fable method and imagination in descartes

JAMES GRIFFITH

Fable, Method, and Imagination in Descartes

James Griffith

Fable, Method, and Imagination in Descartes

palgrave
macmillan

James Griffith
Bratislava International School of Liberal Arts
Bratislava, Slovakia

ISBN 978-3-319-70237-7 ISBN 978-3-319-70238-4 (eBook)
https://doi.org/10.1007/978-3-319-70238-4

Library of Congress Control Number: 2017957864

© The Editor(s) (if applicable) and The Author(s) 2018
This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.
The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.
The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Cover illustration: The Print Collector / Alamy Stock Photo

Printed on acid-free paper

This Palgrave Macmillan imprint is published by Springer Nature
The registered company is Springer International Publishing AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

To my mother

Preface

This project began as a doctoral dissertation at DePaul University in Chicago, in particular with a graduate seminar in which I was struck by how strange it seemed that Descartes, the philosopher of clear and distinct ideas, would refer to one of his fundamental works on science, *The World*, as a fable. To some degree, this fact still seems strange to me. In trying to work out why Descartes would have done this, I discovered a strand of literature on the subject and eventually realized that paying close attention to it could have a significant impact in how we understand the father of modernity.

As the father of modernity, Descartes can seem distant from our ostensibly postmodern world. However, certain readers make clear that he is much closer to ourselves than we might always want to admit. And yet, his paternity does not exist in a vacuum and those other readers help lay out the conditions under which Descartes was writing and philosophizing. Attending to the status of something as strange as the fable in Descartes should, it seems to me, take care to acknowledge both of these aspects, the strange closeness and the historical distance. The foundations of modernity occur in a time when an astonishing number of concepts concerning the world and methods of how to engage it were at play and in flux, leading to an impressive creativity and imaginativeness on the part of those involved in laying its foundations. In this way, we can acknowledge that there may be more to this moment than what the tradition has told us even as we are careful about the context in which it emerged.

With those conditions and possibilities in mind, I attempt to give an account of how we can understand the status of the fable in Descartes'

overall philosophy. Chapter 1 gives some context to the turn to fable in Descartes, especially in comparison to others. Chapter 2 explores the use of the word as relates to his arguments in physics and in training the mind. Chapter 3 takes the understanding of this relationship into other moments in Descartes' corpus where he makes similar claims, though without using the precise word 'fable'. In doing so, a pattern emerges of new beginnings as requiring a way of deploying his new philosophy without defending it on the grounds of the old, a pattern I consider structurally crucial for Descartes. Chapter 4 examines how this structure affects the way we understand his methodology, especially in the traditional understanding that it is purified of things like history, or perhaps storytelling more generally. Chapter 5 then looks at Cartesian psychology with all of this in mind to show that the imagination, especially in its relationship to the will, is more important to achieving our philosophical and scientific potential than we may have acknowledged. Finally, Chap. 6 attempts to draw all of this together to offer a way to read Descartes anew.

Too many people to name contributed to this work's development in the form of invaluable conversations at various points of its development, although Alicen Beheler, William Meyerowitz, and Amanda Parris were of particular help. Most importantly, I would like to thank Richard A. Lee, Jr., Michael Naas, Peg Birmingham, and the anonymous reader of the original manuscript for their comments and guidance in seeing it to completion. Any errors of course remain my own.

The Graduate Research Conference Funding and Doctoral-Undergraduate Opportunities for Scholarship Programs at DePaul University gave monetary support to present early stages of this research. This work was supported by the Slovak Research and Development Agency under the contract No. APVV-15-0682.

Bratislava, Slovakia James Griffith

Contents

1 Introduction 1
References 8

2 Fable in *The World* and the *Discourse* 11
Fable and Poetry 11
Fable and Pedagogy 24
References 44

3 Fable-Structure or -Logic 47
Fable and Other Forms 47
Fable and Deception 62
References 83

4 Method 87
Simplicity and Complexity 88
Error and Inexact Science 102
Histoire, *Rule-Obedience, and Rule-Generation* 113
References 141

5 Imagination 145
Pedagogy and Imagination 146
Space and Fable 159
Will, Wonder, and Imagination 171
References 195

6 Conclusion 199

Index 203

Abbreviations

AT	René Descartes, *Oeuvres de Descartes*, ed. Charles Adam and Paul Tannery, 12 vols. (Paris: Librairie Philosophique J. Vrin, 1897–1913). Followed by volume number in Roman numerals.
CED	Princess Palatine Elisabeth of Bohemia and René Descartes, *The Correspondence between Princess Elisabeth of Bohemia and René Descartes*, ed. and tr. Lisa Shapiro (Chicago: The University of Chicago Press, 2007).
CSM	René Descartes, *The Philosophical Writings of Descartes*, tr. John Cottingham, Robert Stoothoff, and Dugald Murdoch, 2 vols. (Cambridge: Cambridge University Press, 1984–1985). Followed by volume number in Roman numerals.
CSM-K	René Descartes, *The Philosophical Writings of Descartes*, tr. John Cottingham, Robert Stoothoff, and Dugald Murdoch, and Anthony Kenny (Cambridge: Cambridge University Press, 1991).
DCB	René Descartes, *Descartes' Conversation with Burman*, tr. John Cottingham (Oxford: Clarendon Press, 1976).
E	René Descartes, *Discourse on Method, Optics, Geometry, and Meteorology*, tr. Paul J. Olscamp (Indianapolis, IN: Hackett Publishing Company, Inc., 2001).
HR	René Descartes, *The Philosophical Works of Descartes*, tr. Elizabeth S. Haldane and G. R. T. Ross, 2 vols. (Cambridge: Cambridge University Press, 1985). Followed by volume number in Roman numerals.

LMD Adrien Baillet, *The Life of Monsieur Des Cartes, Containing the History of his Philosophy and Works: as also, The most Remarkable Things that befell him during the whole Course of his Life* (abridged), tr. S. R. (1693).

TM René Descartes, *Treatise of Man*, tr. Thomas Steele Hall (Amherst, NY: Prometheus Books, 2003).

VMD Adrien Baillet, *La Vie de Monsieur Des-Cartes*, 2 vols. (1691). Followed by volume number in Roman numerals.

W René Descartes, *The World, or Treatise on Light*, tr. Michael S. Mahoney, http://princeton.edu/~hos/ mike/texts/descartes/world/world.htm, accessed January 10, 2008.

CHAPTER 1

Introduction

I would like to show three things here, the first two of which can be considered together and the third of which emerges from them. First, I want to show that there is a structure and purpose akin to fables in early moments of Descartes' texts throughout his career; second, that this structure and purpose mean that the method he developed is neither as simple nor as pure as he claimed; and third, that, with these first two readings of Descartes' philosophy at hand, the mind's faculties are reformed thanks to the imagination, which is itself a faculty.

Cottingham (1988) describes Descartes' method succinctly when he writes that it "consists in breaking a problem down and taking it back to its simplest essentials, until we arrive at propositions which are simple and self-evident enough to serve as reliable 'principles' or starting points, from which the answers to the questions that perplex us may eventually be deduced" (Cottingham 1988, p. 36). Descartes developed this method in imitation of mathematics, especially geometry and what will become, through him, algebra, where knotty problems are resolved through a process of simplification until the essential points are revealed and the solution clear. One of his major contributions to philosophy is the generalization of this method, known as analytic reduction or analysis, beyond mathematics proper, into all scientific pursuits, including metaphysics.

However, Descartes did not develop this method in a vacuum, but in explicit distinction from the investigative methods dominant in at least the universities of the time. In particular, it was developed against what in

© The Author(s) 2018

J. Griffith, *Fable, Method, and Imagination in Descartes*,
https://doi.org/10.1007/978-3-319-70238-4_1

mathematics is called the synthetic method, a method Descartes associates with syllogisms. Whereas a synthesis operates via "assumed abstract objects and statements about them, and, by a series of steps conventionally admitted to be valid, arrived at a desired conclusion" (Jones 1986, p. 66), a syllogism's conclusion emerges from previously accepted premises. Neither approach is acceptable for Descartes because he wants to be able to claim that his scientific knowledge is clear and distinct precisely because it does not emerge from assumptions or premises not arrived at from an analytic reduction.

