye.[322]

Several writers discussed in this thesis have spoken of their *cabinets*: Pierre Belon describes how many Toucan beaks can be viewed in 'les cabinets des hommes curieux de choses nouvelles', Thevet mentions leaving his Toucan samples in his Paris *cabinet* while sending a beak to Gessner, and Aldrovandi discusses a painted image of the bird in his *studiolo*. The Toucan was a seemingly widespread phenomenon in the *cabinet* context. This chapter sheds light on the records of such collections. Yet other genres of writing (travel narrative and natural history, for example) speak to the ways in which people interacted with the Toucan as a material object. The following discussion is therefore divided into two sections. The first explicitly revisits a series of texts we have already discussed -- namely, Belon's *Histoire*, Thevet's *Singularitez* and *Cosmographie* and Paré's *Des Monstres et prodiges* -- this time reading around the moments of physical interaction with objects. The second section traces the movements of Toucan objects in collections and inventories, raising questions about material transmission, the spaces of knowledge-making in France (and beyond) and the process of writing the collection into the printed medium.

[321] Giuseppe Olmi, 'Science -- Honour -- Metaphor: Italian Cabinets of the Sixteenth and Seventeenth Centuries', in *The Origins of Museums: The Cabinet of Curiosities in Sixteenth- and Seventeenth-Century Europe*, ed. by Oliver R. Impey and Arthur MacGregor (Oxford: Clarendon Press, 1985), pp. 5-16 (p. 8).
[322] Michael Wintroub, *The Voyage of Thought: Navigating Knowledge Across the Sixteenth-Century World* (Cambridge: Cambridge University Press, 2017) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1017/9781316946459> [accessed 12 Mar 2023], p. 17 and p. 23. Daniela Bleichmar, 'Seeing the World in a Room: Looking at Exotica in Early Modern Collections', in *Collecting Across Cultures*, ed. by Bleichmar and Mancall, pp. 15-30. Deanna MacDonald, 'Collecting a New World: The Ethnographic Collections of Margaret of Austria', *Sixteenth Century Journal*, 33 (2002), 649-663 <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.2307/4144018> [accessed 12 Mar 2023] (p. 663).

I. Objects in Motion

i. Paré's Rotting Pelt: The Challenges of Loss

Despite the many types of Toucan object to arrive in Europe in the sixteenth century, the bird remained fragmented until the first living specimens began arriving in the early seventeenth century. The disjointed nature of the samples, coupled with their tendency to deteriorate over time, placed severe limits on the ability of natural historians to analyse them properly. Specimens were already several months old by the time they arrived in the Old World and there was no technique for preserving them in a complete state. As European activity in the New World increased, travellers and traders tried to transport the living bird across the Atlantic. But these early attempts often proved unsuccessful: Toucans required a temperate environment and plenty of fresh fruit to feed on, conditions that were difficult to recreate aboard a ship.[323] Birds perished on the voyage, the samples rotted and, by the time the ship made port, often only the bony beak remained. Ambroise Paré's book on prodigies and monsters dealt directly with the problem of putrefaction with regard to the Toucan. Moreover, his account also shows how Toucan objects moved through social and cultural contexts at home:

> Un gentilhomme Provençal en feit present d'un au feu Roy Charles neufiesme, ce qu'il ne peust faire vif, car en l'apportant mourut, neantmoins le presenta au Roy: lequel apres l'avoir veu, commanda à Monseigneur le Mareschal de Rets me le bailler, pour l'anatomiser et embaumer, à fin de le mieux conserver; toutesfois bien tost apres se putrefia.[324]

As we discussed earlier, Paré's description highlighted the influence of Thevet, constructed the bird as *monstrueux* and *difforme* and focussed closely on the pepper diet. Yet, as we glean from this excerpt, the text also offers one of the clearest pictures of how Toucan objects moved once they made landfall in France. The short passage outlines several transactions, which demonstrate not only the likely physical trajectories of objects from the New World, but also the importance of the French court to the dissemination of natural-historical knowledge. The first transference is between an anonymous *gentilhomme Provençal* and the French monarch Charles IX. The *gentilhomme* recognises in the

[323] As Thevet reminds us, 'cest oyseau ne scauroit vivre parmy la froidure, qu'il craint merveilleusement.' Thevet, *Cosmographie*, fol. 938^{v}.
[324] Paré, *Œuvres* (2019), p. 2837.

Toucan qualities that would make of it a worthy gift and attempts to bring it before the king. He means to tap into a social culture of gift giving at court and use the bird to promote his social and political status.[325] If he succeeds, the king will be the first in Europe to possess a living Toucan.

But the *gentilhomme* cannot keep the bird alive. He gifts the already-dead creature instead, hoping it will grant him at least some credit. Charles IX, for his part, does not engage with the Toucan in any other way than looking. Having seen it, he orders the *Mareschal de Rets* (the Florentine courtier Albert de Gondi) to confer the specimen to Paré so that it might be preserved. Although, literally speaking, the monarch deems the sample to be worth saving, the quick succession of transfers in the text suggests he hardly paused to appreciate it. He refrains from touching the bird and he plays no further role in its transmission other than ordering the chamberlain to pass it on. As the passage suggests, the rotting bird was only of passing interest to the monarch.

Gondi places the rotting pelt in Paré's hands, asking him to anatomise and embalm it as per the king's instructions. The transaction is made principally out of need -- that is, to stop the sample from deteriorating further. He calls Paré to the rescue. As a surgeon, Paré possessed the technical skills required to preserve the sample in a material sense. But he was also a natural historian: he had the knowledge to preserve the sample in a conceptual sense -- by recording its features in text. Paré therefore exemplifies how technical and artisanal skills were readily transposed into natural-historical practice at the time.[326] Indeed, other sixteenth-century natural historians like Belon and Gessner had a good grasp on how to preserve samples using salt.[327] But the extent of its physical degradation proves to be too advanced. The sample is simply too far gone to be saved, or even understood in a meaningful way, as Paré states in the simplest of terms: 'se putrefia'. The punchy past historic tense indicates that almost nothing bar the beak was left of the sample by the time it reached the natural historian.

---

[325] Natalie Zemon Davies, *The Gift in Sixteenth-Century France* (Oxford: Oxford University Press, 2000), p. 155.
[326] Valentina Pugliano, 'Natural History in the Apothecary's Shop', in *Worlds of Natural History*, ed. by Curry et al., pp. 44-60 (p. 44). Kusukawa, 'Gessner's History of Nature', p. 36.
[327] Paula Findlen and Anna Toledano, 'The Materials of Natural History', in *Worlds of Natural History*, ed. by Curry et al., pp. 151-169 (p. 156).

Over the course of the passage, we sense the author's dissatisfaction at having received a sample of such poor quality. The kind of transaction by which Paré receives it does not reflect positively on his social status. Rather than receiving the sample as a gift (as in the case of the monarch) or even as a specimen suitable for natural-historical analysis, he is asked simply to preserve it. Paré is the last actor in a long chain of passing and the Toucan only reaches him because it needs to be saved from rotting. The transaction does not serve to increase his natural-historical knowledge by any considerable margin either. Returning to the final phrase, we might take 'se putrefia' as intentionally abrupt: do not ask me about it, he writes, it simply rotted.

The final phrase exemplifies the challenges of loss. Paré's rotting pelt is an example of failed (or, at least, frustrated) semiosis: the sample is so degraded that no meaningful interpretation can take place. We notice two trends of semiotic ascription which are incipient but ultimately thwarted in Paré's text. One is social: the logic of the gift fails and Paré's social status is not recognised in the transaction; the other is epistemic: the natural-historical description fails to materialise properly and Paré is forced to rely on secondary information from Thevet. Furthermore, the rotting bird causes Paré to question the relationship between the two. He implicitly asks: is epistemic ascription only possible because of social appreciation? If there was no aristocratic interest in American objects, would the epistemic quarry of the Republic of Letters ultimately be thwarted?

Finally, the text proves how the physical condition of samples determined their movement in space. The monarch is forced to find someone who can halt the process of degradation. No other transfer is possible: it cannot be regifted, reworked or, indeed, passed very far. The final transaction therefore reminds us that the scope of interpretative possibility afforded by the object diminished considerably with each move. What one social actor witnessed was not the same as any other -- the potential for semiotic ascription, then, is in a state of continual flux.

ii. *Belon's Bony Beak:* The Social Lives of Wonder

At the end of his chapter on aquatic birds, the French natural historian Pierre Belon describes his encounter with the huge beak of an unknown New World bird. While he is unsure of the beak's

precise provenance, Belon takes care to outline its physical trajectory as an object and the social actors involved in its transmission:

> Ceux qui naviguent aux terres neufves, faisants leur profit de toutes choses, apportent ce qu'ils trouvent de bon, pour vendre aux marchands. [...] Il est creux par dedans: estant si finement delié, qu'il en est transparent et tenue comme parchemin, et par ce est moult legier. C'est sa beauté qui fait qu'on en voit ja plusieurs par les cabinets des hommes curieux de choses nouvelles: Car au demeurant, lon ne s'en sert à aucune chose.[328]

As Belon traces the physical transfers, he locates the beak firmly within a transoceanic culture of wonder, curiosity and collecting. The natural historian mentions multiple transactions over the course of the excerpt, the first of which is that between those who travel to the New World and merchants at home. He constructs this transfer in commercial terms: the travellers seek profit, bring back what they believe to be good and sell to merchants. Travellers and merchants alike ascribe a distinct economic value to the beak, he claims, and this identification facilitates the initial movement across the ocean. As well as reinforcing the notion that the New World was a space defined primarily by trade, Belon proves the importance of commercial networks to the expansion and dissemination of natural-historical knowledge.[329]

The second movement detailed in the passage is between merchants and the 'cabinets des hommes curieux de choses nouvelles'. It is the beauty of the beak that facilitates this second transaction, Belon contends: the economic value is therefore subsumed into an aesthetic one as the object moves into the collecting context. Yet such 'beauty', he asserts, precludes any form of 'usefulness' ('lon ne s'en sert à aucune chose') which constructs a classical opposition between visual appeal and function. The beaks are a commodity that do not respond to a need. Rather, they are luxury goods, curious objects traded and circulated for their aesthetic appeal. An aesthetic appeal that, as we have shown, was grounded in the fine thinness and translucency of the beak material.

That the natural historian evokes these *cabinets* is important; it indicates that such collections were well-known in learned circles and beyond at the time. One can already see several of these beaks in the *cabinet* context, Belon continues. He does not make clear his degree of interaction with these

[328] Belon, *Histoire de la nature des oyseaux*, p. 184.
[329] Florike Egmond, 'European Exchanges and Communities', in *Worlds of Natural History*, ed. by Curry et al., pp. 78-93 (p. 79).

collections in the text, but it is possible that the natural historian visited one (or several) and witnessed a Toucan beak there for himself. Indeed, it is probable that he had heard reports of them through colleagues and contemporaries, as multiple *cabinets* existed in Paris at the time.[330] It was not only the transactions of traders that were so critical to natural-historical knowledge making, then, but also the activities (and aesthetic preferences) of collectors.

From the network of unnamed travellers, merchants and collectors, Belon acquires a Toucan beak of his own. Just how it reaches him from such a network, however, is not clear. As Egmond shows, objects were frequently lent, borrowed and passed around in informal, non-commercial ways too.[331] Belon may have employed an agent, for example, to seek out the beak. Whatever happened, as the object lands on the natural historian's desk, the final major transaction of the passage is complete.

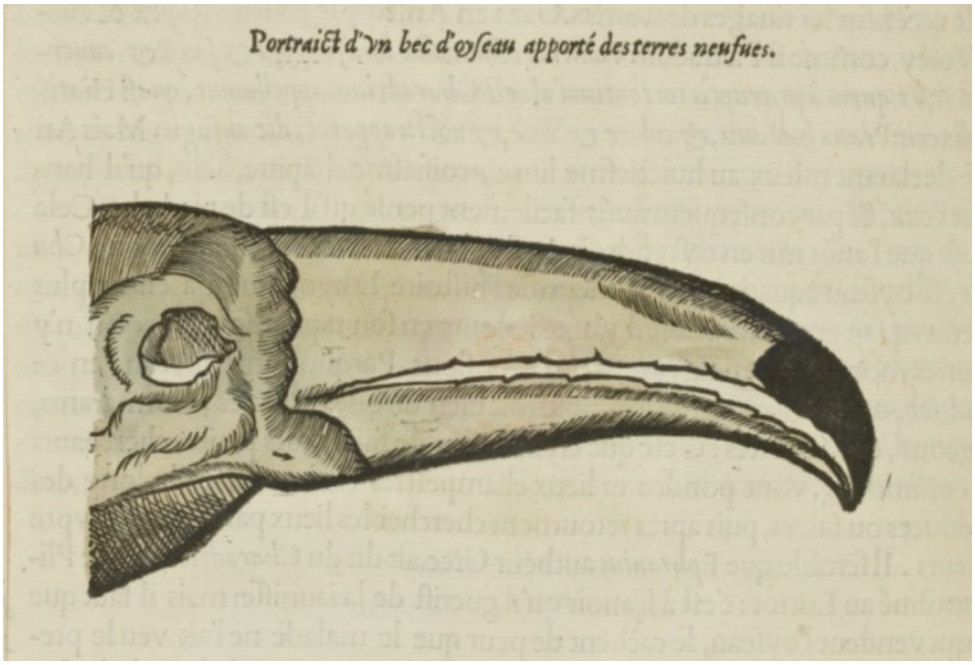


Figure 17. *Portraict d'un bec d'oyseau apporté des terres neufves*.[332]

The engraving clearly portrays what Belon was looking at and therefore the kind of Toucan object one might witness in a *cabinet*: a bony beak, bleached white (due to the post-mortem breakdown of keratin), attached to a part of the bird's skull. In both image and text, the reader senses that Belon has

[330] See the excellent catalogue of sixteenth-century cabinets on the Curiositas website <https://curiositas.org/chronologie/16e> [accessed 12 Mar 2023].
[331] Egmond, p. 79.
[332] Belon, *Histoire de la nature des oyseaux*, p. 184.

both looked at and touched the sample. The engraving is full of meticulous detail -- a subtle interplay of thick and fine lines giving the impression of hollowness, carefully traced edges showing the notched sides of the mandibles and white spaces left where light passed through. The text shows a similar attention to dimensions, textures and proportions:

> [...] ayant le bec long de demy pied, gros comme le bras d'un enfant, poinctu et noir par le bout, mais blanc en toutes autres endroits, et quelque peu coché par les bords. Il est creux par dedans: estant si finement delié, qu'il en est transparent et tenue comme parchemin, et par ce est moult legier.[333]

Describing the beak as half a foot long and as large as a child's arm, Belon provides a specific sense of scale. Hyperbolic language emphasises the fine quality of the material. Belon insists on the beak's thinness: its matter is at once 'tenue' ('slender') and 'si finement delié' ('so finely thinned') that light can pass through it. He likens the material to 'parchemin' ('parchment'), which proves again the use of haptic referents (the sensation of physical touch produced by familiar objects) to make sense of 'new' material. But the comparison also raises a natural-historical question about anatomy. *Parchemin*, unlike *papier*, is make of animal skin (vellum). Invoking this particular material, Belon implicitly asks if this beak is really made of skin -- a hardened pelt of sorts.

Furthermore, the term *delié* indicates a specific form of threadlike materiality. The beak appears to confound the natural historian's tactile analysis in a number of ways: it is very light despite its great size and it has no airways for smelling ('conduicts pour odorer').[334] As someone who is interested in avian forms, Belon teases out a series of anatomical questions: what kind of material are beaks made of? Does the form of a beak determine its function? As he turns the object in his hands, the natural historian is forced to re-imagine altogether what a bird might look like, and to reconsider his approach to anatomical analysis in the broader sense.

The hyperbolic language Belon uses marks the shift from aesthetic to epistemic wonder. The beauty of the beak, which has facilitated its movement into European collections, stuns the writer at the aesthetic level and leaves him wanting to know more. It is therefore beauty that excites Belon's intellectual passions and marks the starting point for his quest for knowledge. Re-reading Belon in

[333] Belon, *Histoire de la nature des oyseaux*, p. 184.
[334] Belon, *Histoire de la nature des oyseaux*, p. 184.

terms of material transfers and encounters, we can appreciate just how significant the aesthetic wonder of material samples was to their transmission into Europe. Moreover, through his semiosis of the beak, we realise how transformative the ability to hold, probe and feel Toucan objects in the hand was to the development of natural-historical knowledge and analysis.

iii. 'Un chapeau fort beau et riche': Thevet's Featherworks and the Logic of Fashion

Belon finds only the beak. Yet many other forms of Toucan objects circulated in sixteenth-century Europe, the most prominent example being feathers and indigenous objects fashioned from them (featherworks). The cosmographer André Thevet was startled by the vibrant colours and plush touch of Toucan feathers. In both his *Singularitez* and *Cosmographie*, Thevet conveys a sense of wonder at their aesthetic quality. As Belon does, the cosmographer both looks at and feels the bird's samples closely.[335] Instead of examining the feathers in a study in Europe, however, Thevet's initial interaction most likely occurs in the New World.