He wants to be able to claim to have shown to himself clear and distinct ideas as concerns the truth of the world. He needs to be able to make such a claim, and thus to be able to show others how they can show such things to themselves, despite and because he himself came across it by chance and not by method (see CSM I, p. 112; AT VI, p. 3). Descartes begins many of his texts—in particular the *Discourse on Method*, the *Meditations on First Philosophy*, and the *Principles of Philosophy*—by saying we should take note of facts such as, at a distance, a square tower can appear round. If the world is sometimes deceptive, it is dubitable, and there would seem to be no escape from this doubt, especially if "All teaching and all learning through discourse proceed from previous knowledge" (Aristotle 1981, 71a) when this previous knowledge would itself be based on deceptive, dubitable sensation.[1] Thus, Descartes' search is for a method that will allow for correcting some of the errors involved with synthesis and syllogism.

However, he runs into the problem of justifying this new method. Indeed, the question at hand in much of Descartes' project is how any method is justified. On the one hand, it might appear as though utility could be a satisfactory explanation. On the other, this explanation works on the assumption that a method has already been deployed because, to judge something as useful, a method must have already been used in order for its utility to be discovered. What is at stake in Descartes is how anyone can inaugurate a new method. Doing so requires a shift in thinking, in the most basic standards of what even constitutes thinking. Thus, it is impossible for Descartes, for the most part and in most of his works, to engage in the syllogistic or synthetic reasoning of the universities of his day. One cannot inaugurate a new method through an old one, at least not when the methods at hand are fundamental for all education. Some technique other than that of logic, of proofs, premises, and conclusions is required.

In at least three crucial moments throughout Descartes' career, he has recourse to an interesting choice of technique: the fable. In the beginning of *The World, or a Treatise on Light*, the *Discourse*, and in a late portrait made of him, Descartes (or a book he holds in the portrait) refers to his work (or to the world itself) as a fable. In the context of the pedagogical reorientation at the heart of the Cartesian project, 'fable' is not just one literary genre among others. It is a genre with pedagogical intent embedded within it in a way other genres do not necessarily have. It also cannot be forgotten that the fable is a literary genre, and is thus associated with the imagination. That Descartes has recourse to an imaginative, literary technique to launch his new method should not be dismissed too easily. Rather than engaging the reader directly in how he can justify his method—an impossible task when the method is at the heart of justification itself—Descartes focuses on how he can get his reader *into* his method. Doing so is accomplished through the fable, through telling a story that draws the reader into his way of thinking such that he or she begins thinking along with Descartes, begins deploying this method on his or her own. Thus, utility is not a justification for the method until after the reader has already been immersed in the method. The new method is set to work by the imaginative act involved in telling a fable, and this new method becomes the operation of a new kind of pedagogy that Descartes is interested in developing—one of a self-instruction that involves no assumptions (save, of course, that of the fable's story).

The third thing I hope to show, that the mind's faculties are reformed through the faculty of the imagination, emerges from these first two points in that the mind is that which applies the method, or is that which does the thinking along with Descartes. It is not that there had never been thinking prior Descartes or that there were no minds at all. Rather, it is that the thinking and the methods for what was considered proper thinking were problematic and the minds formed by this thinking and method were in fact malformed or deformed. What was malformed or deformed, then, was the mind's faculties. Yet these faculties are what engage in thinking, which means they are to reform themselves in Descartes' reformation of the mind and the method it will use to gain clear and distinct ideas about the world. Through the fable, Descartes engages the faculty of the imagination to begin this reformation. Among the faculties to be reformed by the imagination and through the fable will of course be the will, which is considered infinite. However, at least in the Sixth Meditation, the imagination is considered finite because it is dependent on finite perceptions, which would

seem to make it impossible for it to reform the infinite will (see CSM II, p. 54–55; AT VII, p. 79). The use of the fable as an imaginative technique to inaugurate the method used by the mind, however, shows that the imagination cannot be considered purely finite. Indeed, Descartes' fables ask the reader to imagine the world as other than how it appears such that the mind's faculties, including the will, can take up this new world through his method. This dynamic shows that the faculty of the imagination is neither precisely finite nor precisely infinite but is rather what I will call transfinite, moving between the finite and the infinite. The imagination, through the fable, exceeds limits it will set for itself in the reformation of the faculties established by the method of thinking which is entered into thanks to the fable, the fable-structure or -logic that runs to the heart of his method.

A brief comparison of Descartes' recourse to fable with the reasons why another philosopher of the period, Margaret Cavendish, uses fictions will help clarify the relationship of the imagination to the will and highlight the importance of the fable as concerns Descartes specifically. Although she did publish non-fictional speculative works, in many ways Cavendish wrote her fictional pieces because she was forced to do so, as did many other women philosophers in the seventeenth century since they were excluded from the developing discourse that embraced the changes Descartes sought to launch in academic settings as distinct from the discourse in salons.[2] In one of these speculative works, *Observations upon Experimental Philosophy*, she suggests that the will can be obstructed by, if nothing else, bad philosophy, and claims that voluntary actions come from within rather than through an external force (see Cavendish 2001, pp. 22 and 19). In the companion piece to *Observations*, the fiction called *The Blazing World*, fictions can be framed according to the writer's desires because fancy "creates of its own accord" a product which is "a voluntary creation or production of the mind" (Cavendish 2004, p. 123). Thus, she has been able to create a new world over which she reigns and which she hopes will please the reader as well. What is more, creating a new world through the imagination like this "is in every one's power" (Cavendish 2004, p. 124), even those who cannot hope to aspire to, for instance, political or military ambition.

One difference between *The Blazing World* and at least *The World* that immediately comes to the fore is that Cavendish (2004) feels no compulsion to describe her new world as like our own, while Descartes' fable is of a new world which operates just like ours. In this way, Cavendish (2004) claims a greater power to the imagination than Descartes, even if his imagination is transfinite in the sense I am giving the word.

However, there are other differences in terms of the relationship of external force, the will, and the imagination. Descartes, not unlike Cavendish, was forced into writing his *World* as a fable because of external circumstances, but those circumstances differ in important ways. At least prior to the 1616 admonition of Galileo forced upon him by Pope Paul V, Cardinal Robert Bellarmine seems to have considered him and other defenders of the heliocentric system to be doing enough to stay off the *Index Librorum Prohibitorum* if they presented their theories as not absolute truth (see Bellarmine 2008, p. 146). Thus, Galileo presents his work as hypothetical and defends it on these grounds in his depositions (see Galilei 2008, pp. 276–287). Descartes, writing *The World* between 1629 and 1633, presents his contribution to heliocentrism not just as a hypothesis, but as a fable. In this way, he goes beyond what was at the time thought to be sufficient to avoid placement on the *Index* if a fable is to be understood as a product of the imagination. In Cavendish's case, the turn to fable is a way to generate a world over which she could be sovereign, as distinct from the world in which she lived where her will was obstructed by the gender dynamics of the time and at least possibly by bad philosophy. What is more, Descartes' turn to fable understood as a product of the imagination would seem all the more unnecessary given his understanding of the will as infinite, while for Cavendish the will, insofar as it can be obstructed, cannot be considered infinite, and the imagination seems to have just such a standing for her. If the will is infinite, and if hypothesis seems to have been considered sufficient to avoid being placed on the *Index*, why does Descartes deploy a fable here? The force of the gender dynamics pushing Cavendish and others into writing imaginative works can thus be understood as stronger than the religio-political force working on Descartes. In combination with this point, differences between Cavendish and Descartes' philosophies as concerns the status and role of the faculties of will and imagination mean that the former's turn to works of the imagination can be more immediately understood.

Understanding Descartes' turn to fable and the effect it has on our understanding of his method and of the imagination in his philosophy is then the goal here. I attempt to lay out this understanding and the effect by, first, examining the use of fable in *The World* and the *Discourse*, supplemented by the *Comments on a Certain Broadsheet*, such that what can be seen is that the fable in the former has a similar effect on the reader's mind as light in the physical world being described and that, in the *Discourse*, the pedagogical role of the fable as renewing a mental motion in the reader.

Second, I continue the examination of the *Discourse* to include the historical background to the story it tells and comparing it with *The World* taken as a treatise. Afterwards, I look to a dialog, *The Search for Truth by Means of the Natural Light*; the *Principles of Philosophy*, which Descartes asks his readers to take up as a novel; and the roles of doubt, hyperbole, and the evil genius in the *Meditations* to bring to light a fabular structure to important moments throughout his philosophy.

Third, I take up Descartes' discussions of analytic and synthetic methods in the *Objections and Replies*, *Discourse*, *Rules for the Direction of the Mind*, and *Geometry* to show that the supposed simplicity of analysis is actually in a complex relationship with synthesis. Then I continue with the *Rules* and *Principles* and also turn to a letter to Princess Elizabeth of Bohemia to show the Cartesian method as not so much pure as always in relation with inexact sciences like history and that metaphysics and ethico-political life operate in mutual imitation.