The cosmographer identifies the proportions and dimensions of Toucan feathers with precision and pays close attention to the indigenous uses in the *Singularitez*: 'Les Sauvages en prennent la peau, à l'endroit qui est jaune,' he notes, 'et l'accommodent à faire garnitures d'espées à leur mode, et quelques robes, chapeaux, et autres choses.'[336] Through his account, as in Léry's *Histoire*, we glimpse the indigenous technique for removing Toucan feathers. Instead of plucking them out, the Tupinamba remove the entire skin around the breast to leave a pelt with small soft feathers still attached. According to Thevet, indigenous craftspeople make a great variety of objects with the pelt, from tools and weapons to headdresses and ritual attire. Indeed, as he rounds off the line with the open-ended 'et autres choses', the cosmographer intimates that an even greater selection of Toucan objects existed in Tupinamba material culture, which simply could not be described in text.

[335] 'Il y a quelques plume rouges, entrelacées parmy les noires, soubs la poitrine plume jaune, environ quatre doigts, tant en longueur que largeur.' Thevet, *Singularitez*, fol. 91^{r}.
[336] Thevet, *Singularitez*, fol. 91^{r}. For further information on the Tupinamba feather mantles, see Buono, 'Feathered Identities and Plumed Performances'.

In his *Cosmographie*, Thevet accentuates his admiration for the indigenous crafting of Toucan feathers further. 'Les Sauvages ont bien *l'industrie* d'escorcher ces oyseaux', he claims, and the 'autres choses' of the *Singularitez* is rephrased as 'plusieurs autres choses de *plaisir*.'[337] Focussing on the 'industrie' of the Tupinamba, Thevet gives the impression that fashioning Toucan feathers is a tricky material task, requiring manual dexterity, diligence and skill. Interpreting the Tupinamba technique as *industrie*, Thevet both promotes the creative agency of the indigenous makers and transforms the description into a discourse of craft and ingenuity. Yet more is at stake than material making and indigenous ingenuity in Thevet. Referring to the featherworks themselves as 'choses de plaisir', he indicates the broader framing discourse of luxury commodities and, crucially, fashion.

If we return to our initial quote from the *Singularitez*, we notice how the cosmographer constructs each of the indigenous objects (*garnitures*, *robes* and *chapeaux*) as items of European attire. The terms he deploys are vague. *Garnitures* suggests an ornament added to the edges of a piece of clothing (at the collar or sleeves) and *robes* might refer to a number of different garments. The word *chapeau* could denote many kinds of hat, from caps and berets to bonnets and even hoods (Cotgrave).[338] The lack of specificity proves how indigenous featherworks resisted and subsequently pushed the boundaries of dress categories in Europe at the time. Yet it also proves how indigenous attire very quickly became part of and, ultimately, transformed European discourses of fashion.

Feathers were already part of European fashion. They featured prominently, for example, in the headgear of male chivalric and aristocratic garb which had its origins in the Middle Ages. Ostrich feathers, in particular, played a vital role in the ceremonial displays of authority, power and prestige at European courts.[339] The tradition continued well into the Renaissance. If we take François Desprez's book on dress and fashion, *Recueil de la diversité des habits* (printed in Paris in 1567 by Richard Breton), we notice how feathers appear on a number of items of clothing, particularly hats.[340] Yet

[337] Thevet, *Cosmographie*, fol. 938[r].
[338] Cotgrave, s.v. garnitures, robes.
[339] Aomar Boum and Michael Bonine, 'The Elegant Plume: Ostrich Feathers, African Commercial Networks, and European Capitalism', *The Journal of North African Studies*, 20 (2015), 5-26 <https://doi.org/10.1080/13629387.2014.983733> [accessed 12 Mar 2023] (pp. 5-6).
[340] François Desprez, *Recueil de la diversité des habits, qui sont de présent en usage, tant es pays d'Europe, Asie, Affrique et isles sauvages* (Paris: Richard Breton, 1567) <https://gallica.bnf.fr/ark:/12148/bpt6k102756w> [accessed 13 Mar 2023].

feather fashion exploded in Europe with the increased commercial activity in the New World. Feathers and featherworks from the Americas far exceeded those in the Old World in terms of their colour, iridescence and motility.[341] As Stefan Hanß has shown, their material properties stimulated the affective responses of Europeans in an unprecedented way, causing 'pure excitement across the continent.'[342] In response to this excitement, featherworking took off in Renaissance fashion; it became an established artisanal craft in Europe, leading to the creation of workshops and even featherworking guilds.[343]

As Thevet notes in the *Cosmographie*, such was the crafting ability and ingenuity of Tupinamba artisans that the Toucan featherworks they made were comparable in quality to French silk.[344] The analogy stems from Thevet's careful tactile appreciation for the featherwork. For Thevet, the sheen, softness and reflective quality of silk (features which evoke aesthetic pleasure -- whether visual or tactile) is matched, even superseded, by Toucan featherwork. It is on account of such material qualities that Thevet decides to gift a featherwork to the king, Henri II: 'un chapeau riche et fort beau.'[345] The Toucan object he describes is therefore far more than an ethnographic curiosity -- it is an aesthetic luxury and an item of fashion.

Thevet's *chapeau* is an astute gift. By gifting a featherwork to the king, the cosmographer tapped into the sharply increasing enthusiasm for feathers and feather fashion at the French court at the time.[346] His Toucan feather hat expands the limits and forms featherworks might take in the European frame of reference. In Thevet's texts, then, we witness the logic of fashion through a process of semiotic ascription. The cosmographer identifies a unique aesthetic quality through the craft, fineness, colours and textures of the Toucan featherwork. This aesthetic quality means the object will have a high value in social performance and display. He therefore gifts the object to the king.

---

[341] Rublack, p. 37.
[342] Stefan Hanß, 'Making Featherwork in Early Modern Europe', in *Materialized Identities in Early Modern Culture, 1450-1750*, ed. by Susanna Burghartz, Lucas Burkart, Christine Göttler and Ulinka Rublack (Amsterdam: University of Amsterdam Press, 2021) <https://doi.org/10.1515/9789048554058> [accessed 13 Mar 2023], pp. 137-186 (pp. 137-138).
[343] Hanß, 'Making Featherwork', p. 147.
[344] 'ces Sauvages font le tissu du plumage si mignonnement avec leur filet d'escorce d'arbre, que à grand peine le scauroit on faire plus proprement par deça à tout le fil de soye.' Thevet, *Cosmographie*, fol. 938^{v}.
[345] Thevet, *Cosmographie*, fol. 938^{v}.
[346] Hanß, 'Making Featherwork', pp. 148-149.

Furthermore, the social standing of the gift-receiver makes the comparison with silk even more relevant. Over a hundred sumptuary laws were written in early modern France; laws which dictated who exactly was permitted to wear silk.[347] By comparing Toucan featherwork to silk (and gifting his *chapeau* to the king) Thevet suggests that feathers belong in the same category of luxury commodity and that, therefore, only a select few should be allowed to wear them.

Together, both the *Singularitez* and the *Cosmographie* inscribe Toucan feathers in the social logic of luxurious fashion and its related craftsmanship. Thevet shows how indigenous-made Toucan featherworks shift and change in terms of social value as they traverse social contexts: but he also proves how these contexts are themselves transformed by the circulation of such objects. Thevet's accounts are a prime example of the book acting as a form of figurative *cabinet*, enacting a discourse of curiosity and collecting through the presentation of material objects.[348] But, much more than that, written accounts give the reader an opportunity to appreciate the networks of meaning that are made around Toucan objects. Tracing their movements by way of the cosmographer's account of his travels into the New World interior, we get an insight into the objects' precise geographic provenance, the materials from which they are made, the individuals who carry them and the motivations behind their being moved. Thevet's two books therefore configure Toucan objects in quite a different manner to a *cabinet* inventory.

Overall, Thevet was crucial to the transmission of the Toucan across early modern Europe. He played a vital role in establishing the bird in both natural-historical and social contexts. His books prove just how transformative Toucan feathers were to the discourses of craft, colour, ingenuity and fashion: his influence can be read across successive natural-historical volumes and, as we are about to see, beyond print altogether.

[347] Ulinka Rublack and Giorgo Riello, 'Introduction', in *The Right to Dress: Sumptuary Laws in a Global Perspective, c. 1200-1800*, ed. by Ulinka Rublack and Giorgio Riello (Cambridge: Cambridge University Press, 2019) <https://doi.org/10.1017/9781108567541> [accessed 13 Mar 2023], pp. 1-34 (p. 8).
[348] Kenny, p. 19.

iv. From Featherwork to Needlework: Mary Stuart's 'Byrd of America'

The French court acted as one of the centres for the dissemination of Toucan objects in the sixteenth century. Beaks, bones, pelts and feathers were passed between courtiers and through networks of natural historians, collectors, anatomists and other mutual acquaintances. Texts detailed the trajectories of such objects. But we should also be encouraged to look beyond the printed medium, as other forms of cultural production trace the movement of Toucan objects in space.

One of the most visually striking depictions may be found in the needlework of the Scottish monarch, Mary Stuart.[349] Set within a tapestry containing a series of embroidered icons from the canon of sixteenth-century natural-historical knowledge is a Toucan. The tapestry, known today as the Marian Hanging, is one of several stitched by Mary during her period of exile at the hands of her royal cousin, Elizabeth I of England.[350] The image is carefully crafted, colourful and replete with detail. Rather than refer to the name popular in France, she names it 'A Byrd of America' (Fig. 18).

[349] Also known as Mary, Queen of Scots, or Mary I of Scotland.

[350] Mary was in exile in England between 1569 and 1585. Placed under house arrest, she spent the majority of these years at the residence of George Talbot, Sixth Earl of Shrewsbury. Mary stitched her tapestries with the help of Talbot's second wife, Elizabeth 'Bess' of Hardwick and another female companion from France, Marie de Seton. See Peter Mason, 'André Thevet, Pierre Belon and Americana in the Embroideries of Mary Queen of Scots', *Journal of the Warburg and Courtauld Institutes*, 78 (2015), 207-221 <https://www.jstor.org/stable/26321954> [accessed 13 Mar 2023] (p. 208). The Marian Hanging is currently housed at Oxburgh Hall in Norfolk. A full image gallery of the tapestry may be found in the Victoria and Albert Museum online catalogue: <https://collections.vam.ac.uk/item/O137608/the-marian-hanging-hanging-mary-queen-of/> [accessed 13 Mar 2023].



Figure 18. Mary Stuart, 'A Byrd of America', *The Marian Hanging*, c. 1570-1580, embroidery, Victoria and Albert Museum, London.

Mary Stuart had her own set of Toucan objects. As Margaret Swain's early work outlined, she housed a feather sample and 'The Beik of a fowle of India or Brazile' in a collection of curiosities in Edinburgh.[351] The source of Mary's specimens has been the subject of much debate. Despite being held captive in a foreign land, the monarch had access to multiple networks across Scotland, France and England. Her connection to France was particularly strong. Her mother, Marie de Guise, was from of one of France's most powerful noble families and Mary herself had been betrothed to the dauphin François II from a young age. Mary spent her formative years at the French court: collected

[351] Margaret H. Swain, *The Needlework of Mary, Queen of Scots* (New York: Van Nostrand Reinhold, 1973), p. 107.

from Dumbarton at the age of five (in 1549), she only returned to Scotland following the death of her husband in 1561.

Michael Bath has suggested that Mary's Toucan specimens came from this courtly milieu -- quite possibly as a gift from the French monarch, Henri II.[352] But this is only one possibility. As we know, many Toucan objects circulated at the time. And we should not forget the roles played by Thevet, Gessner and their famous intermediary Giovanni Ferrerio in the transfer of samples. Ferrerio had his own connection to Scotland: he spent around thirteen broken years there, either attending the court of James V, or instructing the Cistercian monks of Kinloss Abbey.[353] He also acted as an agent for Gessner, collecting material from Scotland and sending it to the natural historian in Zurich. Peter Mason argues that Ferrerio sent Gessner his beak from Scotland.[354] However, as we know that Ferrerio acted as the middleman between Thevet and Gessner, it seems more likely that he sent the beak to Gessner from France (where he obtained it from Thevet). Yet Mason's suggestion is not beyond the realm of possibility. If correct, Ferrerio would have taken Thevet's beak with him to Scotland before sending it on to the natural historian from there.

It is conceivable that, once he had finished writing his *Icones avium*, Gessner handed the beak back to Ferrerio in Scotland. The latter could then have left the beak in Mary's possession, or at least in a courtly collection based in the capital. Whatever did happen, the scope of possible transactions offers a series of points. First, it proves that natural-historical networks cannot be separated from courtly ones because they both relied on the same agents (travellers and traders acting as intermediaries in the European cultures of wonder). Secondly, it demonstrates the pivotal role of the French court in bringing social actors and objects from the New World together. Finally, it suggests that the exchange of natural-historical objects occurred in two directions. Instead of being simply given, Toucan objects could be lent, borrowed for a time and then handed back. Indeed, this could have been the case for Belon, who mentions visiting several collections and having his own beak specimen.

---

[352] Michael Bath, *Emblems for a Queen: The Needlework of Mary Queen of Scots* (London: Archetype, 2008), p. 85.
[353] Durkan, p. 349.
[354] Mason, 'André Thevet', p. 209.

Returning to the *Byrd*, the question arises as to how Mary used her Toucan objects in creating her embroidered representation. As she had only a set of disjointed fragments (the beak and some feathers), it is difficult to imagine how Mary could have come to a firm conception of the whole bird without referring to another source. We know that Mary relied heavily on printed sources, using natural-historical volumes such as Gessner's *Historia animalium* as a reference point.[355] With this knowledge in mind and looking again at the embroidery in question, it becomes clear that Mary has produced a near-perfect copy of the *Toucan* in André Thevet's *Singularitez* (Fig. 19). The bird perches in the iconic triangular pose with three toes pointed forward; the beak exhibits the phantom nostril halfway along the upper mandible and even Thevet's twig is reproduced with surprising accuracy.



Figure 19. *D'un oyseau nommé Toucan*.[356]

Although Mary had a part to play in the transfer of Toucan objects, the creation of her embroidered *Byrd* is more a story of printed book to needlework than it is of featherwork to needlework. We might read the editorial preference for Thevet's Toucan as an aesthetic one: by including the twig and plant matter, Thevet gives at least some context for how the bird looked in the flesh. Gessner's image, on the other hand, has no context or background. The bird exists in isolation, lying motionless as if the

[355] Bath, p. 70.
[356] Thevet, *Singularitez*, fol. 91[r].

engraving had been made by looking at the anatomical sample alone. However, the more convincing reading is that Mary's preference for Thevet's bird is based on a personal connection to the cosmographer.

The young monarch was present at court upon the return of Thevet from the New World in 1556. Bringing back multiple Toucan objects -- the most famous of which being the feather hat that was gifted to Henri II -- and publishing a book on the expedition only shortly after, Thevet established himself as one of the principal authorities on Brazil. Indeed, Mary could well have caught a glimpse of his Toucan samples as they moved through court. Thevet was also closely connected to the Guise family. He had met Jean de Guise, Cardinal of Lorraine (Mary's great uncle) in 1549 and had secured his patronage for the expedition to the Levant.[357] Even though there is no recorded meeting between the two individuals, based on the courtly, familial and confessional circles through which Thevet and Mary Stuart moved, it seems unlikely (as Mason suggests) that they did not meet.[358]

In reproducing Thevet's Toucan, Mary makes an editorial choice based on a personal connection; the lives of objects and those who make sense of them are entwined. The tapestry proves how images, books and ideas (in addition to material objects) could move rapidly through networks and how they were reproduced in different contexts and cultural media. Furthermore, the *Byrd* affords Mary a mobility of her own. Imprisoned in England, distanced from friends and relatives, the practice of embroidery offered her some form of escape. In a similar fashion to the *cabinet*, the tapestry functioned as a constructed microcosm, allowing the exiled monarch to transcend the confines of her house arrest in a flight of the imagination. But it also acts as a memory device for Mary on a personal level, taking her back to France and her formative years at court.

[357] Mason, 'André Thevet', p. 219.
[358] Mason, 'André Thevet', p. 221.

II. Objects in Collections

Over the course of the previous section, each account signals that many hundreds of Toucan objects could have circulated in the sixteenth century. Yet such objects remain elusive. Only a few examples are recorded in text, image and embroidery. We can only imagine the true extent of Toucan object dissemination in Europe at the time. But what of the samples that are recorded in text, specifically in the catalogues and inventories of collections? What kind of a life do they have?

As we have shown, certain material historians have argued that cabinets construct a form of microcosm. Others like Daniela Bleichmar claim that the cabinet produces a form of story: as the viewer moves from object to object, a narrative interplay takes place.[359] Moreover, being physically present was not the only way to experience a cabinet. Many collectors published catalogues listing the cabinet's contents. As Russo shows, these inventories had the potential to create a narrative of their own by organising the cabinet's contents differently.[360] In the same way that a cabinet constructed a 'spatial narrative', so too did the catalogue: one which had the potential to create either synergies or tensions with the physical collection.