Fourth, I return to *The Search*, *Meditations*, and *Objections and Replies*, supplemented by a notebook Descartes kept between 1619 and 1621 to show that the mind's faculties cannot have been formed prior to his philosophy's inauguration of thinking. I then return to *The World*, *Rules*, *Principles*, and *Meditations*, adding to them readings of the *Optics*, *Treatise of Man*, and *The Passions of the Soul*, to demonstrate that the imagination as a faculty is what I will call transfinite, or moves between the infinitude of the will and the finitude of perception. This transfinite quality allows the imagination to fabulate in order to set off the motion of thinking that will form the mind's faculties, including the imagination's supposed finitude and passivity. The third and fourth points require the examination of the first and second regarding fable.

Before beginning this process of understanding the turn to fable and its effects on the method and imagination, however, I would like to briefly consider here the third, and final, positive appearance of fable as connected with Descartes. The portrait of him by Jan Baptist Weenix, where Descartes holds a large book with the words "Mundus EST fabula" seen on the verso page, was painted between 1647 and 1649, hence between three years and one before his sudden death in Sweden. Before this, the last time "fable" appears in his published work with anything close to a positive inflection is in the *Discourse on Method*, published in 1637.[3] In the end, whether the Weenix portrait constitutes a final positive reference to fables could appear somewhat debatable. What would become of the firm ground for the existence of the world as laid out in the *Meditations*, the *Replies*, the *Principles*

of Philosophy, and so on if the world remains a fable? Perhaps taking the world as a fable is to take it as the pedagogical tool par excellence, since we are to learn from the world and not from Scholasticism or its books. If that were the case, the world would have its rules ready-made for discovery, provided we have habituated ourselves to a more realistic method of engagement with this world and its rules, all of which would have been authored by the omnipotent and omniscient god who does not deceive. This god can still be said not to deceive because the fabular quality of the world would be so only for the purpose of stirring the human mind to engage its rational and therefore uniquely human qualities.

Of course, none of this would explain the fading of the fable from Descartes' favor. The word simply fails to appear in any of his writings composed for publication or more general distribution after the *Discourse*. More to the point, it seems to have taken on a decidedly negative connotation in at least two letters written after the publication of the *Discourse*: In one, he writes, "As for the likenesses of little dogs, which are said to appear in the urine of those who have been bitten by mad dogs, I must admit that I have always thought it was a fable" (CSM-K, p. 144; AT III, p. 20), while in a letter to Mesland from May, 1645, he writes that, regarding his *Principles*, "one must either reject everything contained in the last two parts and simply take it as a pure hypothesis or even a fable, or else accept the whole of it" (CSM-K, p. 249; AT IV p. 217).

The following may remain only a hypothesis, but if the fable returned in the Weenix (whether or not "Mundus EST fabula" was Descartes' idea), thereby returning at the end of his life (whether or not Descartes or Weenix knew it was the end), such a return may indicate a return to the beginning of his career, and to beginnings in general. Here, right at the very end, he seems to be telling us to return to the beginning, to return to his fables, to return to fables and the related imaginative genres of poetry, fiction, novels, and so on, that always appear, whether they appear explicitly or not, at the beginnings of his works.

Notes

1. See also Aristotle, *Physics*, 184a–184b.
2. See for instance Kate Lilley, "Introduction," in Cavendish (2004); Erica Harth, *Cartesian Women: Versions and Subversions of Rational Discourse in the Old Regime* (Ithaca, NY: Cornell University Press, 1992); and François Poullain de la Barre, *On the Equality of the Two Sexes*, in *Three Feminist Treatises*, tr. Vivien Bosley (Chicago: The University of Chicago Press, 2002).

3. Readers of the 1647 Louis-Charles d'Albert French translation of the *Meditationes de Prima Philosophia* or readers of the HR may disagree with this statement, since, in the First Meditation, Descartes writes, in French, "Mais ne leur resistons pas pour le present, & supposons, en leur faueur, que tout ce qui est. dit icy d'vn Dieu soit vne *fable*" (AT IX, p. 16; my emph.), and, in English, "But let us not oppose them [i.e., extreme skeptics] for the present, and grant that all that is here said of God is a *fable*," (HR I, p. 147; my emph.). However, this is an instance where the French translation is different from Descartes' original Latin. In the first, 1641, edition of the *Meditationes*, this sentence reads, "Sed iis non repugnemus, totumque hoc de Deo demus esse *fictitium*" (AT VII, p. 21; my emph.). Because he primarily follows the Latin text, John Cottingham translates this sentence as "Let us not argue with them, but grant them that everything said about God is a *fiction*" (CSM II, p. 14; my emph.). Cottingham explains his preference for the Latin because "the French version stays fairly close to the Latin" and is sometimes a paraphrase of or simply clumsier than the Latin, so "There is no good case for giving the French version greater authority than the original Latin, which we know that Descartes himself composed" (ibid., pp. 1 and 2). However, Cottingham also says, citing Adrien Baillet's biography, that Descartes not only approved d'Albert's translation, but also used it to "'retouch his original work'" (VMD II, p. 172; cited in CSM II, p. 1). Because it is unclear whether Descartes ever published a 'retouched' edition of his *Meditationes*, we are left with at least three possibilities for this discrepancy between the Latin and the French: (1) D'Albert made the change and Descartes did not notice it; (2) d'Albert made the change and Descartes did not think the two words were different enough for him to ask d'Albert to change it to "fiction"; and (3) d'Albert made the change and Descartes noticed it, approved it as an improvement, and retouched his manuscript to accord with d'Albert. Without knowledge of any publicly available retouched Latin manuscript or a second edition of the *Meditationes*, deciding between these three options seems impossible.

References

Aristotle. 1981. *Posterior Analytics*. Translated by Hippocrates G. Apostle. Grinnell, IA: The Peripatetic Press.

Bellarmine, Cardinal Robert. 2008. "Cardinal Bellarmine's Letter to Foscarini." In Galileo Galilei, *The Essential Galileo*, edited and translated by Maurice A. Finocchiaro, 146–148. Indianapolis: Hackett Publishing Company.

Cavendish, Margaret. 2001. *Observations Upon Experimental Philosophy*, edited by Eileen O'Neill. Cambridge: Cambridge University Press.

———. 2004. *The Description of a New World, Called the Blazing World*. In *The Blazing World and Other Writings*, edited by Kate Lilley, 119–225. New York: Penguin Books.

Cottingham, John. 1988. *The Rationalists*. New York: Oxford University Press.

Galilei, Galileo. 2008. Chapter 9: From the Later Trial-Documents (1632–33). In *The Essential Galileo*, edited and translated by Maurice A. Finocchiaro, 272–293. Indianapolis: Hackett Publishing Company.

Jones, Alexander. 1986. Introduction. In Pappus of Alexandria, *Book 7 of the Collection, part 1*, edited and translated by Alexander Jones, 66–74. New York: Springer.

CHAPTER 2

Fable in *The World* and the *Discourse*

The question of how to begin, how to inaugurate a new form, style, or path of thinking opened Descartes onto the fable. Because so much concerning his metaphysical and epistemological claims hinge on methodological problems in the very inauguration of the how and why of what is learned, a defense of his new form or style of thinking cannot itself develop through that methodology. As a result, Descartes deviates from the course of thinking not precisely by defending his new form, style, or path, but by setting it to work it such that it may defend itself in its operation. This change in course occurs through Descartes' telling us that a given text is a fable, a literary form associated with pedagogical goals.

In order to trace out the effects of this change in course, a procedure of investigating the fable and its relationship to other forms of writing is necessary. First, however, a clarification on Descartes' more positive uses of 'fable' needs to be made so as to open up what can be meant by a fable-logic or -structure in Descartes' philosophy. This will occur by distinguishing between fable and poetry in *The World* and clarifying how the fable as a form serves a pedagogical purpose, in particular through its relationship to potential vs. possibility, in the *Discourse*.