Catalogues therefore generated yet another form of life for the objects housed within physical collections. Just as the viewer encountered the object in space, the reader of the inventory had what Surekha Davies refers to as a 'catalogical encounter', which frames the object in a different light.[361] Inventories were much more than a simple record or 'paper history' (Findlen) which may only 'obscure' the physical reality (Auslander).[362] As a text, the catalogue had the potential to shape the experience of an object and to inscribe it with new meanings. The following section demonstrates how, through text, Toucan objects became embedded in early modern cultures in a different sense

[359] Bleichmar, 'Seeing the World in a Room', p. 30.
[360] Alessandra Russo, 'Cortés's Objects and the Idea of New Spain: Inventories as Spatial Narratives', *Journal of the History of Collections*, 23 (2011), 229-252 <https://doi.org/10.1093/jhc/fhq041> [accessed 13 Mar 2023] (p. 229).
[361] Surekha Davies, 'Catalogical Encounters: Worldmaking in Early Modern Cabinets of Curiosities', in *Early Modern Things: Objects and their Histories, 1500-1800*, ed. by Paula Findlen (London: Routledge, 2021) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.4324/9781351055741> [accessed 13 Mar 2023], pp. 227-254 (p. 237).
[362] Paula Findlen, 'Afterword', p. 245. Leora Auslander, 'Beyond Words', *American Historical Review*, 110 (2005), 1015-1045 <https://doi.org/10.1086/ahr.110.4.1015> [accessed 13 Mar 2023] (p. 1017).

and, crucially, how they continued to have a significant impact on European discourses long after their initial arrival on the continent.

i. Paul Contant: *Jardin et Cabinet Poétique* (1609)

The most significant catalogue to evidence the transfer of Toucan objects between collectors in France is Paul Contant's *Jardin et Cabinet Poétique*.[363] Printed in Poitiers by Anthoine Mesnier in 1609, the text records the great variety of botanical, natural-historical and ethnographic objects housed in the collection (and garden) of the apothecary and collector Contant.[364] Although it is little known today, Contant -- alongside his father -- curated one of the most extensive (and best recorded) collections in early seventeenth-century France.[365] Located in the centre of Poitiers, it aroused considerable interest from travellers and scholars, the most prominent of whom being Henri de Condé, once heir presumptive to the throne, who visited in 1628.[366]

Yet it was not just the physical extent of the collection that made the *Jardin et Cabinet Poétique* so rich. Contant presents each of the plants and objects in one continuous poem spanning practically the entire account. A selection of objects then appears visually in a series of plates at the end. The poem itself follows the physical trajectory of the narrator (Contant) as he walks from his garden to the cabinet inside and then back again. As he moves, the narrator describes in detail his

---

[363] Other less significant examples include a 'Tocani avis rostrum' noted in the cabinet of the Saintes apothecary and collector Samuel Veyrel. Samuel Veyrel, *Indice du cabinet de Samuel Veyrel* (Bordeaux: Pierre de la Court, 1635) <http://access.bl.uk/item/viewer/ark:/81055/vdc_100028157625.0x000001#?c=0&m=0&s=0&cv=0&xywh=-1151%2C-156%2C4391%2C3117> [accessed 13 Mar 2023], p. 3, and 'Le Bec d'un oizeau nommé Toucan' mentioned by the La Rochelle collector and minor noble Léonard Bernon. Léonard Bernon, *Recueil des pieces curieuses apportées des Indes* (Paris: Jacques le Gentil, 1670) <https://www.google.co.uk/books/edition/Recueil_des_pi%C3%A8ces_curieuses_apport%C3%A9es/8J85AAAAcAAJ?hl=en&gbpv=1> [accessed 13 Mar 2023], p. 5.

[364] Paul Contant, *Le Jardin, et cabinet poétique de Paul Contant apoticaire de Poictiers* (Poitiers: Antoine Mesnier, 1609) <https://archive.org/details/leiardinetcabine00cont/mode/2up> [accessed 13 Mar 2023]. See also: Paul Contant, *Le Jardin, et cabinet poétique (1609)*, ed. by Myriam Marrache-Gouraud, Pierre Martin and Jean Céard (Rennes: Presses Universitaires de Rennes, 2004).

[365] Antoine Schnapper, *Le Géant, la licorne, la tulipe: Collections françaises au XVIIe siècle* (Paris: Flammarion, 1988), p. 220.

[366] Russell Ganim, 'The Great Chain of Being: Life and Literature in Paul Contant's *Le Jardin, et Cabinet Poétique*', *Cahiers du Dix-Septième*, 15 (2014), 63-81 <https://earlymodernfrance.org/journal/2014-volume-xv-2/great-chain-being-life-and-literature-paul-contant%E2%80%99s-jardin-et-cabinet-poet> [accessed 13 Mar 2023] (p. 71).

encounter with each object in turn. Thus, though the terms *Jardin* and *Cabinet* hold generic implications (*Jardin* referring to a collection of poems; *Cabinet* not only referring to a particular kind of space, but also suggesting the possibility of intimate, even erotic encounters), we may take the title literally: it is the poeticised rendition of a real garden and cabinet. But the text is also fluid. It evades generic classification and imagines multiple audiences: it acts as a guide, a memorandum and, potentially, an advertisement for prospective visitors.

Contant's book has a clear natural-theological structure, and it bears stylistic similarities to the *Sepmaine* of Guillaume de Salluste Du Bartas.[367] We learn that Contant models his text on a little-known poem named *Bouquet printanier*, a manuscript dedicated to a local nobleman (le Sieur de Ligneron) yet whose author and date is unknown.[368] The poem traces the movement (or, rather, location) of material samples, inscribes the catalogue in a literary tradition and, moreover, draws on natural-historical knowledge throughout the description. Indeed, as we will see, Contant's text also outlines a distinct Reformed confessional stance, and indicates a local community of scholars, collectors and fellow Reformers in the west of France. The book therefore sits at the intersection of multiple threads in our discussion, highlighting the many genres and critical territories through and across which the Toucan lived and moved.

Contant owned two kinds of Toucan object. The first is a natural-historical specimen (although the precise dimensions of the object are not clear); the second is a Tupinamba *Maracas* adorned with Toucan feathers. He describes both in text and image.

> 10. Et cest oyseau qui a un gros bec si difforme,
> A la comparaison de la petite forme
> De son corps enrichy de si belles couleurs,
> Que le printemps ne peut de ses bizarres fleurs
> A nostre œil curieux estalant les merveilles,
> Nous en faire admirer de plus riches et belles.
> Bref ce petit oyseau est sur tous estimé
> Pour son bec, pour son corps richement emplumé.[369]

[367] Myriam Marrache-Gouraud, *Le Jardin, et cabinet poétique (1609)*, p. 33.
[368] Myriam Marrache-Gouraud, p. 27.
[369] Contant, *Le Jardin, et cabinet* (2004), p. 185.

The natural-historical specimen comes early in the account: it is only the tenth object to appear in the cabinet. Although the text is one continuous poem, the author places the objects in a numerical sequence. These numbers are designed to help the reader find their way in the image plates at the end of the book. The Toucan sits between two kinds of spiny fish ('8. Orbis', a pufferfish, '9. Uranoscope', a stargazer) and an ethnographic object from the New World ('11. Canoë') (see Fig. 20). The visual configuration of objects around the Toucan immediately constructs a spatial narrative with an ontological implication for the bird. Firstly, it suggests that it has some association with water, which momentarily revives the early contention of Belon. Secondly, it shows the bird to be perching at the interface between *naturalia* and *artificalia*, thus alluding to the ethnographic association of Toucan parts and priming the reader for the description of the *Maracas* to come.

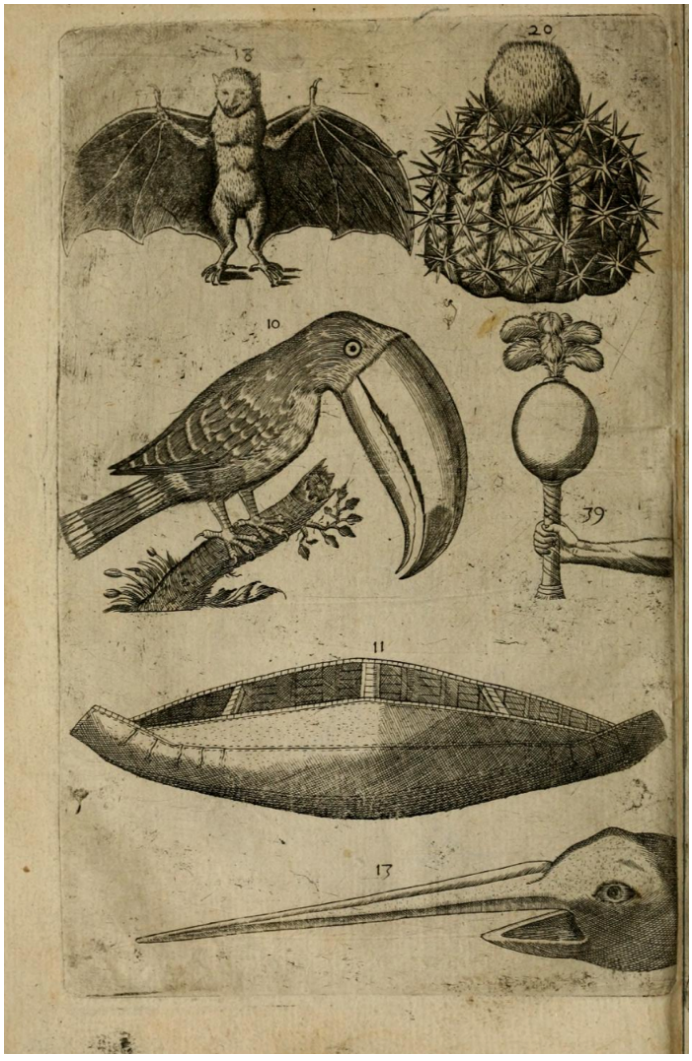


Figure 20. *Toucan* and *Maracas* in Contant's *Jardin et Cabinet Poétique*.[370]

[370] Contant, *Le Jardin, et cabinet* (1609), unpaginated.

In the description itself, Contant (like so many writers before him) highlights the Toucan's *difformité*. The opening couplet reworks a frequently repeated descriptive strategy from natural history, which starts with the deformity of the beak in relation to the relative size of the body. We therefore see how, once again, modes of interpreting the bird in natural history readily crossed over into neighbouring genres. But here in Contant's poetic cabinet, *difformité* assumes yet another guise: that of curiosity. In the context of the collection, it is the characteristic of *difformité* in the material object that defines it as curious and, therefore, worthy of being placed in the cabinet.

Furthermore, as Contant reverses the equation as it appears in natural history -- it is no longer the beak that is large in relation to the body, but rather the body that is small in relation to the beak -- we may read the collector as attempting to increase the sense of epistemic shock carried by *difformité* even further. In any case, the decision to highlight *difformité* proves not only the discursive reach of natural history, but also how ideas incipient in natural-historical discourse ultimately shaped approaches to material objects.

The next four lines are semantically rich and syntactically challenging. Spring has nothing more beautiful or rich to show us with its diverse and strange flowers, the narrator contends, than the feathers of the Toucan. Or, to rephrase, the most beautiful and rich things we may find in nature are not Spring flowers but, actually, Toucan feathers. By framing the discussion in such hyperbolic terms and pointing to the viewer's wonder before the object, Contant accentuates the aesthetic dimension of the bird. Indeed, he seems to suggest that natural forms in the New World are capable of even exceeding those in Europe in terms of their vibrant colour and beauty.

This is the first example of a plant analogy being used to describe the Toucan. Of course, one might read the comparison as stemming from stylistic constraints (Spring flowers being common poetic currency and *fleur* being a neat rhyme for *couleur*) or, indeed, from the fact that Contant was himself a gardener who frequently used plant life as a frame of reference. Yet we might also read the analogy as intentionally effecting a descriptive procedure that is not possible in other genres of writing. The space of the cabinet, which assembles disparate objects, allows the narrator to draw comparisons (and conclusions) between natural kinds across the spectrum of animals and plants. The

text itself allows Contant to bring petals and feathers together and, therefore, to invite broader speculation about aesthetic forms in nature and how they are related. Contant's analogy thus proves the fluidity of the catalogue as a genre and highlights its ability to facilitate new ways of looking at the natural world.

Contant was an avid reader of the Reformed pastor Jean de Léry. Although he does not mention him by name, Contant describes taking information from 'un fidelle Escrivain dont la plume autantique, A fait voir aux François l'autre France Antarctique.'[371] Despite appearing to echo the title of Thevet's *Singularitez de la France Antarctique*, the line is a clear reference to Léry.[372] Indeed, Contant's discussion of the Tupinamba *Maracas* replays Léry's chapter on indigenous shamanism in the *Histoire d'un voyage*.[373] Over the course of the poem, a clear confessional affiliation materialises between the two writers.

> 39. Ce fruict Americain que la gent Idolatre
> Adore comme un Dieu d'or d'argent ou de plastre
> Par superstition! que la brutale main
> Du Caribe cruel faict d'un bruict si hautin
> Resonner lors qu'il met dans ces fruicts de merites
> Du Mil de son pays, ou des pierres petites;
> Atourez tout autour des plumages plus beaux
> Du Toucan, de l'Arat, et des autres oyseaux
> Les plus rares qui soient; et parez de la sorte,
> Ministres de Sathan s'en vont de porte, en porte,
> De village en village, et autour des maisons
> Ce fruict ainsi paré ils plantent à foisons,
> Avec commandement aux peres de familles
> De donner sans delay toutes choses utiles
> Pour les alimenter: Car Maracas ce fruict,
> Est un Dieu qui repaist tant seulement de nuict.[374]

Decorated with Toucan feathers, the Tupinamba *Maracas* is the second, ethnographic object which enables the Toucan to reach Europe. The meanings and associations of this type of object contrast drastically with those of the natural-historical specimen. Contant places the *Maracas* in the context of

[371] Contant, *Le Jardin, et cabinet* (2004), p. 191.
[372] Myriam Marrache-Gouraud, p. 190.
[373] Chapitre XVII. *Ce qu'on peut appeler Religion entre les Sauvages Bresiliens; des erreurs, ou certains abuseurs qu'ils ont entr'eux, nommez* Caraïbes *les detienent: et de la grande ignorance de Dieu où ils sont plongez*.
[374] Contant, *Le Jardin, et cabinet* (2004), pp. 211-213.

the ritual performance of the Tupinamba *Pajé*. The object is an 'American fruit', which 'idolatrous' (indigenous) people 'love like a God made of gold, silver, or plaster'. It contains dried grains and little stones, so that it makes a very loud noise when the *Pajé* shakes it with his 'brutale main'. Covered in the rarest and most beautiful of bird feathers (as the *Pajé* themselves are) they are carried from village to village and planted in the ground. The *Pajé* then commands the 'peres de famille' to pay tribute in food to the object. It is then believed, Contant concludes, that the *Maracas* consumes the tribute at night.

A large part of the ritual Contant evokes is described at length in Léry's *Histoire*.[375] Indeed, the repetition of multiple phrases from Léry's book leads us to believe, at first glance, that the collector is simply paraphrasing the episode. But Contant is doing more than repeating in verse. He takes the description of the *Maracas* much further: by calling it a form of 'fruit god', he satirically animates the *Maracas*. The metaphor deliberately conflates creature with Creator and turns the symbol of fruit as divine gift on its head. Now, it represents the festering growth of idolatry in the New World. The 'fruit-god' has none of the richness or *copia* of real fruit; rather, it is an empty gourd with seeds rattling inside -- a mere shell containing evil.

In a significant development from Léry, Contant points directly to Toucan (and macaw) feathers as the object's principal decoration. He therefore folds the bird explicitly into the framing discourse of idolatry around the *Maracas*. The feather goes beyond aesthetic beauty in this context, then, and acquires a second characteristic -- it becomes a marker of deception. Although Toucan feathers display the quality of rarity and wonder, they are used in the service of a ritual which the writer condemns.

The language Contant uses ('par superstition', 'la brutale main', 'Ministres de Sathan') indicates we are well in the realm of confessional polemic. Indeed, in his discussion of 'plastre' (as

[375] '[...] les *Caraibes* allans particulierement de village en village, font accoustrer des plus belles plumasseries qui se puissent trouver, en chacune famille trois ou quatre, ou selon qu'ils s'avisent plus ou moins, de ces hochets ou gros sonnettes qu'ils nomment *Maracas*: lesquelles ainsi parees, fichans le plus grand bout du baston, qui est à travers dans terre, et les arrengeans tout le long et au milieu des maisons, ils commandent puis apres qu'on leur baille à boire et à manger.' Jean de Léry, *Histoire d'un voyage fait en la terre du Bresil, autrement dite Amerique* (Geneva: Eustache Vignon, 1594) <https://gallica.bnf.fr/ark:/12148/bpt6k546416> [accessed 13 Mar 2023], p. 249.

Marrache-Gouraud points out) 'on ne peut pas s'empêcher de voir dans ce plâtre une attaque calviniste contre les représentations imagées de Dieu.'[376] Where, for Léry, the *Maracas* sparks a discussion about the idolatry of errant preachers in Europe (claiming to carry the bones of saints with them), Contant's *Caribe*, who walks from village to village asking payment in goods and chattels, also becomes a metaphor for the mendicant (Catholic) friar.[377] Contant is clearly echoing Léry in this sense. But it is important to note that while Léry focuses on the childishness of indigenous ritual in his episode -- and, therefore, allows himself at times to suggest a form of innocence which renders the Tupinamba ripe for conversion -- Contant gives free reign to the confessional imaginary, and his depiction is much darker and more aggressive. Published at a moment in which confessional hostilities had been momentarily paused in France, the *Jardin et Cabinet* nonetheless imagines for itself a Reformed reader, perpetuating the lives of Reformed confessional discourses in printed works.

The numbers in the text point to the images at the end of the book. In this sense, the text acts as a *légende* which informs us how to read the images. We are not meant to read the book in a linear fashion: rather, the configuration of images structures the account. Regarding his Toucan, Contant reworks the engravings of Gessner and Aldrovandi: the beak and body closely resemble the bird in *Icones avium* and the branch resembles that in *Ornithologiae*. Yet, as in many contemporary texts, Contant makes his own amendments. The body exhibits a finer degree of shading on the wing, crop and head.

At first, the assemblage of objects in the engraving appears to follow the principle of diversity and abundance and, therefore, to largely reflect what might appear in the physical cabinet. However, the objects also relate to one another in distinct ways. The collocation of Toucan and Toucan-feather-object reinforces the association between the bird and forms of indigenous craft. The presence of the canoe in the middle of the plate alongside the bony skull of a swordfish reminds the reader of the Toucan's connection to water, which is hinted at in the text. But what is most striking is the aesthetic effect of the engraving as a whole. The prickly cactus, the bizarre humanoid bat and the pointed features of beak and bone work together to create an impression of monstrous natural forms.

[376] Myriam Marrache-Gouraud, p. 210.
[377] Léry, *Histoire* (1594), p. 245.

Furthermore, the presence of the *Maracas* (with a disjointed human arm to bear it) reminds the viewer of the discourse of idolatry in the text. Taken together, these objects produce an unsettling visual construction of the monstrous which verges on the demonic. The image recalls one of the major points from the text. The Toucan produces a form of aesthetic wonder, but this beauty is deceptive: it hides a spectacle that is condemned on theological grounds. The spatial arrangement of the image thus reconfigures the bird within the realm of the uncanny, the bizarre and the idolatrous.

Contant was part of a network of collectors in the west of France, which included Laurent Bernon in La Rochelle and Samuel Veyrel in Saintes. Each of them was a Reformer. Together they give the impression of a provincial academy of (principally Reformed) scholars sharing ideas, objects and information in and around Poitiers. The confessional affiliation was an important factor: as we have seen in the *Jardin et Cabinet*, writers like Contant both replayed and revived Reformed confessional discourses. Indeed, the apothecary's experiment with confessional critique through Toucan objects reminds us of the miracle beak story we encounter in Léry's reworking of Marnix. Protestant communities formed provincial sites of knowledge making that would continue to function well into the seventeenth century. In Contant's account, the material-historical, the natural-historical and the confessional all come into contact with one another. Contant therefore offers us a unique example of how the Toucan (and Toucan objects) brought together multiple disciplines, genres and media, and critically informed early modern cultures in a number of ways. As we look towards the future, we may find several other instances of the bird's transformative impact on early modern thought -- notably in seventeenth-century pictorial representation.

Conclusion

Over the course of our discussion, we have witnessed the many different lives that were breathed into the Toucan through semiotic ascriptions in natural-historical writing, confessional polemic and discourses of collecting. These symbolic lives ultimately begin with an absence, a *point aveugle*; the lost (or, rather, uncaptured) indigenous cosmological thinking about the Toucan means that the bird very quickly becomes a symbolic, European creature in the early modern period. Each of these symbolic lives had a uniquely significant impact on early modern culture, crossing languages, genres and borders, and transforming ideas across a whole range of critical discourses. In this sense, the bird encourages us to look anew at the intersections and modes of symbolic accretion taking place between natural history and several other textual genres and cultural practices in the period.

By way of conclusion, we offer a series of glimpses into where a study of the cultural transmission of the Toucan might lead in the future -- into the many subsequent lives of the bird in European culture. Focussing on a set of images (which include engravings, oil paintings, watercolours and ceramics) we show how the various semiotic ascriptions of natural history, confessional writing and collecting continued to play out across early modern cultures in the broader sense. Many of the stories touched on here are for another time. Yet together they prove the sustained impact of the Toucan in early modern culture and, indeed, well beyond.

We begin with an engraving produced near the end of the sixteenth century, which indicates how the epistemic debates of natural-historical writing (particularly the polemic between Belon and Thevet) brushed against the increasingly widespread knowledge about material specimens in the context of devotional printmaking.

i. Jan Sadeler and Maarten de Vos, 'The Fifth Day' (c. 1587)



Figure 21. Jan Sadeler after Maarten de Vos, *The Fifth Day: The Creation of the Birds and the Fishes*, c. 1587, engraving, 198 × 249 mm, Rijksmuseum, Amsterdam.

In 1587, the Flemish engraver Jan Sadeler I (1550-1600) was appointed to the court of Duke Wilhelm V in Bavaria.[378] Together with his collaborator in Antwerp, Maarten de Vos, Sadeler produced a small yet detailed graphic series for his new ducal patron. Entitled *Imago Bonitatis* ('Image of Goodness'), the series depicted the Creation across a set of seven engravings -- each one corresponding to a different day, with the final day being shown in two individual panels. As Herrin notes, the *Imago Bonitatis* 'combines Maarten de Vos's ingenuity at rendering complex and lively compositions with Sadeler's own accomplished precision with the engraver's Burin.'[379] The engraving itself exhibits a

[378] Amanda Herrin has provided an excellent biographical introduction to Sadeler and de Vos's work. See Amanda Herrin, 'Pioneers of the Printed Paradise: Maarten de Vos, Jan Sadeler I and Emblematic Natural History in the Late Sixteenth Century', in *Zoology in Early Modern Culture: Intersections of Science, Theology, Philology and Religious Education*, ed. by Karl A. E. Enenkel and Paul J. Smith (Leiden: Brill, 2014) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004279179> [accessed 12 Mar 2023], pp. 329-400 (pp. 329-330).
[379] Herrin, p. 330.

real abundance of creatures -- some accepted within the canon of sixteenth-century natural-historical knowledge, others of a mythical provenance -- from across the globe. A North American turkey stands alongside an African ostrich, a Bird of Paradise flies alongside a European owl, and the ocean teems with marine monsters. The image reflects the same natural-theological principle we witnessed most prevalently in d'Abbeville and Cardim: that is, if understanding nature entailed a better knowledge of God, then by accentuating the abundance and diversity of the Creation, one paid reverence to Him.

Nestled in the bottom left corner of the engraving is a Toucan (see Fig. 22). Skimming the surface of the water alongside different kinds of fish, configured in its iconic triangular pose, the composition appears to incorporate several of the epistemic claims from natural history. Yet, through the placement of the bird's nostrils, De Vos and Sadeler make a distinct claim of their own: the beak is not without airways, as Belon, Gessner and a host of others imagine -- rather, they appear at its base.



Figure 22. Detail from *The Fifth Day: Creation of the Birds and the Fishes*.

Herrin has suggested that De Vos and Sadeler's Toucan is a composite exhibiting aspects of both Oviedo's *Picudo* and Belon's unnamed water bird. This is certainly true in the case of Belon: the placement of the bird in water shows a clear acceptance of the French natural historian's classificatory inference. However, given the limited dissemination of Oviedo's *Picudo* -- and the lack of an image in his 1526 account -- it appears more likely that the engravers incorporated elements of Thevet's

Toucan of the *Singularitez* instead. In fact, given our analysis of the two writers, we can read the engraving as playing out visually the polemic between Belon and Thevet.

The engravers explicitly accept Belon's water claim, but the smooth edges of the mandibles and triangular pose (which accentuates the sense of *difformité*) chime more with Thevet's first bird. Moreover, the placement alongside a variety of sea creatures draws out the sense of monstrosity posited by Thevet and produces a visual configuration of *copia* in nature. As noted, however, the engraving rebukes both natural historians by placing the nostrils at the beak's base. As Herrin points out, it is likely that De Vos and Sadeler -- being so closely connected to the courtly milieux in which they were employed -- had access to a material sample.[380] In other words, the engravers witnessed a Toucan beak themselves, and the specimen had informed their visual composition.

The 'Fifth Day' therefore makes a number of points. First, that the epistemic polemic of natural-historical writing about the Toucan continued to play out graphically -- this time in the context of religious printmaking. Second, that material specimens of the bird were spreading rapidly beyond France towards the end of the sixteenth century. And third, that the courts of the Hapsburg kingdoms had a part to play in the circulation of natural-historical objects. Not only does the engraving indicate there is further work to be done in terms of the material dissemination of Toucan samples in Northern and Central Europe (and the role of France and the French court in this distribution), it also encourages us to think critically about the intersections between natural history and other forms of visual media in the period.

The inclusion of a Toucan in a visual depiction of the Creation, for example, raises an important point about the theological status of the New World in European Christian thought -- a subject we have touched on at numerous points. This question surfaces once again in the early seventeenth-century devotional painting of the Low Countries.

[380] Herrin, p. 356.



Figure 23. Jan Brueghel the Elder and Peter Paul Rubens, *The Garden of Eden with the Fall of Man*, 1615, oil on canvas, 74.3 × 114.7 cm, Mauritshuis, The Hague.

Jan Brueghel the Elder was one of the leading Flemish artists of the early seventeenth century. Like De Vos and Sadeler, he and his collaborator Peter Paul Rubens had frequent contact with the Hapsburg courts across Europe: he painted for Archduke Albert VII of Austria (1559-1621), the Infanta Isabella of Spain (1566-1633) in Brussels, and he had visited the court of Rudolph II in Prague in 1604.[381] It was for precisely these courtly patrons that Brueghel and Rubens' *Paradijslandschap* (paradise landscape) paintings were made. As we notice in the 'Garden of Eden', a core feature of the work is the depiction of a great number of animal species from across the globe. The inclusion of exotic animal species in devotional painting was a growing theme in the early seventeenth century.[382] Breughel and Rubens drew on a variety of sources, which included printed natural-historical

[381] Rikken, p. 402.
[382] Rikken, p. 402.

catalogues (as Kolb has shown), material samples and, importantly, living specimens housed in courtly menageries.[383]

In 1615, Albert VII acquired a live Toucan.[384] As the bird was housed in a courtly collection in Brussels, the two artists were able to produce their visual depictions directly from a living specimen. The *ad vivum* portrayal we witness in the 'Garden of Eden' thus marks a significant development in the representation of the Toucan in European culture. The bird appears in full colour, both lively and life-like in a three-dimensional effect created by the painting (see Fig. 24). Examining the piece, it becomes easy to understand the anxieties of seventeenth-century natural historians like Johann Faber (who, as we have said, corresponded frequently with Rubens): oil painting from a live specimen, which lifted the bird from the monochromatic printed book, afforded both greater aesthetic appeal and epistemic accuracy.



Figure 24. Detail from 'The Garden of Eden with the Fall of Man'.

The image proves the continued importance of courtly patronage and courtly collecting to the development of natural-historical knowledge. Indeed, as we have said, Faber's account relied on the

[383] Arianne Faber Kolb, *Jan Brueghel the Elder: The Entry of the Animals in Noah's Ark* (Los Angeles: The J. Paul Getty Museum, 2005) <https://www.google.co.uk/books/edition/Jan_Brueghel_the_Elder/e5gnAgAAQBAJ?q=&gbpv=0#f=false> [accessed 13 Mar 2023], pp. 22-31.
[384] Kolb, p. 15. Rikken, p. 418.

eyewitness testimony of Cassiano dal Pozzo, who saw a living Toucan at the court of Louis XIII at Fontainebleau.[385] From the uncharted forests of the New World to the courtly menageries of Europe, and now (figuratively speaking) into the Earthly Paradise, the Toucan had travelled a long way.

In the work itself, the Toucan perches alongside several other exotic species of bird -- an African grey parrot, a blue-and-yellow macaw and a ring-necked parakeet, as well as European species like the goldfinch and the barn swallow. As the birds sit alongside one another overlooking the Garden below, the image creates the impression of a prelapsarian interspecies harmony. Yet, configured in this arrangement, the painting also reveals something critical about the New World in European thought: that it was, by then, practically fully incorporated into the Christian theological conception of the world. The presence of the Toucan (and American macaws) in the Garden indicates that the New World was viewed as a fundamental component of the Creation.

Over the course of our discussion, we have witnessed the evolution of the theological perception of the New World across the period. In Léry's *Histoire*, the narrator constructs a quasi-Edenic vision of a country in which indigenous people walk around naked in a temperate environment alongside abundant plant and animal life. Despite the morally troubling activities of the Tupinamba, which ultimately condemned them on theological grounds, Léry perceived a fleeting glimpse of their relative 'humanity' and ability to attain salvation through their belief in an afterlife (which was symbolised by the affective cries of the *Engoulevent* over the forest canopy). In Claude d'Abbeville's missionary narrative, the narrator claimed to have seen a region particularly favoured by God through the great variety of natural-historical phenomena. The Toucan (and the New World in the broader sense) became an integral part of d'Abbeville's thinking about universal provision, the concept of bounty and the presence of grace throughout the world. Such ideas about grace were taken further by the Jesuit Fernão Cardim, who concluded that Catholic Christianity in the New World could actually supersede forms of Catholicism in Europe in terms of aesthetic beauty and in its potential to foster harmonious intercultural communities.

[385] The dissemination of live birds at European courts is a story of particular interest, yet one for another time.

The appearance of the Toucan in Breughel and Rubens's Earthly Paradise reminds us of the incorporation of the New World into Genesis narratives already witnessed in texts like Léry's *Histoire*. Indeed, the image of a Toucan surveying the post-Diluvian world in Jan van Balen's 'Noah and the Ark' (Fig. 25) speaks to another conundrum of the period -- the question of extent to which the New World (its animal life and, by association, people) was deemed worthy of Christian salvation. Van Balen's bird recalls Léry's transcription, for instance, of the Tupi 'great flood' myth in which the narrator considers whether indigenous people (who have forgotten their Adamic origin yet ultimately read the presence of the divine world in their oral myths and in their fear of *Toupan*) are convertible.[386] The Toucan played an important role in European thinking about the New World from a theological point of view. A future study might trace the appearance of exotic animal species across seventeenth-century devotional painting in the Low Countries, asking the extent to which they reflected European religious perspectives on the world beyond.

[386] 'Et parce aussi, comme je diray plus au long, que quand ils entendent le tonnerre, qu'ils nomment *Toupan*, ils sont grandement effrayez: si nous acommodans à leur rudesse, prenions de là particulierement occasion de leur dire, que c'estoit le Dieu dont nous leur parlions, lequel pour monstrer sa grandeur et puissance, faisoit ainsi trembler ciel et terre.' Léry, *Histoire* (1580), p. 233. 'Au surplus qu'ils avoyent entremeslé et fait mention en leurs chansons, que les eaux s'estans une fois tellement desbordees qu'elles couvrirent toute la terre, tous les hommes du monde, excepté leurs grands peres qui se sauverent sur les plus hauts arbres de leur pays, furent noyez: lequel dernier poinct, qui est ce qu'ils tiennent entre eux plus approchant de l'Escriture saincte, je leur ay d'autres fois depuis ouy reiterer.' Léry, *Histoire* (1580), p. 248.



Figure 25. Jan van Balen, *Noah and the Ark*, c. 1625-1650, oil on canvas, 50 × 67 cm, Russell-Cotes Art Gallery and Museum, Bournemouth.

Through a preliminary investigation into religious printmaking and devotional painting, it becomes clear that the Low Countries had a significant part to play in bringing the Toucan to the European cultural imagination in the seventeenth century. Subsequent to their own colonial intervention in Brazil between 1630 and 1654, the Dutch produced a series of important accounts of the Toucan, which we have yet to touch on. As a further example, we get a sense of how extensive the transmission of the Toucan was in the Low Countries through a ceramic tile produced in the iconic blue-and-white Delft style (Fig. 26).



Figure 26. *Antique Tile with Bird (Toucan)*, c. 1625-1650, ceramic, 13 × 13 × 1.1 cm <https://www.catawiki.com/en/l/24286163-antique-tile-with-bird-toucan-17th-century-rare-ceramic> [accessed 21 Mar 2023].

As the auction lot notes, the image is modelled on that of Adriaen Collaert (1560-1618), a Flemish designer and engraver who worked for Plantin in Antwerp. Collaert's own engraving appears as a copy of Aldrovandi's bird from *Ornithologiae*, which means we may trace the visual lineage of this blue and orange Toucan all the way back to André Thevet and Conrad Gessner in the sixteenth century. The ceramic illustrates, once again, the importance of the early French accounts and offers a further opportunity to examine the appearance of the Toucan in different modes of European craft.

Through the depictions of the courtly painters who spent considerable time in the Dutch colony (Zacharias Wagener, Albert Eckhout and Frans Post), as well as the important natural-historical volume of Willem Piso and Georg Marcgraf, *Historia Naturalis Brasiliae* (the first of its kind dedicated entirely to Brazil), the Low Countries provides particularly fertile ground for investigating the Toucan further in seventeenth-century Europe.

iii. 'Allegory of Hearing'

Turning to one final image, a visual configuration which serves here to combine and inter-animate many of the lives explored in this thesis, we witness numerous New World birds perching alongside a set of musical instruments. Between 1617 and 1618, Breughel and Rubens created a series entitled 'The Five Senses in Five Paintings' for Albert VII and Isabella.[387] Set among stringed and brass instruments in the bottom left corner of the 'Allegory of Hearing' are two Toucans (Fig. 27).



Figure 27. Jan Brueghel the Elder and Peter Paul Rubens, *Allegory of Hearing*, c. 1617-1618, oil on panel, 64 × 109.5 cm, Museo del Prado, Madrid.

[387] Rikken, p. 416.



Figure 28. Detail from Allegory of Hearing.