Fable and Poetry

The fable of *The World* is an attempt to explain the operations of matter. Prior to describing this new, fabular world, Descartes lays out a theory of matter where there are three elementary forms of matter: earth, air, and

© The Author(s) 2018

J. Griffith, *Fable, Method, and Imagination in Descartes*,
https://doi.org/10.1007/978-3-319-70238-4_2

light (or fire or flame). These elements differ in the size of their composition and in the speed with which they move through the world, the speed of motion indicating their liquidity. Earth as an element is materially larger than the other two and moves most slowly, primarily by collision with the other elements. Air is smaller and faster than earth but larger and slower than light, and its size and speed indicate that it is not pure but rather has some aspect of light in it. Light is smallest and quickest, or most liquid, and can penetrate even the smallest crevices in matter, which can eventually break them apart. Descartes understands the world to be a plenum, with any empty space immediately filled by one or another element. In the fable itself, he presents a finitude of solid matter that cannot be considered any of the elements and into which god has introduced cracks without empty space between the parts created by those cracks. The introduction of these cracks sets off the motion of the newly created parts of this solid matter in different directions. For Descartes, this motion would, thanks to the laws of nature, necessarily settle into a world like our own, with its planets, comets, and other formations of elements. The beginning of this motion, which cannot be considered motions of elements yet because the pre-motive solid is not yet even earth, can be as chaotic as we can imagine and the world would still emerge in a form like our own. Finally, the chaos at hand here is connected with poetic description as an example of an imaginative description of what defies order, an order which defines the world itself, whether fabular or our own (see W, pp. 5–10; AT XI, pp. 16–35).

For the moment, this analysis is isolated exclusively to *The World*. It is not meant to be a general claim concerning Descartes' concept of poetry. As Stewart (1938) traces out, Descartes' "love of poetry survived to the end" (Stewart 1938, p. 242). Though he relies too heavily on the now-disputed ballet *La Naissance de la Paix* as evidence for this love at the end of Descartes' life, Stewart (1938) is still correct that Descartes had a respectful, though complex, relationship with poetry throughout his life. In *The World*, the association of poetry with chaos is not even necessarily meant as insulting, and this association cannot be taken as operating throughout Descartes' career. The association in *The World*, however, is helpful for bringing other aspects of his philosophy and his physics to attention.

I begin from this text, then, because of its import for other claims Descartes makes, both earlier and later in his career, concerning the relationship between rule-generation and rule-obedience as well as their relationships between rhetoric, language, pedagogy, and epistemology.

Chaos and Light

Here, I want to treat the status of the physical operations of the world as laid out in this treatise on light that understands itself as a fable. Without light, there is no world, even if there is matter. Descartes begins by noting that "there can be a difference between our sensation of light … and what is in the objects that produces that sensation in us." However, before the world can be a world, either insofar as it is in itself or insofar as it appears, light needs to come into being. Before light, there is the pre-motive solid, even if cracks have appeared and motion begun. Descartes describes a pre-world and -light universe that occupies precisely the same extent of space as our own world of light, but that is constituted not of the three fundamental elements of earth, air, and light (or flame), but is rather "a real, perfectly solid body," an absolute plenum. This, as it were, vision of space, not as a vessel filled with objects but as a plenum from out of which objects are carved, is consistent throughout Descartes' career. It is also crucial for making sense both of how a geometrized world can be understood from out of an algebraicized geometry and of the relationship between the imagination and the understanding, though I will be concerned only with the latter in this section (W, pp. 1 and 10; AT XI, pp. 3 and 33).[1]

It is a vision declared in the description of a fabular new world that matches perfectly the world we experience. However, before either the fabular new world or the world we experience come to be, this solid body not constituted of earth, air, or light remains a perfectly knowable, imaginable, supposable, and conceivable matter because it is that from out of which the three elements come to be.[2] The fact that this solid remains precisely not any of the elements of the world, whether fabular or experienced, is an important point to bear in mind. It is not the world proper, even if it is that from out of which the world emerges. The world, to be a world, needs light.

The emergence of the world occurs with movement. Although Descartes does not specifically claim that god initiates the movement, limiting himself to claiming god introduces the cracks, he does claim that god created the world as a world that operates according to rules ("loix de la Nature"). After this introduction, the movement of chaos follows three "principal rules [*principales regles*]" that lead to the emergence of the three fundamental elements of earth, air, and light as they operate in both the fabular and experienced worlds such that the specifics of the remaining laws of nature also emerge (W, p. 12; AT XI, pp. 37–38).

From out of pre-motive solid, then, the creative motion breaks apart its solidity such that pieces of this solid break off from each other—some smaller, others larger. The smaller pieces move faster and fit into smaller and deeper crevices within the remaining portions of the pre-motive solid, breaking it apart more as they do so. The movements of all these pieces follow the three principal rules, the first two of which roughly align with Newton's three laws of motion—"each individual part of matter always continues to remain in the same state unless collision with others constrains it to change that state" and "when one of these bodies pushes another, it cannot give the other any motion except by losing as much of its own at the same time; nor can it take away from the other body's motion unless its own is increased by as much"—while the third claims that all motion is rectilinear, even when it may appear circular or curved.[3] In other words, there are no curved or circular motions in the precise sense, only increasingly or decreasingly minute straight lines construed within three spatial dimensions that do not in themselves exist except as constituted by the material which moves in straight lines. That is, matter does not move through space, but the motion of matter constitutes what is understood as space. Space is not a container within which matter moves, but is the equivalent of matter itself. As the matter of the pre-motive solid breaks apart, developing into the elements of earth, air, and light, the mutual ricochet among these pieces erodes the pieces more or less into spheres composed of one or more element. The movement of matter may not be curved, but matter itself can be because of the increasingly subtle and glancing collisions that occur over the course of those pieces of matter following their laws of motion. As these collisions render the pre-motive solid into the three elements that are more or less spherical according to their material status (light is most spherical, earth least so, air in between), light gathers itself into the stars around which air, having gathered itself into the heavens, revolves thanks to a constant pressure from the movement of light from out of its gathering points. The movements of air in turn put pressure on the places where earth has gathered together in the form of planets and comets. The farther from the stars that the pieces of air and earth get from the pressure and collision of light, however, the slower the movements of air and earth become (W, pp. 7, 12–14, and 16–18; AT XI, pp. 23, 38–44, and 51–54).

Prendergast (1975), in considering rectilinear motion and duration, considers rectilinear motion as conceivable "without reference to duration" to be paradoxical (Prendergast 1975, p. 462). He resolves the

paradox of rectilinear motion without duration by saying that, because tendency toward motion is a mode of bodies in motion and measured according to the size and velocity of the body, it is in that body, whether it is in motion or otherwise, and it is instantaneous because, once in motion, this body instantaneously moves rectilinearly. For him, "this explains why Descartes calls light both action or motion *and* action or inclination (tendency) to move" and that light itself "is simply the instantaneously transmitted motion or tendency move" (Prendergast 1975, p. 462). If light is both the transmission of motion into all other pieces of matter and the tendency within those other pieces toward motion, then it is the mode of bodies in motion toward which those bodies tend. However, in that light is also a material element of the world of *The World*, Prendergast (1975) would also appear to be claiming that this tendency is not merely a mode of the matter of the world, but its potential to be a world in motion. A world not in motion is, for *The World*, no world at all, but the pre-motive solid without elements. Light and its tendency to act as the tendency toward motion for the other elements is the potential of the world and this makes light and the fable of the world distinct from the pre-motive solid.

From this description of the motive relationship between light, air, and earth, it would appear that the movement of light is crucial to the preservation of the world as a world or in its worldliness. If air and earth both slow their movement in proportion to their distance from light, then, without light, both air and earth would settle back into the pre-motive solid. If so, this motive relationship would explain the distinction Descartes makes between divine creation and preservation. For Descartes, "if God preserves [*conserve*] them [i.e., the parts of matter] in the same way that He created [*creées*] them, He does not preserve them in the same state." It is in this way that Descartes is able to claim that there is a divine, perhaps miraculous, moment of creation in terms of the introduction of cracks, along with a persistent divine preservation of the world as such, even while excluding miracles from the mechanical, algebraic, and geometric operations of the world. God begins the world from out of the pre-motive solid by introducing the cracks that will introduce the motion. This motion leads to the emergence of the elements, especially light, which both is an element in motion and the element of motion. Light's motions preserve the worldliness of the world insofar as its motions preserve the world's other elements from settling away from motion (W, p. 12; AT XI, p. 37).

Divine creation is the same as divine preservation, then, insofar as divine creation is the introduction of cracks from which the three elements emerge and divine preservation is the movement of light, thanks to which movement the maintenance of the movements of air and earth are themselves preserved. The introduction of these cracks can result in a poetic chaos which precedes the world as such because the orderly motion of the world emerges with the emergence of its material elements, and light is the element on which that motion depends. Light sustains the movement of the world. The movement of the world is the playing out of the three principal rules of motion. These principal rules have no meaning, however, without the motion of matter because, without matter moving in the form of the three elements, there is no rule, only the pre-motive solid. Light, then, can be understood both as the world and as the rules by which it operates. It is not merely that the world and its rules depend on light or even that light embodies the rules by which the world operates. Rather, light, in this fabular world that matches our own, is the world and the rules by which it operates. There is neither world nor rule in the pre-motive solid. Light not only obeys the rules of motion. It also generates them.

Poetry and Fable

Even though there is a difference between the sensation of light and what is in the objects that produces that sensation, the latter obeys the rules of motion that themselves result in the sensation of light even while these rules are generated by light itself. It is possible to make the claim that the rules that result in the sensation of light are themselves generated by light because there are no rules for any sensation whatsoever without light, without at least its emergence, which in turn initiates motion as order. Light itself obeys the rules of motion, of course, but it also generates these rules insofar as they do not exist before the movement into the world, toward its elements, their motions since nothing exists in any proper fashion before that movement. It is, in other words, important to bear in mind that light is both of the world and that which allows the world to come to be as a world.

In a similar distinction, Descartes claims that "words bear no resemblance to the things they signify." An effect of this rupture emerges when Descartes looks at Aristotle's *Physics*. He claims that "*Motus est actus entis in potentia, prout in potentia est*" is uninterpretable, and no less so when

translated as "le mouvement est l'acte d'vn Estre en puissance, entant qu'il est en puissance."[4] This claim to uninterpretability appears in the context of the first principal rule, concerning the tendency of pieces of matter to continue in the same state unless a collision with another piece of matter changes the state. What is uninterpretable about the Aristotle passage hinges on the different conceptions of motion between Aristotle as well as 'the philosophers' and Descartes. These philosophers exclude motion from the list of qualities that do not change unless and until a given piece of matter meets another, such as size, shape, rest, and so on; suppose kinds of motion that do not result in a change of place, such as motions to form, heat, and quality; conceive of rest as a privation of motion and, following from this conception, attribute a tendency toward self-destruction to motion, in contrast to any other qualities of matter. For Descartes, motion occurs when "bodies pass from one place [*lieu*] to another and successively occupy all the spaces [*espaces*] in between." Here it is important to again bear in mind the world Descartes is fabulating, where space is not an empty vessel but a carved-out plenum, thus linking the geometrical motion of point to line to surface with the movement of bodies 'within' space. In addition, Descartes conceives of rest as a quality equally as attributable to a piece of matter as motion may be attributed to it, and as identical to other qualities of matter in that it tends to remain in its state unless changed by a collision (W, pp. 1 and 12–13; AT XI, pp. 4 and 39–40).

That Descartes grounds his conception of motion in the geometrical motion from point to line to surface and that he opposes this grounding to Aristotelian being *in potentia* or *en puissance* insofar as he "cannot *interpret* [*ne … sçaurois* interpreter]" it are both important to bear in mind. He does not claim to be unable to conceive, suppose, know, or imagine being *in potentia* or *en puissance*. Rather, he cannot interpret it. The Aristotelian conception is a conception, even if an uninterpretable one. For this reason, Descartes can claim that the Aristotelian conception of motion was able to give rise to "the old world." It is, then, a world, a world with order, rules, and laws. Indeed, one of the critiques of the old world is that its conception of motion obeys a rule of self-destruction in distinction from the other laws of nature. The language of Aristotelianism may not be interpretable, but that does not place it outside the realm of rules, outside worldliness as such where the world as a world that may be interpreted emerges. It is not chaos but merely an uninterpretable world. In neither the old nor new worlds do words resemble the things they signify. The language of Aristotelianism fails to cause conception for

Descartes, but that does not mean it fails in itself to conceive of the world to the extent that rules may appear to be obeyed by what is signified by that language (W, p. 12; AT XI, pp. 38 and 39; my emph.).

If the orderly uninterpretable language of Aristotelianism is neither itself chaos nor aligned with it, however, poetry is aligned with chaos. While discussing the motion at the beginning, in the transition from chaos to world as orderly elements in motion, Descartes insists that god makes the parts that had been constitutive of chaos move in numerous directions and at numerous speeds, from then on preserving their motion in accord with the laws of nature. The movement from chaos to world will occur because

> God has so wondrously established these laws that, even if we suppose that He creates nothing more than what I have said, and even if He does not impose any order or proportion on it but makes of it *the most confused and most disordered chaos that the poets could describe* [décrire], the laws are sufficient to make the parts of that chaos untangle themselves and arrange themselves in such right order.

Poetry, then, has the capacity to describe chaos. Despite this descriptive ability of poetry, however, the rules of motion, especially the three principal rules, will allow the pieces of matter to fall into their appropriate places once the elements, especially light, appear. Poetic language, nonetheless, has an ability to describe chaos, and thus the words it uses would signify things which are not yet things, not yet matter. Perhaps one could claim that the chaos that the poets would describe would be the demi-motion of the transition between the pre-motive solid and the world, but if this demi-motion would be in any way prior to the emergence of light, that motion would not be the motion of any world, old or new, and thus the conventions of language used by poetry would describe that which is not of the order of orderly motion. Poetic words, then, would not be merely uninterpretable, but would signify nothing at all. There is no order in this poetry, no world being described or signified (W, p. 11; AT XI, p. 34; my emph.).

Cavaillé (1991) compares Descartes' conception of poetry insofar as it can be aligned with chaos to cosmogonic poetry that seeks to describe the world before the world as it appears, from Ovid to Guillaume de Salluste du Bartas, focusing on the latter, who "transfers the negative path of theology to physics" (Cavaillé 1991, p. 281; my trans.) through rhetorical

techniques that critique and undermine logic by images like "'air … without clarity, … / Earth without firmness'" (De Salluste du Bartas 1981, v.249–250, quoted in Cavaillé 1991, p. 281; my trans.). This understanding of chaos is not what is at work in Descartes' fable because "the physicist solicits the poet only in order to better exclude him [the poet] from *his* [the physicist's] world" (Cavaillé 1991, p. 282; my trans.). However, Cavaillé (1991) seems to miss a certain similarity between the cosmogonic poets and Descartes, a similarity that simultaneously draws a perhaps more important distinction between them. Both engage in a retroactive form of description of 'pre-worldly' chaos, though in different ways. The poets undermine the signifying logic of words in describing unrepresentable and irrational forms of matter, but also signify that same matter in the act of undermining it, while Descartes fabulates an imaginary world that corresponds to the world as experienced, thus justifying the fable's operations on the grounds of experience. Where they most completely differ is in the form of the description of chaos. While the poets describe a chaos that is unrepresentable because the qualities of its matter contradict what would qualify that matter in experience, Descartes describes a chaos that precedes experience as such. The Cartesian chaos is precedent of the experiencable because in it there is neither air nor, more importantly, light. The poetic chaos of the Cartesian fable does not, in itself or in the way of the cosmogonic poets, refer to experience. Only what emerges from Descartes' poetic chaos does. The chaos of the cosmogonic poets is more akin to the uninterpretable claims of Aristotelian physics. In short, the cosmogonic chaos remains in the realm of order by undermining the order of experience through linguistic and rhetorical virtuosity, while the Cartesian chaos is not of the order of order at all.

Chaos as Descartes' poets would describe it is not what the fable of *The World* describes or fabulates, even when the fable describes the pre-motive solid. In fact, the fable does not describe at all. The fable fabulates, makes, or even is a world. There are three moments that indicate this fabulating quality of fable as distinct from the descriptive quality of poetry. First, the fable does not itself begin until chapter 6. Prior to its beginning, Descartes, as he so frequently does to introduce his thinking, makes note of the ways in which our senses are deceived, even the most seemingly reliable sense of touch. In noting sensory deception in this context, Descartes indicates that the world is not necessarily what we think it is. Such perhaps pre-theoretical deception, a deception of the senses distinct from the uninterpretable significations of Aristotelianism, sets Descartes on a path not just

of distrust of the world of experience but also on a path of conceiving of the world (perhaps of worldliness) as something other than merely given. In conceiving of the world as something other than given, combined with the claim that words do not resemble what they signify, Descartes has already begun to indicate that this fable may be able to make a world appear, to fabulate a world (W, p. 2; AT XI, p. 6).[5]

Second, in introducing the fable at the end of chapter 5, he explains why he will turn his treatise into a fable: "to make the length of this discourse less boring for you." Descartes wants to stimulate the reader's mind, to prompt thinking, to inaugurate conceiving. His fable, which developed from out of an experience of the world that shows itself as other than what is given and leading to an engagement with another world which is uninterpretable, is then primarily interested, insofar as it is a fable, in not being boring. The goal, the motivation, or the motive of the fable is to begin a motion in the mind of the reader. What the fable fabulates is "another, wholly new" world in the imagination of the reader, a new world in "imaginary spaces [*espaces imaginaires*]" where space is imagined as a plenum set into motion such that light begins and maintains the orderly motion of the parts of the world's matter (W, p. 10; AT XI, p. 31).