Although, as noted, Brueghel and Rubens were known for including exotic animals throughout their pictorial works, the placement of the birds here creates a strong association between the Toucan and melodious, musical sound. Indeed, as they appear in an allegorical painting in which the sense of hearing is the principal subject, the birds become distinct symbols of sound. The piece thus confirms how the auditory dimension of the bird continued to resurface in perhaps surprising ways across the period.

The story of sound originates with our very first bird, the *Picudo* of Oviedo. Witnessing a Toucan for himself in New Spain, the natural historian was struck by the 'big whistling sounds' produced by the feisty little creature. On account of the principally visual and haptic modes of analysis in the discipline, the noise of the bird was all but lost in natural-historical representations, only appearing fleetingly through Faber's classificatory approximation to woodpeckers. Sound was to make an emphatic return with Jean de Léry, however, who connected Toucan feathers to the noisy, joyful dancing of the Tupinamba. In his Reformed confessional satire of 1611, he subsequently transformed the beak into something capable of producing a sound in its own right -- this time the barely audible creaturely prattle which the narrator ironically describes as a form of Catholic prayer.

The auditory dimension of the Toucan emerged time and again in Catholic confessional discourses too: for the Jesuit pedagogue Nicolas Caussin, the beak became a symbol of eloquent

speech, the 'golden stream' of oratory through which one can demonstrate the excellence of one's mores. In the account of Fernão Cardim, noise around the Toucan took the form of a melodious cacophony: the bird's feathers feature as part of a Catholic ritual in which multiple actors (Jesuit priests, colonial administrators, soldiers and indigenous dancers) sound together in harmony. Noise therefore features prominently within the different confessional imaginaries where it does not in natural-historical discourse.

It is significant that the bird should become practically synonymous with sound by allegorical association in Brueghel and Rubens's painting. It reminds us of how, at its very core, the story of the Toucan's reception in early modern Europe was one of social actors attempting to make sense of a strange-looking creature which made an even stranger sound. The image invites us to contemplate the role of animal sounds further, to think about how early moderns sought to represent animal calls in cultural media, how creaturely noises shaped and informed early modern thinking.

As the many further avenues of exploration suggest once more, the Toucan had a unique impact on early modern European thought and culture. I hope to have offered a glimmer, a fleeting insight into the first part of the story, but there is much left to discover, and many more Toucan lives in other places, other times.

List of Books

Primary

Abbeville, Claude d', *L'Arrivee des Peres Capucins, et la conversion des sauvages à nostre saincte foy* (Paris: Jean Nigaut, 1613)

--, *Les Fruicts de la mission des reverends peres Capucins en l'Isle de Maragnan* (Lille: Christofle Beys, 1614)

--, *Histoire de la mission des peres Capucins en l'isle de Maragnan et terres circonvoisines ou est traicte des singularitez admirables et des meurs merveilleuses des indiens habitans de ce pais avec les missives et advis qui ont este envoyez de nouveau* (Paris: François Huby, 1614)

Alciato, Andrea, *Emblematum liber* (Augsburg: Heinrich Steyner, 1531) <https://www.emblems.arts.gla.ac.uk/alciato/books.php?id=A31a> [accessed 9 Mar 2023]

Aldrovandi, Ulisse, *Ornithologiae hoc est de avibus historiae libri xii* (Bologna: Franciscum de Franciscis, 1599) <https://www-proquest-com.ezproxy-prd.bodleian.ox.ac.uk/books/vlyssis-aldrovandi-ornithologiae-hoc-est-de/docview/2090363540/se-2> [accessed 8 Mar 2023]

Aquinas, Thomas, *Summa contra gentiles: Book three: Providence*, trans. by Vernon J. Bourke (London: University of Notre Dame Press, 1975)

Aristotle, *Metaphysics*, trans. by G. Cyril Armstrong and Hugh Tredennick (Cambridge, MA: Harvard University Press, 2014) <https://www.loebclassics.com/view/aristotle-metaphysics/1933/pb_LCL271.3.xml> [accessed 9 Mar 2023]

Belon, Pierre, *Histoire de la nature des oyseaux: Avec leurs descriptions et naïfs portraicts* (Paris: Gilles Corrozet, 1555)

--, *L'Histoire naturelle des estranges poissons marins: Avec la vraie peincture et description du Daulphin, et de plusieurs autres de son espece, observee par Pierre Belon du Mans* (Paris: Regnaud Chaudière, 1551) <https://gallica.bnf.fr/ark:/12148/bpt6k1511375q?rk=21459;2> [accessed 8 Mar 2023]

--, *Portraits d'oyseaux, animaux, serpens, herbes, arbres, hommes et femmes d'Arabie et d'Égypte: Le Tout enrichy de quatrains, pour plus facile cognoissance des oyseaux et autres portraits* (Paris: Guillaume Cavellat, 1557) <https://gallica.bnf.fr/ark:/12148/bpt6k1511381f> [accessed 6 Mar 2023]

Bernon, Léonard, *Recueil des pieces curieuses apportées des Indes* (Paris: Jacques le Gentil, 1670) <https://www.google.co.uk/books/edition/Recueil_des_pi%C3%A8ces_curieuses_apport%C3%A9es/8J85AAAAcAAJ?hl=en&gbpv=1> [accessed 13 Mar 2023]

Bèze, Théodore de, *La Comédie du Pape malade et tirant à la fin de ses regrets et complaintes sont au vif exprimées* (Geneva: n. pub, 1859) <https://catalog.hathitrust.org/Record/008427099> [accessed 12 Mar 2023]

Botero, Giovanni, *Le relationi universali di Giovanni Botero benese* (Venice: Nicolò Polo, 1597) <https://books.google.co.uk/books?id=4poDZabilgUC&hl=it&source=gbs_slider_cls_metadata_7_mylibrary> [accessed 8 Mar 2023]

Calvin, Jean, *Excuse a messieurs les nicodemites sur la complaincte qu'ils font de sa trop grand rigueur* (Geneva: Jean Girard, 1544)

--, *Institution de la Religion Chrétienne (1541)*, ed. by Olivier Millet (Geneva: Droz, 2008)

--, *Petit traicté monstrant que doit faire un homme fidele congnoissant la verité de l'evangile quand il est entre les papistes, Avec un epistre du mesme argument. Ensemble l'excuse faicte sur cela aux Nicodemites* (Geneva: Jean Girard, 1545) <https://www.e-rara.ch/gep_g/content/titleinfo/686304> [accessed 12 Mar 2023]

--, *Three French Treatises*, ed. by Francis M. Higman (London: The Athlone Press, 1970)

--, *Traité des Reliques suivi de l'Excuse à Messieurs les Nicodémites*, ed. by Albert Autin (Paris: Bossard, 1921)

Cardim, Fernão, *Narrativa epistolar de uma viagem e missão jesuitica* (Lisbon: Imprensa Nacional, 1847) <http://dbooks.bodleian.ox.ac.uk/books/PDFs/590202622.pdf> [accessed 12 Mar 2023]

--, *Tratados da terra e gente do Brasil*, ed. by Ana Maria de Azevedo (Lisbon: Comissão Nacional para as Comemorações dos Descobrimientos Portugueses, 1997)

--, *Tratados da terra e gente do Brasil*, ed. by Baptista Caetano, Capistrano de Abreu and Rodolpho Garcia (Rio de Janeiro: J. Leite, 1925)

Caussin, Nicolas, *La Cour sainte, ou l'institution chrestienne des grands, avec les exemples de ceux qui dans les cours ont fleury dans la saincteté* (Paris: Sébastien Chappelet, 1624)

--, *Eloquentiae sacrae et humanae parallela libri xvi* (Paris: Sébastien Chappelet, 1619)

--, *The Holy Court, or the Christian Institution of Men of Quality with Examples of Those who in Court have Flourished in Sanctity: By Nicolas Caussin of the Society of Jesus: Written in French and Translated into English by T. H.* (Paris: English College Press, 1626)

--, *Polyhistor Symbolicus: Electorum Symbolorum, et Parabolarum historicarum Stromata, XII. Libris complectens* (Cologne: Johann Kinck, 1623) <https://archive.org/details/polyhistorsymbol00caus> [accessed 12 Mar 2023]

Cicero, *Tusculan Disputations*, trans. by J. E. King (Cambridge, MA: Harvard University Press, 1927) <https://www.loebclassics.com/view/marcus_tullius_cicero-tusculan_disputations/1927/pb_LCL141.291.xml> [accessed 12 Mar 2023]

Contant, Paul, *Le Jardin, et cabinet poétique (1609)*, ed. by Myriam Marrache-Gouraud, Pierre Martin and Jean Céard (Rennes: Presses Universitaires de Rennes, 2004)

--, *Le Jardin, et cabinet poétique de Paul Contant apoticaire de Poictiers* (Poitiers: Antoine Mesnier, 1609) <https://archive.org/details/leiardinetcabine00cont/mode/2up> [accessed 13 Mar 2023]

Cotgrave, Randle, *A Dictionarie of the French and English Tongues* (London: Adam Islip, 1611) <https://www.google.co.uk/books/edition/A_Dictionarie_of_the_French_and_English/IOhMAAAAcAAJ?hl=en&gbpv=0> [accessed 6 Mar 2023]

Dan, Pierre, *Le Tresor des merveilles de la maison royale de Fontainebleau* (Paris: Sebastien Cramoisy, 1642) <https://catalogue.bnf.fr/ark:/12148/cb302974591> [accessed 9 Mar 2023]

Desprez, François, *Recueil de la diversité des habits, qui sont de présent en usage, tant es pays d'Europe, Asie, Affrique et isles sauvages* (Paris: Richard Breton, 1567) <https://gallica.bnf.fr/ark:/12148/bpt6k102756w> [accessed 13 Mar 2023]

Du Bellay, Joachim, *La Deffence, et Illustration de la Langue Françoyse (1549)*, ed. by Jean-Charles Monferran (Geneva: Droz, 2001)

Epifanio, *Sancti Patris Nostri Epiphanii, Episcopi Constantiae Cypri, ad Physiologum* (Antwerp: Plantin, 1588) <https://spcoll.library.uvic.ca/Digit/physiologum/facsimile/facsimile_img.htm> [accessed 12 Mar 2023]

Estienne, Robert, *Dictionarium Latinogallicum* (Paris: Robert Estienne, 1538) <https://www.google.co.uk/books/edition/Dictionarium_latino_gallicum/rbtKAAAAcAAJ?hl=en&gbpv=0> [accessed 12 Mar 2023]

Faber, Johann, *Animalia Mexicana descriptionibus, scholijsque exposita* (Rome: Jacobum Mascardum, 1628) <https://www.google.co.uk/books/edition/Ioannis_Fabri_Lyncei_Bambergensis_Animal/cW3g9gzIdd4C?hl=en> [accessed 8 Mar 2023]

Fouquelin, Antoine, *La Rhétorique françoise d'Antoine Foclin* (Paris: A. Wechel, 1555) <https://gallica.bnf.fr/ark:/12148/bpt6k63291011> [accessed 6 Mar 2023]

Gessner, Conrad, *Historiæ animalium liber III. qui est de Avium natura* (Zurich: Christoph Froschauer, 1555) <https://archive.org/details/gri_33125010867691/page/n151/mode/2up> [accessed 8 Mar 2023]

--, *Historiæ animalium liber III. qui est de Avium natura* (Frankfurt am Main: Johann Wechel, 1585) <https://www.google.co.uk/books/edition/_/L6lkAAAAcAAJ?hl=en&gbpv=0> [accessed 8 Mar 2023]

--, *Icones avium omnium, quæ in historia avium Conradi Gesneri describuntur, cum nomenclaturis singulorum Latinis, Italicis, Gallicis et Germanicis plerunque, per certos ordines digestæ* (Zurich: Christoph Froschauer, 1560) <https://archive.org/details/gri_33125011099229/mode/2up> [accessed 8 Mar 2023]

Gournay, Marie Le Jars de, *L'Ombre de la demoiselle, oeuvre composée de meslanges* (Paris: Jean Libert, 1626) <https://gallica.bnf.fr/ark:/12148/bpt6k70563p> [accessed 6 Mar 2023]

Jonston, Jan, *Historiæ naturalis de avibus libri vi* (Amsterdam: J. J. Schipperi, 1657) <https://archive.org/details/bub_gb_iES6mT9zVt8C_2> [accessed 9 Mar 2023]

La Primaudaye, Pierre de, *Suite de l'Académie Françoise, en laquelle il est traicté de l'homme* (Paris: Guillaume Chaudiere, 1580) <https://gallica.bnf.fr/ark:/12148/bpt6k8707794z.texteImage> [accessed 6 Mar 2023]

Léry, Jean de, *Histoire d'un voyage faict en la terre du Brésil*, ed. by Frank Lestringant (Paris: Librairie Générale Française, 1994)

--, *Histoire d'un voyage faict en la terre du Brésil, autrement dite Amerique* (Geneva: Antoine Chuppin, 1580) <https://www.google.co.uk/books/edition/Histoire_d_un_voyage_fait_en_la_terre_du/WGFoAAAAcAAJ?hl=en> [accessed 5 Mar 2023]

--, *Histoire d'un voyage fait en la terre du Bresil, autrement dite Amerique* (Geneva: Antoine Chuppin, 1578) <https://gallica.bnf.fr/ark:/12148/btv1b525073912> [accessed 9 Mar 2023]

--, *Histoire d'un voyage fait en la terre du Bresil, autrement dite Amerique* (Geneva: Eustache Vignon, 1594) <https://gallica.bnf.fr/ark:/12148/bpt6k546416> [accessed 13 Mar 2023]

--, *Histoire d'un voyage fait en la terre du Bresil, dite Amerique* (Geneva: Jean Vignon, 1611) <https://gallica.bnf.fr/ark:/12148/bpt6k580169> [accessed 9 Mar 2023]

López de Gómara, Francisco, *La historia general de las Indias, con todos los descubrimientos, y cosas notables que han acaescido en ellas, dende que se ganaron hasta agora* (Antwerp: Juan Steelsio, 1554) <https://books.google.co.ve/books?id=m7OHMz-DozgC&hl=es> [accessed 6 Mar 2023]

Marcourt, Antoine, *Le Livre des marchans: Fort utile a toutes gens* (Neufchâtel: Pierre de Vingle, 1533) <https://www.e-rara.ch/zuz/doi/10.3931/e-rara-539> [accessed 12 Mar 2023]

Marnix de Sainte Aldegonde, Philippe de, *Den byencorf der H. roomsche kercke* (Amsterdam: Nicolaes III Biestkens, 1597)

--, *Premier tome du tableau des differens de la religion* (Leiden: Jan Paets, 1600)

--, *Traicté du sacrament de la saincte Cene du Seigneur* (Leiden: Jan Paets and Jean Baudouin, 1599)

Montaigne, Michel de, *Essais II*, ed. by Emmanuel Naya, Delphine Reguig and Alexandre Tarrête (Paris: Gallimard, 2009)

--, *Essais III*, ed. by Emmanuel Naya, Delphine Reguig and Alexandre Tarrête (Paris: Gallimard, 2009)

Oviedo, Gonzalo Fernández de, *De la natural hystoria de las Indias* (Toledo: Ramón de Petras, 1526) <http://bdh.bne.es/bnesearch/detalle/bdh0000050339> [accessed 5 Mar 2023]

--, *L'Histoire naturelle et generalle des Indes, isles, et Terre Ferme de la Grand Mer Oceane*, trans. by Jean Poleur, ed. by Michel de Vascosan (Paris: Michel de Vascosan, 1556) <https://babel.hathitrust.org/cgi/pt?id=ucm.5324316051&view=1up&seq=7> [accessed 6 Mar 2023]

--, *La historia general de las Indias* (Seville: Cromberger, 1535) <https://babel.hathitrust.org/cgi/pt?id=ucm.5323537519&view=1up&seq=5> [accessed 6 Mar 2023]

Nieremberg, Juan Eusebio, *Historia naturæ, maxime peregrinæ* (Antwerp: Plantin, 1635) <https://archive.org/details/ioanniseusebiini00nier_0/mode/2up> [accessed 9 Mar 2023]

Paré, Ambroise, *Les Œuvres* (Paris: Gabriel Buon, 1575)

--, *Les Œuvres*, ed. by Jean Céard, Evelyne Berroit-Salvadore and Guylaine Pineau (Paris: Classiques Garnier Numérique, 2019) <https://classiques-garnier-com.ezproxy-prd.bodleian.ox.ac.uk/pare-ambroise-les-oeuvres.html> [accessed 8 Mar 2023]

--, *Les Œuvres d'Ambroise Paré* (Paris: Gabriel Buon, 1585) <https://www.proquest.com/books/les-œuvres-dambroise-paré-diuisees-en-vingt-huict/docview/2090362479/se-2> [accessed 8 Mar 2023]

Picinelli, Filippo, *Mundus Symbolicus* (Cologne: Herman Demen, 1681) <https://www.google.co.uk/books/edition/Mundus_Symbolicus/l89KAAAAcAAJ?q=&gbpv=0#f=false> [accessed 12 Mar 2023]

Provins, Pacifique de, *Brieve relation du voyage des isles de l'Amerique* (Paris: Nicolas and Jean de la Coste, 1646)

Purchas, Samuel, *Purchas his Pilgrimage, or Relations of the World and the Religions Observed in all Ages and Places Discovered, from the Creation unto this Present* (London: William Stansby for Henrie Fetherstone, 1626)

Thevet, André, *La Cosmographie universelle* (Paris: Guillaume Chaudière, 1575) <https://gallica.bnf.fr/ark:/12148/btv1b8626691v?rk=21459;2> [accessed 8 Mar 2023]

--, *Histoire d'André Thevet angoumoisin, Cosmographe du Roy, de deux voyages faits aux Indes Australes, et Occidentales*, ed. by Jean-Claude Laborie and Frank Lestringant (Geneva: Droz, 2006)

--, *Les Singularitez de la France Antarctique, autrement nommée Amérique, et de plusieurs terres et isles découvertes de nostre temps* (Paris: Maurice de la Porte, 1557)

Rabelais, François, *Gargantua*, ed. by Françoise Joukovsky (Paris: Flammarion, 1993)

--, *Œuvres complètes*, ed. by Mireille Huchon (Paris: Gallimard, 1994)

Ray, John, *The Ornithology of Francis Willughby of Middleton in the County of Warwick Esq, Fellow of the Royal Society* (London: Andrew Clarke for John Martyn, 1678) <https://archive.org/details/ornithologyFran00Will> [accessed 8 Mar 2023]

Rondelet, Guillaume, *Libri de piscibus marinis, in quibus veræ piscium effigies expressæ sunt* (Lyon: Macé Bonhomme, 1554) <https://www.biodiversitylibrary.org/item/130384#page/5/mode/1up> [accessed 6 Mar 2023]

Veyrel, Samuel, *Indice du cabinet de Samuel Veyrel* (Bordeaux: Pierre de la Court, 1635) <http://access.bl.uk/item/viewer/ark:/81055/vdc_100028157625.0x000001#?c=0&m=0&s=0&cv=0&xywh=-1151%2C-156%2C4391%2C3117> [accessed 13 Mar 2023]

Secondary

Almeida, Eduardo de, *Dicionário de tupi antigo: A língua indígena clássica do Brasil* (São Paulo: Global, 2013)

Appadurai, Arjun, 'Introduction', in *The Social Life of Things: Commodities in Cultural Perspective*, ed. by Arjun Appadurai (Cambridge: Cambridge University Press, 1986) <https://hdl.handle.net/2027/heb32141> [accessed 12 Mar 2023], pp. 3-63

Ashworth, William B., 'Natural History and the Emblematic World View', in *Reappraisals of the Scientific Revolution*, ed. by David Lindberg and Robert Westman (Cambridge: Cambridge University Press, 1990), pp. 303-332

Asúa, Miguel de, 'Natural History in the Jesuit Missions', in *The Oxford Handbook of the Jesuits*, ed. by Ines G. Županov (Oxford: Oxford University Press, 2018) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1093/oxfordhb/9780190639631.001.0001> [accessed 9 Mar 2023], pp. 708-736

--, *Science in the Vanished Arcadia: Knowledge of Nature in the Jesuit Missions of Paraguay and Río de la Plata* (Leiden: Brill, 2014) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=1730277> [accessed 9 Mar 2023]

Atkinson, Geoffroy, *Les Nouveaux horizons de la Renaissance française* (Paris: Droz, 1935)

Auslander, Leora, 'Beyond Words', *American Historical Review*, 110 (2005), 1015-1045 <https://doi.org/10.1086/ahr.110.4.1015> [accessed 13 Mar 2023]

Azevedo, Ana Maria de, *Tratados da terra e gente do Brasil* (Lisbon: Comissão Nacional para as Comemorações dos Descobrimientos Portugueses, 1997)

Balfe, Thomas and Joanna Woodhall, 'Introduction: From Living Presence to Lively Likeness–The Lives of *ad vivum*', in *Ad vivum? Visual Materials and the Vocabulary of Life-likeness in Europe before 1800*, ed. by Thomas Balfe, Joanna Woodhall and Claus Zittel (Leiden: Brill, 2019) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004393998> [accessed 8 Mar 2023], pp. 1-43

Bankoff, Greg, 'Big Men, Small Horses: Ridership, Social Standing and Environmental Adaptation in the Early Modern Philippines', in *The Horse as Cultural Icon*, ed. by Peter Edwards, Karl A. E. Enenkel and Elspeth Graham (Leiden: Brill, 2011) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004222427> [accessed 6 Mar 2023], pp. 99-120

Bath, Michael, *Emblems for a Queen: The Needlework of Mary Queen of Scots* (London: Archetype, 2008)

Bichon, J., 'Sagesse humaine ou sagesse canine?: Sur un passage du *Prologue* du *Gargantua*', *Études Rabelaisiennes*, 8 (1969), 87-90

Blair, Ann, 'The 2016 Josephine Waters Bennett Lecture: Humanism and Printing in the Work of Conrad Gessner', *Renaissance Quarterly*, 70 (2017), 1-43 <https://doi.org/10.1086/691829> [accessed 7 Dec 2022]

--, 'The Capacious Bibliographical Practice of Conrad Gessner', *The Papers of the Bibliographical Society of America*, 111 (2017), 445-468 <https://www.jstor.org/stable/26547531> [accessed 8 Mar 2023]

--, 'Conrad Gessner's Paratexts', *Gesnerus*, 73 (2016), 73-122 <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/22977953-07301004> [accessed 8 Mar 2023]

Bleichmar, Daniela, 'Seeing the World in a Room: Looking at Exotica in Early Modern Collections', in *Collecting Across Cultures: Material Exchanges in the Early Modern Atlantic World*, ed. by Daniela Bleichmar and Peter Mancall (Philadelphia: University of Pennsylvania Press, 2013), pp. 15-30

--, *Visible Empire: Botanical Expeditions and Visual Culture in the Hispanic Enlightenment* (Chicago: University of Chicago Press, 2012) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.7208/chicago/9780226058559.001.0001> [accessed 6 Mar 2023]

Bleichmar, Daniela and Peter Mancall, eds, *Collecting Across Cultures: Material Exchanges in the Early Modern Atlantic World* (Philadelphia: University of Pennsylvania Press, 2013)

Boehrer, Bruce, *Animal Characters: Nonhuman Beings in Early Modern Literature* (Philadelphia: University of Pennsylvania Press, 2010) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=3441770> [accessed 6 Mar 2023]

--, *Parrot Culture: Our 2,500-year-long Fascination with the World's Most Talkative Bird* (Philadelphia: University of Pennsylvania Press, 2004)

Boum, Aomar and Michael Bonine, 'The Elegant Plume: Ostrich Feathers, African Commercial Networks, and European Capitalism', *The Journal of North African Studies*, 20 (2015), 5-26 <https://doi.org/10.1080/13629387.2014.983733> [accessed 13 Mar 2023]

Bujok, Elke, 'Ethnographica in Early Modern *Kunstkammern* and their Perception', *Journal of the History of Collections*, 21 (2009), 17-32 <https://doi.org/10.1093/jhc/fhn031> [accessed 12 Mar 2023]

Buono, Amy J., 'Feathered Identities and Plumed Performances: Tupinambá Interculture in Early Modern Brazil and Europe' (unpublished doctoral thesis, University of California Santa Barbara, 2007)

--, '"Their Treasures are the Feathers of Birds": Tupinambá Featherwork and the Image of America', in *Images Take Flight: Feather Art in Mexico and Europe 1400-1700*, ed. by Alessandra Russo, Gerhard Wolf and Diana Fane (Munich: Hirmer, 2015), pp. 178-189

Burghartz, Susanna, Lucas Burkart, Christine Göttler and Ulinka Rublack, eds, *Materialized Identities in Early Modern Culture, 1450-1750* (Amsterdam: University of Amsterdam Press, 2021)

Cabranes-Grant, Leo, 'From Scenarios to Networks: Performing the Intercultural in Colonial Mexico', *Theatre Journal*, 63 (2011), 499-520 <https://www.jstor.org/stable/41411237> [accessed 6 Mar 2023]

Campbell, Mary B., *The Witness and the Other World: Exotic European Travel Writing, 400-1600* (Ithaca, NY: Cornell University Press, 1988)

--, *Wonder and Science: Imagining Worlds in Early Modern Europe* (Ithaca, NY: Cornell University Press, 1999) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.7591/9781501705069> [accessed 9 Mar 2023]

Cañizares-Esguerra, Jorge, 'Introduction: Jesuit Liminal Space in Liberal Protestant Modernity', in *Encounters between Jesuits and Protestants in Asia and the Americas*, ed. by Jorge Cañizares-Esguerra, Robert Aleksander Maryks, and Ronnie Po-Chia Hsia (Leiden: Brill, 2018) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004373822> [accessed 9 Mar 2023], pp. 177-184

Castelnau-L'Estoile, Charlotte de, 'The Uses of Shamanism: Evangelizing Strategies and Missionary Models in Seventeenth-Century Brazil', in *The Jesuits II: Cultures, Sciences, and the Arts, 1540-1773*, ed. by John W. O'Malley, Gauvin Alexander Bailey, Steven J. Harris, and T. Frank Kennedy (Toronto: University of Toronto Press, 2005) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.3138/9781442681552> [accessed 12 Mar 2023], pp. 616-637

Cave, Terence, *Pré-Histoires II: Langues étrangères et troubles économiques au XVIe siècle* (Geneva: Droz, 2001)

--, *Thinking with Literature: Towards a Cognitive Criticism* (Oxford: Oxford University Press, 2016)

Cave, Terence and Dierdre Wilson, 'Introduction', in *Reading Beyond the Code: Literature and Relevance Theory*, ed. by Terence Cave and Dierdre Wilson (Oxford: Oxford University Press, 2018), pp. 1-20

Céard, Jean, *La Nature et les prodiges: L'Insolite au XVIe siècle, en France* (Geneva: Droz, 1977)

Chaouche, Sabine, *L'Art du comédien: Déclamation et jeu scénique en France à l'âge classique* (Paris: Champion, 2001)

Chesters, Timothy, 'Discretion', in *Renaissance Keywords*, ed. by Ita Mac Carthy (London: Legenda, 2013) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.4324/9781315088907> [accessed 8 Mar 2023], pp. 103-118

Chinard, Gilbert, *L'Exotisme américain dans la littérature française au XVIe siècle* (Paris: Hachette, 1911)

Cohen, Gustave, 'Rabelais et Marnix de Sainte-Aldegonde', *Revue des Études Rabelaisiennes*, 6 (1908), 64-65 <https://gallica.bnf.fr/ark:/12148/bpt6k19482m/f86.item> [accessed 9 Mar 2023]

Cohen, Simona, *Animals as Disguised Symbols in Renaissance Art* (Leiden: Brill, 2008) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=467997> [accessed 9 Mar 2023]

Conley, Tom, *An Errant Eye: Poetry and Topography in Early Modern France* (Minneapolis: University of Minnesota Press, 2011) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=648100> [accessed 6 Mar 2023]

--, *The Self-Made Map: Cartographic Writing in Early Modern France* (Minneapolis, MN: University of Minnesota Press, 1996) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=310378> [accessed 12 Mar 2023]

Considine, John, *Small Dictionaries and Curiosity: Lexicography and Fieldwork in Post-Medieval Europe* (Oxford: Oxford University Press, 2016) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1093/acprof:oso/9780198785019.001.0001> [accessed 8 Mar 2023]

Crawford, Julie, *Marvelous Protestantism: Monstrous Births in Post-Reformation England* (Baltimore, MD: The Johns Hopkins University Press, 2005)

Curry, Helen, Nicholas Jardine, James Secord and Emma Spary, *Worlds of Natural History* (Cambridge: Cambridge University Press, 2018)

Daston, Lorraine and Katharine Park, *Wonders and the Order of Nature (1150-1750*) (New York: Zone Books, 1998)

Davies, Natalie Zemon, *The Gift in Sixteenth-Century France* (Oxford: Oxford University Press, 2000)

Davies, Surekha, 'Catalogical Encounters: Worldmaking in Early Modern Cabinets of Curiosities', in *Early Modern Things: Objects and their Histories, 1500-1800*, ed. by Paula Findlen (London: Routledge, 2021) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.4324/9781351055741> [accessed 13 Mar 2023], pp. 227-254

--, *Renaissance Ethnography and the Invention of the Human: New Worlds, Maps and Monsters* (Cambridge: Cambridge University Press, 2016)

Demonet, Marie-Luce, *Les Voix du signe: Nature et origine du langage à la Renaissance (1480-1580)* (Paris: Champion, 1992)

Dickenson, Victoria, *Drawn from Life: Science and Art in the Portrayal of the New World* (Toronto: University of Toronto Press, 1998) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=4671445> [accessed 6 Mar 2023]

Derrida, Jacques, *L'Animal que donc je suis* (Paris: Galilée, 2006)

Domenici, Davide, 'Rediscovery of a Mesoamerican Greenstone Sculpture from the Collection of Ulisse Aldrovandi', *Journal of the History of Collections*, 34 (2022), 1-22 <https://doi.org/10.1093/jhc/fhab001> [accessed 9 Mar 2023]

Durkan, John, 'Giovanni Ferrerio, Gesner and French Affairs', *Bibliothèque d'Humanisme et Renaissance*, 42 (1980), 349-360 <https://www.jstor.org/stable/20676118> [accessed 8 Mar 2023]

Duval, Edwin, 'Putting Religion in its Place', in *The Cambridge Companion to Rabelais*, ed. by John O'Brien (Cambridge: Cambridge University Press, 2011) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1017/CCOL9780521867863> [accessed 9 Mar 2023], pp. 93-106

Edwards, Peter and Elspeth Graham, 'The Horse as Cultural Icon: The Real and the Symbolic Horse in the Early Modern World', in *The Horse as Cultural Icon: The Real and Symbolic Horse in the Early Modern World*, ed. by Peter Edwards, Karl A. E. Enenkel and Elspeth Graham (Leiden: Brill, 2011) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004222427> [accessed 6 Mar 2023], pp. 1-33

Egmond, Florike, 'European Exchanges and Communities', in *Worlds of Natural History*, ed. by Helen Curry, Nicholas Jardine, James Secord and Emma Spary (Cambridge: Cambridge University Press, 2018), pp. 78-93

Enenkel, Karl A. E. and Paul J. Smith, eds, *Early Modern Zoology: The Construction of Animals in Science, Literature and the Visual Arts* (Leiden: Brill, 2007)

Enenkel, Karl A. E. and Paul J. Smith, 'Introduction: Emblems and the Natural World (ca. 1530-1700)', in *Emblems and the Natural World*, ed. by Karl A. E. Enenkel and Paul J. Smith (Leiden: Brill, 2017) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004347076> [accessed 8 Mar 2023], pp. 1-40

Feest, Christian F., 'European Collecting of American Indian Artefacts and Art', *Journal of the History of Collections*, 5 (1993), 1-11 <https://doi.org/10.1093/jhc/5.1.1> [accessed 12 Mar 2023]

Findlen, Paula, 'Afterword: How (Early Modern) Things Travel', in *The Global Lives of Things: The Material Culture of Connections in the Early Modern World*, ed. by Anne Gerritsen and Giorgio Riello (London: Routledge, 2015), pp. 241-246

--, *Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy* (Berkeley: University of California Press, 1994)

Findlen, Paula and Anna Toledano, 'The Materials of Natural History', in *Worlds of Natural History*, ed. by Helen Curry, Nicholas Jardine, James Secord and Emma Spary (Cambridge: Cambridge University Press, 2018), pp. 151-169

Françozo, Mariana, 'Beyond the Kunstkammer; Brazilian Featherwork in Early Modern Europe', in *The Global Lives of Things: The Material Culture of Connections in the Early Modern World*, ed. by Anne Gerritsen and Giorgio Riello (London: Routledge, 2015), pp. 105-127

Franklin, Wayne, *Discoverers, Explorers, Settlers: The Diligent Writers of Early America* (Chicago: University of Chicago Press, 1979)

Freedberg, David, *The Eye of the Lynx: Galileo, His Friends, and the Beginnings of Modern Natural History* (Chicago: University of Chicago Press, 2002) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=3038245> [accessed 8 Mar 2023]

French, Roger and Miguel de Asúa, *A New World of Animals: Early Modern Europeans on the Creatures of Iberian America* (London: Routledge, 2016) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=4817020> [accessed 6 Mar 2023]

Frisch, Andrea, *The Invention of the Eyewitness: Witnessing and Testimony in Early Modern France* (Chapel Hill: North Carolina Studies in the Romance Languages and Literatures, 2004)

Fudge, Erica, *Brutal Reasoning: Animals, Rationality, and Humanity in Early Modern England* (Ithaca, NY: Cornell University Press, 2006)

--, *Perceiving Animals: Humans and Beasts in Early Modern English Culture* (Basingstoke: Macmillan, 2000)

--, *Renaissance Beasts: Of Animals, Humans and Other Wonderful Creatures* (Urbana: University of Illinois Press, 2004)

Gabrieli, Guiseppe, *Contribuiti alla Storia della Accademia dei Lincei* (Rome: Accademia Nazionale dei Lincei, 1989) <https://catalog.hathitrust.org/Record/002472150?> [accessed 8 Mar 2023]

Ganim, Russell, 'The Great Chain of Being: Life and Literature in Paul Contant's *Le Jardin, et Cabinet Poétique*', *Cahiers du Dix-Septième*, 15 (2014), 63-81 <https://earlymodernfrance.org/journal/2014-volume-xv-2/great-chain-being-life-and-literature-paul-contant%E2%80%99s-jardin-et-cabinet-poet> [accessed 13 Mar 2023]