Garber's explanation of imaginary space is helpful here. In Aristotelian philosophy, there can be no nothing, but such a possibility is worrisome in Christian theology because then "not even God could create an empty space" (Garber 1992, p. 127). In 1277, Bishop Étienne Tempier of Paris condemned this possibility, forcing Aristotelians to think about the possibility of empty space. This rethinking resulted in "the possibility, in some sense, of an empty space beyond the world, what came to be called 'imaginary space,' space that would allow God to move the finite world as a whole" such that, in Descartes' time, "it was by no means uncommon to hold that space is in some sense independent of the bodies that occupy it, and that there can be or actually are portions of this space unoccupied by body" (Garber 1992, pp. 127–128). For Cavaillé (1991), Descartes' imaginary space is an ironic deployment of Scholastic terminology. He "adroitly exploits a simultaneous linguistic and doctrinal ambiguity" where, "beyond the fixed spheres, for a strictly Aristotelien physics, there is nothing," but such a place "remains conceivable: whence this other distinction between true space (*locus verus*) and imaginary space (*locus imaginarius*)" (Cavaillé 1991, pp. 213–214; my trans.). This conceivable space is the space of Descartes' fable, the space of a new, orderly world without vacua imagined by the fabulator to point the reader's mind in the direction of the *locus imaginarius* or *espace imaginaire* distinct from the space of the world as given.

As becomes clear with the democratization of reason declared explicitly in the *Discourse* (see CSM I, p. 111–112; AT VI, p. 1–2), and as is implied by the deployment of French in *The World*, even the densest (or perhaps least academically educated) minds can be directed toward this imaginary space or set into the motion of thinking, so long as they are not bored. Descartes imagines world and mind as stimulated both to order and to ordering through light and fable, respectively. Poetry, in being aligned with chaos, cannot stimulate conception in this way. Indeed, the descriptions of poetry, in being of "the most confused and disordered [*embroüillé*] chaos," have nothing to do with order even in the sense of being a privation of order.

Third, building on the previous point, Descartes, having explained the three principal rules of motion, explains that he could give more rules to determine motion in more detail, but that he will not do so because he only wants to "suppose" the rules "that most certainly follow from the eternal truths on which mathematicians are want to support." The rest of *The World* is concerned with those few certain rules, including, in the next chapter, the process of the breaking apart of the pre-motive solid into the ordered world of experience, though it remains a fabulated experience within imaginary space that also happens to match the world we do experience (and experience as other than what is given). In that the rest of the fable of *The World* is dedicated to laying out the clearest rules that follow, it is dedicated to showing the rules of conceiving, knowing, supposing, and imagining. The fable of *The World*, then, fabulates a world without miracles, and thus a world where even god, as the fabulated "author of all the motions of the world," must obey the laws laid out in the fable. As claimed above, when discussing divine preservation of the world-qua-motion through the preservation of light as well as through poetry's inability to prevent the ordering of the world once motion has begun, these rules, these "eternal truths," clear and mathematically certain, shown through the rest of the fable, are the world as interpretable and conceivable. But if the rules that constitute the fable are the world, then this fable, as a fable of the world, is also those rules. The story the fable tells is a story that fabulates the world as a rule-bound world (W, p. 15; AT XI, p. 47).

But all of this means, then, that the telling of the fable is nothing more than the generating of the rules that the world obeys, even while the fable itself, in being rules, obeys the rules that it also generates to stimulate the reader's mind to conceive the world that is the fable. The words of the fable fabulate their own signified, their own world. There is no difference between the words of this fable and what they signify—a non-difference

predicated on the rule that differentiates or distinguishes between fabular regularity and poetic chaos, a rule itself made possible by the potential for an imaginative moment which fabulates a fabular world like our own from the beginning—even while it remains a fabulated world, though more interpretable than the old world of Aristotelianism, and even while it could not necessarily claim to be the same world as the deceptive world of experience that shows Descartes there is more to the world than what is given. This movement between the deceptive world whereby more than what is given is shown and the fabular world whereby signs and signifieds find themselves in interpretive harmony, a movement where the deceptive world demands imagining a fabular world without deception that itself requires a self-deception that this fabular world is 'truly' the world, thus calls attention to the method whereby this fabulation can occur. Even still, the method whereby this fabulation can occur requires a kind of method, lest the fable be simply one more uninterpretable world in a long history of them. The method for generating a method is required, and this requirement signifies the work of fabulation as such, fabulation as that which generates what will come to be interpreted as the world of harmonious sign and signified. In other words, the fable does not merely obey the rules of conceiving the world. It also generates them.

Light and Fable

For these reasons, poetry as understood in *The World* cannot be conflated with the fable. In laying out the fable-structure or -logic in Descartes, I will connect fables with other literary genres, but in this context, poetry as aligned with chaos cannot be aligned with fable. Fable is to the conception of the mind of the reader as light is to the motions of the world: They both are the rules of their respective activities.

However, light and fable are not just parallel or biplanar foundations of their respective spaces, but are co-constitutive. The action of light is the basis for the experiences that are linguistically interpreted. At the same time, the conventions of language that give meaning to the interpretations are also necessary for light itself to have meaning, to be interpreted, and thereby for light to be conceived in terms other than as merely given. The potential for interpretation distinguishes light from chaos. If the telling of the fable of *The World* is the telling of the rules for interpretation that the fable itself also obeys, then, as much as light is the ground for what is

linguistically interpreted, the fable is also the ground for maintaining an interpretable relationship to what is experienced. This co-constitution also means that the fable, in generating the rules of interpretation that it obeys, generates its own signifieds, the things which it describes. In doing both of these things, qua fable, the fable is its own moral. The moral of the fable of *The World* is not external to the story itself, even in a deconstructed sense, but weaves its meaning within its telling.[6]

Insofar as light and fable are co-constitutive, what is important to bear in mind in this conception of the fable is its relationship to rule-obedience and rule-generation. Both light and fable, the former in the world of material motion and the latter in the world of conceiving, obey the rules they generate and vice-versa. If this is true of fable in *The World*, then Descartes' pedagogical motive with the words that stimulate the minds of readers has a crucial relationship to rhetoric insofar as rhetoric can be understood as the art of persuasion. His rhetoric is always motivated by the hope or conception of stimulating his readers' minds to think on their own, within the parameters of rules which guarantee truth. In this treatise, the old world of Aristotelianism is uninterpretable, even if perhaps conceivable, while the fable of the new world is both interpretable and conceivable by others because its telling is the generation of the rules for obedience, which the reader obeys in the reading itself. The interpretability and conceivability of the old and new worlds show the mind's potential for both. The fable of the world that shows the world as operating in an interpretable and a conceivable fashion is possible because minds, like the fabulated world itself, have the potential for rule-obedience within them. If the Aristotelian world was uninterpretable, its conceivability was still potential from the beginning of its formation. The fable reforms this potential rule-obedience in a more regulated and interpretable fashion by reforming the world as more than what is given and ultimately more obedient to the order of algebra and geometry than what had been conceived. It is the potential for a conception of a world interpretable by such order that the fable sets into motion. Obedience to these rules then generates the parameters for truth, even while this "naked" truth remains veiled within a fable which is less boring than other treatises. To connect the concept of the fable to novels, dialog, and history, then, will require attention to this complicated relationship between rhetoric, language, pedagogy, and epistemology as found in the Cartesian fable (W, p. 10; AT XI, p. 31).

Fable and Pedagogy

A few more words about words, especially about the words for 'potential', are in order here. An examination of these words will help clarify how Descartes understands pedagogy, especially how it is that the fable educates, through the other great fable in his corpus called the *Discourse*.

Potentia, Facultas, *and* Puissance

In *The World*, Descartes considers *potentia* and *puissance* to be synonyms, or at least that the latter can translate the former. As shown above, the fact that Descartes does not know how to interpret the Aristotelian definition of motion ("the actuality of the potentially existing qua existing potentially") does not by itself mean that this definition is a chaotic, non-conception of motion. Nor, however, does it mean that he considers *potentia* or *puissance* to be inconceivable words.

In *The World*'s definition of motion, Aristotelian *potentia* is not a concern since motion, as derived from geometry and distinct from rest, is a real quality of matter insofar as the matter passes from one place to another 'within' the plenum of space. This passing from one place to another is maintained thanks to light, which both gives rise to and obeys the rules of motion. Now, insofar as there is a connection between light and fable since fable generates and obeys the rules for conceiving the world, there is also a connection between the motion of the world and the motion of conceiving. The mind that conceives the new world of the fable of *The World* is set into motion by that fable, and this mind can be considered a plenum of imaginary space.