Garrod, Raphaële, *Cosmographical Novelties in French Renaissance Prose (1550-1630): Dialectic and Discovery* (Turnhout: Brepols, 2016)

--, 'Introduction. Knowledge and Literature: The Natural-Historical Description as Epistemic Genre?', in *Natural History in Early Modern France: The Poetics of an Epistemic Genre*, ed. by Raphaële Garrod and Paul J. Smith (Leiden: Brill, 2018), pp. 1-17

--, 'The Natural-Historical Rejuvenation of Emblematics: The Moral Pedagogy of Nicolas Caussin's *Polyhistor Symbolicus*', in *Natural History in Early Modern France: The Poetics of an Epistemic Genre*, ed. by Raphaële Garrod and Paul J. Smith (Leiden: Brill, 2018), pp. 120-139

Garrod, Raphaële and Paul J. Smith, eds, *Natural History in Early Modern France: The Poetics of an Epistemic Genre* (Leiden: Brill, 2018)

Gathagan, Laura and Benjamin Pohl, 'Introduction', in *A Companion to the Abbey of Le Bec in the Central Middle Ages (11th-13th Centuries)*, ed. by Laura Gathagan and Benjamin Pohl (Leiden: Brill, 2018) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=5124288> [accessed 12 Mar 2023], pp. 1-10

Geary, Patrick, 'Sacred Commodities: The Circulation of Medieval Relics', in *The Social Life of Things: Commodities in Cultural Perspective*, ed. by Arjun Appadurai (Cambridge: Cambridge University Press, 1986) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1017/CBO9780511819582> [accessed 12 Mar 2023], pp. 169-192

Gerritsen, Anne and Giorgio Riello, eds, *The Global Lives of Things: The Material Culture of Connections in the Early Modern World* (London: Routledge, 2015)

Glardon, Philippe, 'Gessner Studies: State of the Research and New Perspectives on 16th-century Studies in Natural History', *Gesnerus*, 73 (2016), 7-28 <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/22977953-07301002> [accessed 8 Mar 2023]

Goul, Pauline and Phillip John Usher, eds, *Early Modern Écologies: Beyond English Ecocriticism* (Amsterdam: Amsterdam University Press, 2020)

Greenblatt, Stephen, *Marvellous Possessions: The Wonder of the New World* (Oxford: Clarendon Press, 1991)

Happé, Peter, 'Introduction', in *Les Mystères: Studies in Genre, Text and Theatricality* (Leiden: Brill, 2012) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789401207669> [accessed 6 Mar 2023], pp. 7-20

Harris, Steven J., 'Jesuit Scientific Activity in the Overseas Missions, 1540-1773', *Isis*, 96 (2005), 71-79 <https://www.jstor.org/stable/10.1086/430680> [accessed 12 Mar 2023]

Harrison, Peter, *The Bible, Protestantism, and the Rise of Natural Science* (Cambridge: Cambridge University Press, 1998) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1017/CBO9780511585524> [accessed 9 Mar 2023]

Hanß, Stefan, 'Making Featherwork in Early Modern Europe', in *Materialized Identities in Early Modern Culture, 1450-1750*, ed. by Susanna Burghartz, Lucas Burkart, Christine Göttler and Ulinka Rublack (Amsterdam: University of Amsterdam Press, 2021) <https://doi.org/10.1515/9789048554058> [accessed 13 Mar 2023], pp. 137-186

--, 'Material Encounters: Knotting Cultures in Early Modern Peru and Spain', *The Historical Journal*, 62 (2019), 583-615 <https://doi.org/10.1017/S0018246X18000468> [accessed 5 Mar 2023]

Herdman, Emma, 'Vile Birds and Beasts in Jean Lemaire de Belges's *Epîtres de l'Amant Vert*', *Early Modern French Studies* 39. 2 (2017), 99-113 <https://www.tandfonline.com/doi/abs/10.1080/20563035.2017.1380556?journalCode=yemf20> [accessed 6 Mar 2023]

Herrin, Amanda, 'Pioneers of the Printed Paradise: Maarten de Vos, Jan Sadeler I and Emblematic Natural History in the Late Sixteenth Century', in *Zoology in Early Modern Culture: Intersections of Science, Theology, Philology and Religious Education*, ed. by Karl A. E. Enenkel and Paul J. Smith (Leiden: Brill, 2014) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004279179> [accessed 12 Mar 2023], pp. 329-400

Hill, Elizabeth K., 'What is an Emblem?', *The Journal of Aesthetics and Art Criticism*, 29 (1970), 261-265 <https://www.jstor.org/stable/428607> [accessed 12 Mar 2023]

Hitchcock, Richard, 'Samuel Purchas as Editor: A Case Study: Anthony Knyvett's Journal', *The Modern Language Review*, 99 (2004), 301-312 <https://doi.org/10.2307/3738747> [accessed 12 Mar 2023]

Hoffmann, George, *Reforming French Culture: Satire, Spiritual Alienation, and Connection to Strangers* (Oxford: Oxford University Press, 2017) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1093/oso/9780198808763.001.0001> [accessed 9 Mar 2023]

Holt, Mack P., *The French Wars of Religion, 1562-1629* (Cambridge: Cambridge University Press, 1995) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1017/CBO9781139163682> [accessed 6 Mar 2023]

Kellman, Jordan, 'Environmentalism, Ethnography and Franciscan Natural Theology on the French Colonial Frontier: Claude d'Abbeville's Tupinambá Encounter, 1612-1613', *Journal of the Western Society for French History*, 39 (2011), 22-34 <http://hdl.handle.net/2027/spo.0642292.0039.004> [accessed 12 Mar 2023]

Kenny, Neil, *The Uses of Curiosity in Early Modern France and Germany* (Oxford: Oxford University Press, 2004)

King, Heidi, 'Feather Arts in Ancient Peru', in *Peruvian Featherworks: Art of the Precolombian Era*, ed. by Heidi King (London: Yale University Press, 2012), pp. 9-44

Klein, Holger A., 'Eastern Objects and Western Desires: Relics and Reliquaries between Byzantium and the West', *Dumbarton Oaks Papers*, 58 (2004), 283-314 <https://www.jstor.org/stable/3591389> [accessed 12 Mar 2023]

Kohn, Eduardo, *How Forests Think: Toward an Anthropology Beyond the Human* (Berkeley: University of California Press, 2013)

Kolb, Arianne Faber, *Jan Brueghel the Elder: The Entry of the Animals in Noah's Ark* (Los Angeles: The J. Paul Getty Museum, 2005) <https://www.google.co.uk/books/edition/Jan_Brueghel_the_Elder/e5gnAgAAQBAJ?q=&gbpv=0#f=false> [accessed 13 Mar 2023]

Kusukawa, Sachiko, 'Gessner's History of Nature', in *Worlds of Natural History*, ed. by Helen Curry, Nicholas Jardine, James Secord and Emma Spary (Cambridge: Cambridge University Press, 2018), pp. 33-43

--, *Picturing the Book of Nature: Image, Text, and Argument in Sixteenth-Century Human Anatomy and Medical Botany* (Chicago: University of Chicago Press, 2012)

Lestringant, Frank, *L'Amérique et la controverse coloniale en France, au temps des guerres de religion (1555-1589)* (Paris: Aux Amateurs des Livres, 1990)

--, *André Thevet: Cosmographe des derniers Valois* (Geneva: Droz, 1991)

--, *L'Atelier du cosmographe: Ou l'image du monde à la Renaissance* (Paris: A. Michel, 1991)

--, 'De la barbe au voyage de Panurge (*Tiers livre*, XXVIII, et *Quart Livre*, XLVIII-LIV): Le Savoir cosmographique dans l'œuvre de Rabelais', in *Inextinguible Rabelais*, ed. by Mireille Huchon, Nicolas Le Cadet, Romain Menini, and Marie-Claire Thomine (Paris: Classiques Garnier, 2021), pp. 609-630

--, *Le Brésil d'André Thevet: Les Singularités de la France Antarctique (1557)* (Paris: Chandeigne, 2011)

--, 'Calvinistes et cannibales: Les Écrits protestants sur le Brésil français (1555-1560)', *Bulletin de la Société du protestantisme français*, 126 (1980), 9-26

--, 'Catholiques et cannibales: Le Thème du cannibalisme dans le discours protestant au temps des Guerres de religion', in *Pratiques et discours alimentaires à la Renaissance: Actes du colloque de Tours de mars 1979, Centre d'études supérieurs de la Renaissance*, ed. by Jean-Claude Margolin and Robert Sauzet (Paris: Maisonneuve and Larose, 1982), pp. 233-45

--, *L'Expérience huguenote au Nouveau Monde (XVIe siècle)* (Geneva: Droz, 1996)

--, *Le Huguenot et le sauvage: L'Amérique et la controverse coloniale en France, au temps des guerres de religion (1555-1589)* (Paris: Aux Amateurs des Livres, 1990)

--, *Jean de Léry, ou, l'invention du sauvage* (Paris: Champion, 2005)

--, 'Préface: Léry ou le rire de l'Indien', in *Histoire d'un voyage faict en la terre du Brésil*, ed. by Frank Lestringant (Paris: Librairie Générale Française, 1994), pp. 15-39

--, 'Rabelais and Travel Literature', in *A Companion to François Rabelais*, ed. by Bernd Renner (Leiden: Brill, 2021) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004460232> [accessed 9 Mar 2023], pp. 185-215

--, *Sous la leçon des vents: Le monde d'André Thevet, cosmographe de la Renaissance* (Paris: Presses de l'Université de Paris-Sorbonne, 2003)

--, *Le Théâtre de la curiosité* (Paris: PUPS, 2008)

Lévi-Strauss, Claude, 'D'un Oiseau l'autre. Un exemple de transformation mythique', *L'Homme*, 93 (1985), 5-12

Liszka, James Jakób, *A General Introduction to the Semeiotic of Charles Sanders Pierce* (Bloomington: Indiana University Press, 1996)

Loisel, Gustave, *Histoire des ménageries de l'Antiquité à nos jours* (Paris: Octave Doin and Henri Laurens, 1912)

Luria, Keith P., *Sacred Boundaries: Religious Coexistence and Conflict in Early-Modern France* (Washington, D.C.: Catholic University of America Press, 2005) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=3134708> [accessed 9 Mar 2023]

Mac Carthy, Ita, 'Grace', in *Renaissance Keywords*, edited by Ita Mac Carthy (London: Routledge, 2013) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.4324/9781315088907> [accessed 12 Mar 2023], pp. 63-78

--, *The Grace of the Italian Renaissance* (Princeton, NJ: University of Princeton Press, 2020) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1515/9780691189796> [accessed 12 Mar 2023]

MacDonald, Deanna, 'Collecting a New World: The Ethnographic Collections of Margaret of Austria', *Sixteenth Century Journal*, 33 (2002), 649-663 <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.2307/4144018> [accessed 12 Mar 2023]

Mackenzie, Louisa and Stephanie Posthumus, *French Thinking About Animals* (East Lansing: Michigan State University Press, 2015)

Magnien, Michel, 'Robert Constantin, éditeur de Jules César Scaliger', in *Esculape et Dionysos: Mélanges en l'honneur de Jean Céard* (Geneva: Droz, 2008), pp. 1045-1064

Marr, Alexander, 'Introduction', in *Curiosity and Wonder from the Renaissance to the Enlightenment*, ed. by Alexander Marr and R. J. W. Evans (London: Routledge, 2006), pp. 1-20

--, *Rubens's Spirit: From Ingenuity to Genius* (London: Reaktion Books, 2021)

Marr, Alexander and R. J. W. Evans, eds, *Curiosity and Wonder from the Renaissance to the Enlightenment* (London: Routledge, 2006)

Marrache-Gouraud, Myriam, *Le Jardin, et cabinet poétique (1609)*, ed. by Myriam Marrache-Gouraud, Pierre Martin and Jean Céard (Rennes: Presses Universitaires de Rennes, 2004)

Mason, Peter, 'André Thevet, Pierre Belon and Americana in the Embroideries of Mary Queen of Scots', *Journal of the Warburg and Courtauld Institutes*, 78 (2015), 207-221 <https://www.jstor.org/stable/26321954> [accessed 13 Mar 2023]

--, 'From Presentation to Representation: *Americana* in Europe', *Journal of the History of Collections*, 6 (1), 1-20 <https://doi.org/10.1093/jhc/6.1.1> [accessed 6 Mar 2023]

McBurney, Henrietta, 'Cassiano dal Pozzo as Scientific Commentator: Ornithological Texts, and Images of Birds from the Museo Cartaceo', in *Documentary Culture: Florence and Rome from Grand-Duke Ferdinand I to Pope Alexander VII: Papers from a Colloquium held at the Villa Spelman, Florence, 1990*, ed. by Elizabeth Cropper, Giovanna Perini and Francesco

Solinas (Bologna: Nuova Alfa Editoriale, 1992) <https://catalog.hathitrust.org/Record/002606345> [accessed 9 Mar 2023], pp. 349-363

McClure, Ellen, *The Logic of Idolatry in Seventeenth-Century French Literature* (Cambridge: Boydell and Brewer, 2020), <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1017/9781787446892> [accessed 6 Mar 2023]

McGinness, Anne B., 'Negotiating Confessional Divide in Dutch Brazil and the Republic: The Case of Manoel de Morães', in *Encounters between Jesuits and Protestants in Asia and the Americas*, ed. by Jorge Cañizares-Esguerra, Robert Aleksander Maryks, and Ronnie Po-Chia Hsia (Leiden: Brill, 2018) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004373822> [accessed 9 Mar 2023], pp. 228-252

Meadow, Mark A., 'Merchants and Marvels: Hans Jacob Fugger and the Origins of the Wunderkammer', in *Merchants and Marvels: Commerce, Science, and Art in Early Modern Europe*, ed. by Pamela Smith (New York: Routledge, 2002) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=1487203> [accessed 9 Mar 2023], pp. 182-200

Melehy, Hassan, 'Off the Human Track: Montaigne, Deleuze, and the Materialization of Philosophy', in *Early Modern Écologies: Beyond English Ecocriticism*, ed. by Pauline Goul and Phillip John Usher (Amsterdam: Amsterdam University Press, 2020), pp. 23-48

Melion, Walter S. and Ralph Dekoninck, 'Jesuit Illustrated Books', in *The Oxford Handbook of the Jesuits*, ed. by Ines G. Županov (Oxford: Oxford University Press, 2018) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1093/oxfordhb/9780190639631.001.0001> [accessed 12 Mar 2023], pp. 521-552

Melo, Wolfgang David Cirilo de, 'Plautus's Dramatic Predecessors and Contemporaries in Rome', in *The Oxford Handbook of Greek and Roman Comedy*, ed. by Michael Fontaine and Adele C. Scafuro (Oxford: Oxford University Press, 2014) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1093/oxfordhb/9780199743544.001.0001> [accessed 12 Mar 2023], pp. 447-461

Mirollo, James V., 'The Aesthetics of the Marvelous: The Wondrous Work of Art in a Wondrous World', in *Wonders, Marvels, and Monsters in Early Modern Culture*, ed. by Peter G. Platt (Newark: University of Delaware Press, 1999) <https://catalog.hathitrust.org/Record/004071254> [accessed 6 Mar 2023], pp. 24-45

Myers, Kathleen Ann, *Fernández de Oviedo's Chronicle of America: A New History for a New World* (Austin: University of Texas Press, 2007) <https://catalog.hathitrust.org/Record/005648875?> [accessed 6 Mar 2023]

Norton, Marcy, 'The Chicken or the Iegue: Human-Animal Relationships and the Columbian Exchange', *The American Historical Review*, 120 (2015), 28-60 <https://www.jstor.org/stable/43696335> [accessed 6 Mar 2023]

O'Brien, John, 'Reasoning with the Senses: The Humanist Imagination', *South Central Review*, 10 (1993), 3-19 <https://www.jstor.org/stable/3189996> [accessed 6 Mar 2023]

Ogilvie, Brian, *The Science of Describing: Natural History in Renaissance Europe* (Chicago: University of Chicago Press, 2006)

O'Gorman, Edmundo, *The Invention of America: An Inquiry into the Historical Nature of the New World and the Meaning of its History* (Bloomington: Indiana University Press, 1961)

Olmi, Giuseppe, 'Science -- Honour -- Metaphor: Italian Cabinets of the Sixteenth and Seventeenth Centuries', in *The Origins of Museums: The Cabinet of Curiosities in Sixteenth- and Seventeenth-Century Europe*, ed. by Oliver R. Impey and Arthur MacGregor (Oxford: Clarendon Press, 1985), pp. 5-16

O'Malley, John W., 'Introduction', in *The Jesuits II: Cultures, Sciences, and the Arts, 1540-1773*, ed. by John W. O'Malley, Gauvin Alexander Bailey, Steven J. Harris, and T. Frank Kennedy (Toronto: University of Toronto Press, 2005) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.3138/9781442681552> [accessed 12 Mar 2023], pp. 287-290

Pabel, Hilmar, *Conversing with God: Prayer in Erasmus's Pastoral Writing* (Toronto: University of Toronto Press, 1997) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.3138/9781442673465> [accessed 12 Mar 2023]

Pagden, Anthony, *The Fall of Natural Man: The American Indian and the Origins of Comparative Ethnology* (Cambridge: Cambridge University Press, 1982)