Nearly twenty years after beginning *The World*, Descartes addresses *potentia* again in a fashion that is helpful in this context. In the *Comments*, he responds to public criticisms of the Cartesian system by Henri de Roy (Henricus Regius). In article 14 of his broadsheet, Roy claims that "Even the idea [*Idea*] of God which is implanted in the mind [*menti*] has its origin either in divine revelation, or in verbal instruction [*traditione*], or in observation of things." In his reply, Descartes explains that things derive their being either from a primary and proximate cause or from a remote and accidental cause. Neither *traditione* nor observation can proximally cause the idea of god, however. These can only give ideas of either the printed word 'god' itself or the picture or sound generated by a painter, speaker, or perhaps musician. For Descartes, this leaves only the "faculty

of thinking [*cogitandi facultate*]" as the cause of the idea of god, and the ideas of this faculty are always 'within' us potentially "since the term 'faculty' [*facultatis*] denotes nothing but a potentiality [*potentiam*]" (CSM I, pp. 296 and 305; AT VIII-B, pp. 345, 360, and 361).

All of this fits with how Descartes conceives of physical and imaginary space in *The World*. While god may be the "author of all the motions of the world," there is no divine interference in the operations of nature save through light's preservation. In the *Comments*, observations of things cannot proximally give an idea of god because god is too remote from things. Nor can *traditione* be a proximate cause of the idea of god according to the *Comments* because, as it is put in *The World*, "words bear no resemblance to the things they signify." If the connection holds, however, then the author of the words that sets off the motion of the mind to conceive the idea of god can be a remote cause of that idea in the same fashion that god as the author of the motions of the world is the remote cause of those motions.[7] This remoteness is perhaps 'de-mediated' thanks to the plenum at hand, in the same way that a stick can immediately give a sense to a blind man of his surroundings, to use one of Descartes' examples. However, since the speed of motion tends to slow as objects get farther from the sources of light, the mediation of intervening space cannot be disregarded. The question of the continuation of mental motion will be important for understanding the fable of the *Discourse*.

The faculty of thinking remains, as a faculty, potential or *puissance*. In his entry on *puissance*, Gilson (1964) does not cite any appearance in AT XI, where *The World* appears. However, he does cite the appearance of "potentiam" in the *Comments*. Placing this citation under the heading, "Puissance et acte," he further divides this use of *puissance* or *potentia* into three categories: (1) "potential [*puissance*] opposed to activity [*acte*], that is to say considered as one of the transcendentals. In this sense, potential and activity are entirely separate," (2) "potential … as a species of the predicate of quality. Potential thus envisaged is divided into natural, obediential, supernatural, and neutral potential," and (3) "potential which relates to logical potential; this potential is confused with possible logic because it only consists in the *non repugnantia extremorum*" (Gilson 1964, s.v., "puissance," p. 248; my trans.). In addition, Gilson (1964) gives headings of *puissance*, insofar as it is a potential of the soul, as falling under the Thomistic species of quality ("habitus et dispositio; naturalis potential vel impotentia; passio vel passibilis qualitas; forma, vel circa aliquid constans figura" [Gilson 1964, s.v. "qualité," p. 251]); as natural

potential; and as falling under the ordinary and extraordinary potential of god (Gilson 1964, s.v. "puissance," pp. 249–251). Given that he does not cite the appearance of *puissance* in *The World*, but does cite *potentia* as used in the *Comments*, it seems fair to understand *puissance* in *The World* as falling under the distinction from *acte* laid out by Gilson (1964), and thus as distinct from the possible or possibility and from the motions of energy, so long as the conceptual link is established. This understanding of *puissance* or *potentia* can further be categorized as at least falling under the first subcategory of *puissance*.

Since Gilson's entry for *pouvoir* is merely "What can make greater can also make lesser [*Quod potest facere majus potest etiam minus*]," it could appear as though *pouvoir* is linked to *potential*. However, this quote, from the Second Set of Replies, primarily to Mersenne, develops from Descartes' attempt to give a geometrical explanation of the *Meditations*' arguments for god and the distinction between the soul and the body (Gilson 1964, s.v. "pouvoir," p. 237; my trans.). Specifically, it comes from the ninth axiom of the geometrical presentation. When this axiom is deployed in the propositions, neither *potentia* nor *possibilitas* is the focus. Rather, *vis* is. In these instances, the claim is that he does not have the "power [*vim*]" to give himself the divine perfections he lacks, nor is god able to (*non potest*) perceive perfections that god lacks (CSM II, p. 118; AT VII, p. 168; prop. 3). Further, in an April 21, 1641, letter to Mersenne, which Gilson (1964) also categorizes under *pouvoir*, Descartes explains that this axiom's description of power refers only to what requires "a single power [*potentiam*]," which CSM-K refers in a footnote to the argument for deriving our existence from god in the Third Meditation (i.e., the same argument from the third proposition in the geometrical rearticulation of the *Meditations* in the Second Set of Replies). What appears to be the case in Gilson's explanations of *puissance* and *pouvoir* is that *pouvoir* is in consistent reference to god, where it can be understood as an overlap with *vis* and *potentia*. Such overlap only appears in this case to be conceivable for the divine. Descartes follows up his clarification of the seventh axiom in his letter to Mersenne by saying that, "among men, who doubts that a person who could not make a lantern may be able [*pourra*] to make a good speech." *Pouvoir*, in the case of human life, remains distinct from *puissance* and *potentia* because it is a power at hand insofar as motion is engaged. But the faculty of thinking, as a faculty, is a *puissance*, a *potentia*, a capacity not yet at work. In god, such distinctions are unnecessary, because god's potential is always already at work (CSM-K, p. 181; AT III, p. 362).[8]

Thus, the faculty of thinking, as a faculty, is not thinking proper, is not a quality of the motion of the mind. The faculty of thinking, as a faculty or *potentia* or *puissance*, can be thought of like chaos in *The World*. This faculty, then, is disordered, though with the *potentia* for a motion that will change the substance of the faculty from chaos to the order of discrete faculties. However, Descartes, as the author of the work or works that will set this motion into effect, as the remote cause of that motion, is still not like god since god never needs to demonstrate any distance from the motions that follow from the inaugural motion because god is of a distinct substance from matter, while Descartes needs to distance himself from the thinking and conceiving of those who follow him because he is a thinking thing like those who follow him. Such distancing is what Descartes is doing with respect to Roy in the *Comments*. Finally, the faculty of thinking, or faculties in general, as *potentia* or *puissance* should not be conceived as being of the same elements as thinking itself, which means that the faculties should never be conceived as formed qua ordering and ordered faculties prior to the beginning of motion.[9]

The Cartesian fable initiates his readers' motions which have as yet remained *in potentia* and, as a fabulating moment, it is a fictionalization, the generation of a new world which can be interpreted differently even while its effects remain identical to the witnessed world. Thus, there is a kind of sovereignty, though neither exactly like god's nor exactly like a monarch's, both of which would appear in their non-appearance or their epiphenomenal appearance in the regular operations of the universe or the application of sociopolitical laws. Descartes' sovereignty can only appear in the distancing of himself from the motions of others' minds over which he lacks control, over which he can exert no concurrence. But the motion itself remains inaugurated by him in the way god set the legally operative motions of the world to work and in the way a sovereign initiates the sociopolitical motions of a realm.[10]

Puissance, *Good Sense, and* Méthode

The process of aligning *facultas*, *potentia*, and *puissance* was necessary to understand what Descartes is doing when he begins the other fable in his corpus, that of the *Discourse*. There, he famously begins with the claim that "Good sense [*bon sens*] is the best distributed thing in the world" in that everyone thinks he or she has as much of it as he or she could ever want. From this, Descartes draws the conclusion that it is equal in all.

However, he further explains good sense as "the power [*puissance*] of judging well and of distinguishing the true and the false" as well as "'reason'." Thus, the *puissance* of good sense is the *potentia* for the mind, reason, and judgment. This is the *puissance* Descartes intends to set into motion in the *Discourse* (CSM I, p. 111; AT VI, pp. 1–2).[11]

One more word related to *facultas*, *potentia*, and *puissance* requires clarification: *vis*. There is a discrepancy between Descartes' French and the Latin translation of the *Discours et Essais* by Descartes' friend Étienne de Courcelles, titled *Specimina Philosophiae* and published in 1644 but begun soon after the original's publication (VMD II, p. 214).[12] There, "bona mens" is a "vim." There are numerous discrepancies in the *Specimina*, although it was approved and corrected by Descartes before publication, but this one is of particular importance.[13] Good sense as a *vis* would carry an implication of motion already occurring, as in the divine power or strength to do what it will. While no one is without some mental motion already at work, Descartes' pedagogical goal is to begin anew the motion always *in potentia* for beginning anew. Such new beginnings are not at work with *vis* if this power is in overlap with both *potentia* and *potestas*. Good sense as a *puissance* maintains the potential for proper application not yet at work that is lost if it is *vis*. Thus, "vim" would seem to be a mistranslation of "puissance" (AT VI, pp. 540 and 2).