Parker, Charles H., 'Diseased Bodies, Defiled Souls: Corporality and Religious Difference in the Reformation', *Renaissance Quarterly*, 67 (2014), 1265-1297 <https://www.jstor.org/stable/10.1086/679783> [accessed 12 Mar 2023]

Pouey-Mounou, Anne-Pascale, 'La Métaphore vide et le voleur de mots: La Remotivation métaphorique des adages chez Rabelais (*Tiers Livre*)', in *Métaphore, savoirs et arts au début des temps modernes*, ed. by Caroline Trotot and Bruno Petey-Girard (Paris: Classiques Garnier, 2016), pp. 115-137

--, 'Rabelais and Religion', in *A Companion to François Rabelais*, ed. by Bernd Renner (Leiden: Brill, 2021) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004460232> [accessed 9 Mar 2023], pp. 75-98

Prieto, Andrés I., *Missionary Scientists: Jesuit science in Spanish South America, 1570-1810* (Nashville, TN: Vanderbilt University Press, 2011) <https://search-ebscohost-com.ezproxy-prd.bodleian.ox.ac.uk/login.aspx?direct=true&AuthType=ip,uid&db=nlebk&AN=360706&site=ehost-live&authtype=ip,uid> [accessed 12 Mar 2023]

--, 'The Perils of Accommodation: Jesuit Missionary Strategies in the Early Modern World', *Journal of Jesuit Studies*, 4 (2017), 395-414 <https://doi.org/10.1163/22141332-00403002> [accessed 12 Mar 2023]

Pugliano, Valentina, 'Natural History in the Apothecary's Shop', in *Worlds of Natural History*, ed. by Helen Curry, Nicholas Jardine, James Secord and Emma Spary (Cambridge: Cambridge University Press, 2018), pp. 44-60

Randall, Catharine, *The Wisdom of Animals: Creatureliness in Early Modern French Spirituality* (Notre Dame, IN: University of Notre Dame Press, 2014) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=3441158> [accessed 9 Mar 2023]

Riggins, Stephen H., 'Introduction', in *The Socialness of Things: Essays on the Socio-Semiotics of Objects*, ed. by Stephen H. Riggins (Berlin: Mouton de Gruyter, 1994) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=3044433> [accessed 12 Mar 2023], pp. 1-6

Rikken, Marrigje, 'Exotic Animal Painting by Jan Brueghel and Roelant Savery', in *Zoology in Early Modern Culture: Intersections of Science, Theology, Philology and Religious Education*, ed. by Karl A. E. Enenkel and Paul J. Smith (Leiden: Brill, 2014) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004279179> [accessed 12 Mar 2023], pp. 401-433

Robert-Nicoud, Vincent, *The World Upside Down in 16th-Century French Literature and Visual Culture* (Leiden: Brill, 2018) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004381827> [accessed 12 Mar 2023]

Rublack, Ulinka, 'Befeathering the European: The Matter of Feathers in the Material Renaissance', *The American Historical Review*, 126 (2021), 19-53 <https://doi.org/10.1093/ahr/rhab006> [accessed 12 Mar 2023]

Rublack, Ulinka and Stefan Hanß, 'Knowledge Production, Image Networks, and the Material Significance of Feathers in Late Humanist Heidelberg', *Renaissance Quarterly*, 74 (2021), 412-453 <https://doi.org/10.1017/rqx.2021.2> [accessed 12 Mar 2023]

Rublack, Ulinka and Giorgio Riello, 'Introduction', in *The Right to Dress: Sumptuary Laws in a Global Perspective, c. 1200-1800*, ed. by Ulinka Rublack and Giorgio Riello (Cambridge: Cambridge University Press, 2019) <https://doi.org/10.1017/9781108567541> [accessed 13 Mar 2023], pp. 1-34

Russo, Alessandra, 'Cortés's Objects and the Idea of New Spain: Inventories as Spatial Narratives', *Journal of the History of Collections*, 23 (2011), 229-252 <https://doi.org/10.1093/jhc/fhq041> [accessed 13 Mar 2023]

Russo, Alessandra, Gerhard Wolf and Diane Fane, *Images Take Flight: Feather Art in Mexico and Europe 1400-1700* (Munich: Hirmer, 2015)

Sahlins, Peter, *1668: The Year of the Animal in France* (New York: Zone Books, 2017)

Sawday, Jonathan, *The Body Emblazoned: Dissection and the Human Body in Renaissance Culture* (London: Routledge, 1995)

Schnapper, Antoine, *Le Géant, la licorne, la tulipe: Collections françaises au XVIIe siècle* (Paris: Flammarion, 1988)

Smith, Pamela H., *Merchants and Marvels: Commerce, Science, and Art in Early Modern Europe* (London: Routledge, 2002)

Smith, Paul J., 'Deux Recueils d'Illustrations Ornithologiques: Des *Icones Avium* (1555-1560) de Conrad Gessner et les *Portraits d'oyseaux* (1557) de Pierre Belon', in *Natural History in Early Modern France: The Poetics of an Epistemic Genre*, ed. by Raphaële Garrod and Paul J. Smith (Leiden: Brill, 2018), pp. 18-45

--, 'Interpreting the *Quart Livre*', in *A Companion to François Rabelais*, ed. by Bernd Renner (Leiden: Brill, 2021) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/9789004460232> [accessed 9 Mar 2023], pp. 325-356

--, 'On Toucans and Hornbills', in *Early Modern Zoology: The Construction of Animals in Science, Literature and the Visual Arts*, ed. by Karl A. E. Enenkel and Paul J. Smith (Leiden: Brill, 2007) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1163/ej.9789004131880.i-657> [accessed 6 Mar 2023], pp. 75-119

Swain, Margaret H., *The Needlework of Mary, Queen of Scots* (New York: Van Nostrand Reinhold, 1973)

Testa, Simone, *Italian Academies and their Networks, 1525-1700: From Local to Global* (Basingstoke: Houndmills, 2015) <https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=4828505> [accessed 8 Mar 2023]

Tinguely, Frédéric, *Le Voyager aux milles tours: Les ruses de l'écriture du monde à la Renaissance* (Paris: Champion, 2014)

Trotot, Caroline, 'Introduction', in *Métaphore, savoirs et arts au début des temps modernes*, ed. by Caroline Trotot and Bruno Petey-Girard (Paris: Classiques Garnier, 2016), pp. 7-20

Tutino, Stefania, 'Jesuit Accommodation, Dissimulation, Mental Reservation', in *The Oxford Handbook of the Jesuits*, ed. by Ines G. Županov (Oxford: Oxford University Press, 2018) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1093/oxfordhb/9780190639631.001.0001> [accessed 9 Mar 2023], pp. 216-240

Usher, Phillip John, *Errance et cohérence: Essai sur la littérature transfrontalière à la Renaissance* (Paris: Classiques Garnier, 2006)

Wallace, Anthony F. C., 'Xanadu: Dreams and the Dark Side of Paradise', in *Dreams, Dreamers, and Visions: The Early Modern Atlantic World*, ed. by Anne Marie Plane and Leslie Tuttle (Philadelphia: University of Pennsylvania Press, 2013) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.9783/9780812208047> [accessed 6 Mar 2023], pp. vii-xiv

Walsham, Alexandra, 'Introduction: Relics and Remains', *Past & Present*, 206 (2010), 9-36 <https://doi.org/10.1093/pastj/gtq026> [accessed 12 Mar 2023]

Westerhoff, Jan C., 'A World of Signs: Baroque Pansemioticism, the Polyhistor and the Early Modern Wunderkammer', *Journal of the History of Ideas*, 62 (2001), 633-650 <https://www.jstor.org/stable/3654331> [accessed 12 Mar 2023]

Williams, Wes, 'D'un ami l'autre: La Figure du compagnon chez les pelerins de Jerusalem', *Romanic Review*, 94 (2003), 93-114

--, '"L'Humanité du tout perdue": Early Modern Monsters, Cannibals and Human Souls', *History and Anthropology*, 23 (2012), 235-256 <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1080/02757206.2012.675817> [accessed 6 Mar 2023]

--, *Monsters and their Meanings in Early Modern Culture: Mighty Magic* (Oxford: Oxford University Press, 2011)

--, *Pilgrimage and Narrative in the French Renaissance: 'The Undiscovered Country'* (Oxford: Oxford University Press, 1998)

Wintroub, Michael, *The Voyage of Thought: Navigating Knowledge Across the Sixteenth-Century World* (Cambridge: Cambridge University Press, 2017) <https://doi-org.ezproxy-prd.bodleian.ox.ac.uk/10.1017/9781316946459> [accessed 12 Mar 2023]

List of Figures

Figure 1. *Portrait du Combat entre les Sauvages Toüoupinambaoults et Margajas Ameriquains*, in Jean de Léry, *Histoire d'un voyage faict en la terre du Brésil, autrement dite Amerique* (Geneva: Antoine Chuppin, 1580) <https://www.google.co.uk/books/edition/Histoire_d_un_voyage_fait_en_la_terre_du/WGFoAAAAcAAJ?hl=en> [accessed 5 Mar 2023], p. 196.

Figure 2. *Danseur et Sonneur de Maracas*, in Jean de Léry, *Histoire d'un voyage faict en la terre du Brésil, autrement dite Amerique* (Geneva: Antoine Chuppin, 1580) <https://www.google.co.uk/books/edition/Histoire_d_un_voyage_fait_en_la_terre_du/WGFoAAAAcAAJ?hl=en> [accessed 5 Mar 2023], p. 246.

Figure 3. *Guerriers Indiens du Brésil ayant fait un prisonnier*, in Jean de Léry, *Histoire d'un voyage faict en la terre du Brésil, autrement dite Amerique* (Geneva: Antoine Chuppin, 1580) <https://www.google.co.uk/books/edition/Histoire_d_un_voyage_fait_en_la_terre_du/WGFoAAAAcAAJ?hl=en> [accessed 5 Mar 2023], p. 214.

Figure 4. *Portraict d'un bec d'oyseau apporté des terre neufves*, in Pierre Belon, *Histoire de la nature des oyseaux: Avec leurs descriptions et naïfs portraicts* (Paris: Gilles Corrozet, 1555), p. 184.

Figure 5. *D'un oyseau nommé Toucan*, in André Thevet, *Les Singularitez de la France Antarctique, autrement nommée Amérique, et de plusieurs terres et isles découvertes de nostre temps* (Paris: Maurice de la Porte, 1557), 91r.

Figure 6. *Bec d'un oyseau aquatique apporté des terres neufves*, in Pierre Belon, *Portraits d'oyseaux, animaux, serpens, herbes, arbres, hommes et femmes d'Arabie et d'Égypte: Le Tout enrichy de quatrains, pour plus facile cognoissance des oyseaux et autres portraits* (Paris: Guillaume Cavellat, 1557) <https://gallica.bnf.fr/ark:/12148/bpt6k1511381f> [accessed 6 Mar 2023], 40r.

Figure 7. *Pica Bressillica*, in Conrad Gessner, *Icones avium omnium, quæ in historia avium Conradi Gesneri describuntur, cum nomenclaturis singulorum Latinis, Italicis, Gallicis et Germanicis plerunque, per certos ordines digestæ* (Zurich: Christoph Froschauer, 1560) <https://archive.org/details/gri_33125011099229/mode/2up> [accessed 8 Mar 2023], p. 130.

Figure 8. *Altera icon eiusdem avis ex Andrea Theveto et Ambrosio Parao*, in Conrad Gessner, *Historiæ animalium liber III. qui est de Avium natura* (Frankfurt am Main: Johann Wechel, 1585) <https://www.google.co.uk/books/edition/_/L6lkAAAAcAAJ?hl=en&gbpv=0> [accessed 8 Mar 2023], p. 801.

Figure 9. *Portrait du Toucan*, in André Thevet, *La Cosmographie universelle* (Paris: Guillaume Chaudière, 1575) <https://gallica.bnf.fr/ark:/12148/btv1b8626691v?rk=21459;2> [accessed 8 Mar 2023], 938v.

Figure 10. *De l'oiseau nommé Toucan*, in Ambroise Paré, *Les Œuvres*, ed. by Jean Céard, Evelyne Berroit-Salvadore and Guylaine Pineau (Paris: Classiques Garnier Numérique, 2019) <https://classiques-garnier-com.ezproxy-prd.bodleian.ox.ac.uk/pare-ambroise-les-oeuvres.html> [accessed 8 Mar 2023], p. 2328.

Figure 11. *Picam Bresillicam*, in Ulisse Aldrovandi, *Ornithologiae hoc est de avibus historiae libri xii* (Bologna: Franciscum de Franciscis, 1599) <https://www-proquest-com.ezproxy-prd.bodleian.ox.ac.uk/books/vlyssis-aldrovandi-ornithologiae-hoc-est-de/docview/2090363540/se-2> [accessed 8 Mar 2023], p. 802.

Figure 12. *Tocam ex Theveto et Pareo*, in Ulisse Aldrovandi, *Ornithologiae hoc est de avibus historiae libri xii* (Bologna: Franciscum de Franciscis, 1599) <https://www-proquest-com.ezproxy-prd.bodleian.ox.ac.uk/books/vlyssis-aldrovandi-ornithologiae-hoc-est-de/docview/2090363540/se-2> [accessed 8 Mar 2023], p. 803.

Figure 13. *Picus Americanus*, in Johann Faber, *Animalia Mexicana descriptionibus, scholijsque exposita* (Rome: Jacobum Mascardum, 1628) <https://www.google.co.uk/books/edition/Ioannis_Fabri_Lyncei_Bambergensis_Animal/cW3g9gzIdd4C?hl=en> [accessed 8 Mar 2023], p. 697.

Figure 14. *De passere longi-rostro: Xochitenacatl*, in Juan Eusebio Nieremberg, *Historia naturæ, maxime peregrinæ* (Antwerp: Plantin, 1635) <https://archive.org/details/ioanniseusebiini00nier_0/mode/2up> [accessed 9 Mar 2023], p. 208.

Figure 15. *Altera Xochitenacatl*, in Juan Eusebio Nieremberg, *Historia naturæ, maxime peregrinæ* (Antwerp: Plantin, 1635) <https://archive.org/details/ioanniseusebiini00nier_0/mode/2up> [accessed 9 Mar 2023], p. 209.

Figure 16. 'Jonston's many-named birds', in Jan Jonston, *Historiæ naturalis de avibus libri vi* (Amsterdam: J. J. Schipperi, 1657) <https://archive.org/details/bub_gb_iES6mT9zVt8C_2> [accessed 9 Mar 2023], p. 125.

Figure 17. *Portraict d'un bec d'oyseau apporté des terre neufves*, in Pierre Belon, *Histoire de la nature des oyseaux: Avec leurs descriptions et naïfs portraicts* (Paris: Gilles Corrozet, 1555), p. 184.

Figure 18. Mary Stuart, 'A Byrd of America', *The Marian Hanging*, c. 1570-1580, embroidery, Victoria and Albert Museum, London.

Figure 19. *D'un oyseau nommé Toucan*, in André Thevet, *Les Singularitez de la France Antarctique, autrement nommée Amérique, et de plusieurs terres et isles découvertes de nostre temps* (Paris: Maurice de la Porte, 1557), 91r.

Figure 20. '*Toucan* and *Maracas* in Contant's *Jardin et Cabinet Poétique*', in Paul Contant, *Le Jardin, et cabinet poétique de Paul Contant apoticaire de Poictiers* (Poitiers: Antoine Mesnier, 1609) <https://archive.org/details/leiardinetcabine00cont/mode/2up> [accessed 13 Mar 2023], unpaginated.

Figure 21. Jan Sadeler after Maarten de Vos, *The Fifth Day: The Creation of the Birds and the Fishes*, c. 1587, engraving, 198 × 249 mm, Rijksmuseum, Amsterdam.

Figure 22. 'Detail from *The Fifth Day: Creation of the Birds and the Fishes*', Jan Sadeler after Maarten de Vos, *The Fifth Day: The Creation of the Birds and the Fishes*, c. 1587, engraving, 198 × 249 mm, Rijksmuseum, Amsterdam.

Figure 23. Jan Brueghel the Elder and Peter Paul Rubens, *The Garden of Eden with the Fall of Man*, 1615, oil on canvas, 74.3 × 114.7 cm, Mauritshuis, The Hague.

Figure 24. 'Detail from *The Garden of Eden with the Fall of Man*', Jan Brueghel the Elder and Peter Paul Rubens, *The Garden of Eden with the Fall of Man*, 1615, oil on canvas, 74.3 × 114.7 cm, Mauritshuis, The Hague.

Figure 25. Jan van Balen, *Noah and the Ark*, c. 1625-1650, oil on canvas, 50 × 67 cm, Russell-Cotes Art Gallery and Museum, Bournemouth.

Figure 26. *Antique Tile with Bird (Toucan)*, c. 1625-1650, ceramic, 13 × 13 × 1.1 cm <https://www.catawiki.com/en/l/24286163-antique-tile-with-bird-toucan-17th-century-rare-ceramic> [accessed 21 Mar 2023].

Figure 27. Jan Brueghel the Elder and Peter Paul Rubens, *Allegory of Hearing*, c. 1617-1618, oil on panel, 64 × 109.5 cm, Museo del Prado, Madrid.

Figure 28. 'Detail from *Allegory of Hearing*', Jan Brueghel the Elder and Peter Paul Rubens, *Allegory of Hearing*, c. 1617-1618, oil on panel, 64 × 109.5 cm, Museo del Prado, Madrid.