Setting this *puissance* into motion will be the demonstration of the proper use ("appliquer") of reason. Thus, mind, reason, and judgment no longer only *in potentia* are defined and delineated according to their application. That the applications of reason are diverse is due to the fact that "we direct our thoughts along different paths [*voies*] and do not attend to the same things." What Descartes wants to set into motion, then, is the directing of thoughts along a path such that attention is paid to the same things. This setting into motion would be the proper application of reason. Once this application of reason is set into motion, Descartes and his readers can see that most human activities prove themselves "vain and useless [*inutile*]." The proper application of reason shows that most applications are useless, thus the implication is that the proper application of reason can be delineated according to its usefulness. The proper application, the proper use of reason, is in utility, in good use. The *potentia* of good sense is properly used in good use, though it can be directed along an improper or useless path (CSM I, pp. 111–112; AT VI, pp. 2–3).

There is a rhetorical strategy in addition to the metaphysical, ethical, and pedagogical claims involved in these opening paragraphs. The metaphysical claim is that the mind is the mark of the human species and thus

it is potentially the same in all individuals of that species. The ethical claim is that reaching the potential, achieving the capacity that all humans have, hence becoming truly human, is dependent on learning how to apply this metaphysical marker of the species, choosing the accurate path, but a path which is equally open to all. The pedagogical claim is that this path open to all requires applying the techniques that most fully express the humanity of the human, that is, the mind, reason, rationality. Finally, the rhetorical strategy is to begin this discourse by telling the audience, lenscrafters, who have been trained in technical skills, that their potential for rationality is as powerful as that of the learned and that all they need to become as learned as the learned is to learn how apply their rationality.

This text is written in French for a reason, regardless of any subsequent academic influence thanks to the *Specimina*.[14] Descartes is involved in a democratization of reason in the *Discourse*, expanding the potential for thinking beyond the walls of the academy and its syllogisms, *quaestiones*, and so on. One might be tempted to say that there is a new kind of elect, closer to craftspeople, created here insofar as the good application of good sense is limited to utility. However, considering what Descartes does say on the rare occasion that he discusses politics and what he says to Latin readers about the masses, it is clear that his appeal to the good sense potentially in useful application on the part of all can be understood to be as much of a rhetorical strategy as his praise for the faculty of the Sorbonne. In the *Discourse*, he merely hopes to convince craftsmen of the value of grinding lenses through a geometrization of nature as demonstrated in the *Essays* (see CSM II, pp. 5–6; AT VII, pp. 5–6).

Thus, he writes in French, and deploys a rhetoric of technical, craft-like application of reason to demonstrate to his readers that reason is as potentially theirs as anyone's. Indeed, he even confesses an averageness of mind, wit, imagination, and memory on his own part. What has allowed Descartes to exceed the potentials of others is the method, which was discovered thanks to fortune. In his hope to demonstrate the utility of the method, however, Descartes will not teach it. Teaching, *enseigner*, is not Descartes' aim at all. Rather, he will "reveal [*faire voir*] … what paths [*chemins*] I have followed." Descartes, then, is no teacher, but a revealer or demonstrator. The method as the *méthode* is not a method as a *methodus*, then, insofar as *methodus* is associated with the useless syllogistic reasoning of the universities. In the Seventh Set of Objections, Father Pierre Bourdin challenges Descartes by "[proposing] to deploy the traditional [*veterem*] form and method [*methodum*] which is familiar to all the ancients—indeed to everyone." But the *méthode* is not "a way of teaching" in that Descartes

is not concerned with teaching or with "belonging to a particular school," but with showing, demonstrating, *faire voir*. Twice within two paragraphs Descartes says he will show or make his readers see the method in the hope that doing so will open them onto "self-instruction [*m'instruire*]" (CSM I, pp. 112–345; AT VI, pp. 3–4 and 507). Descartes will reveal, show, make seen, demonstrate, or *faire voir* through the telling of his own fortunate discovery of the method for self-instruction. To *faire voir* the method, he will *faire voir* his own path, *voie*, *chemin* to the method, opening the judgment of his own path up to the reader's good sense.[15] This judgment of Descartes' path to his method hinges on the fact that, as he says to Burman, "no two people think alike," which means that every judgment of the *faire voir* will be highly individualized, and so there are as many paths to the method as there are readers (DCB, p. 45; AT V, p. 175). This method of showing the method is more complex than teaching a method. Descartes is no teacher and the *Discourse* is no seminar, even if it is discursive.[16] In telling his story, Descartes hopes to inaugurate a storytelling on the part of each of his readers. Since there is no one path to the method but there are as many paths as readers, those readers' judgments of the utility of his story must involve their telling themselves their own stories, recalling their own lives, their own experiences, in order to find their own paths to the method.

Fable, **Histoire**, *and Books of the Past*

So the *méthode* of the *Discourse* is no *methodus*, is not even *a* method. No more is it a "*projet d'vne Science universelle*," as Descartes had initially considered titling what became the *Discourse* (AT I, p. 339). There is no *methodus*, no project in this discourse, and perhaps not even a universal science since the full title of the *Discourse* refers to "*the sciences* [*les sciences*]." Instead, there is the democratization of reason found in the universalization of good sense as a potential and potentially useful application of itself which can apparently begin to be applied not through teaching but only through a self-instruction set into motion by a telling of a story, "a history [*histoire*] or, if you prefer, a fable." This fable, this *histoire* is a story of Descartes' fortunate discovery of the *méthode* as the path of self-instruction. But this *histoire* cannot begin simply with the discovery, the famous moment in the stove-heated room (*poêle*). Rather, the scene must be set, the mood established, the reason for his being in a *poêle* in the first place (CSM I, pp. 111–112; AT VI, pp. 1–4).

In setting the scene, in the background that is the necessary beginning of the *histoire* or fable, he turns to his beginning in education. Having been raised on books, Descartes was convinced that they could lead him to "a clear and certain knowledge of all that is useful [*vtile*] in life." It is only after his formal education has ended and he is ready to take on the title of "learned [*doctes*]" that he finds himself in doubt and error such that "my attempts to become educated [*m'instruire*]" had failed. Thus, only after Descartes had already been on an educational path does he find himself at a crossroads and begin to question the direction of his studies. Only once he had become educated does he find himself questioning that education's utility. 'Utility' is the key word here. Having already established that it is not enough to have the potential of good sense but the application of that potential in useful deployment, the ground of his complaint about his education is thereby again its uselessness. Descartes is laying out the failure of his education as a failure in useful application, and that failure in useful application leads him to consider himself a failure in becoming educated (*m'instruire*) such that he must learn to instruct himself (*m'instruire*) (CSM I, p. 113; AT VI, p. 4).

To learn to instruct himself, however, necessarily involves learning to unlearn how he had been educated, and this is not an easy process to commence. Indeed, he explains that he could not bring himself to immediately abandon all his learning. Specifically, he still values certain areas of the academic path: languages, oratory, poetry, mathematics, ethics, theology, jurisprudence, medicine, and even "subjects full of superstition" since they help him guard against being deceived by them. The subjects of most import here are fables, *histoire*, and books of the past. Poetry as described here, in its focus on sweetness of expression and rejected for that same reason, is not the poetry of *The World* and is therefore unhelpful for this analysis. Oratory's power ultimately comes from reasoning and the order of its expression, which is precisely what Descartes is attempting to show in this fable, and so does not rely on a formal education. In that both poetry and oratory are "gifts of the mind rather than fruits of study," they are both irrelevant to the pedagogical status of the fable or *histoire* of the book titled the *Discourse on Method* (CSM I, pp. 113–114; AT VI, pp. 6–7).[17]

However, the value of fable is that it "awakens the mind" or gets it moving, that of *histoire* that "the memorable deeds told in [it] uplift [the mind] and help shape one's judgement," and that of a book of the past that it "is like having a rehearsed conversation in which the authors reveal

to us only the best of their thoughts."[18] Descartes ultimately rejects these three elements of his education because the fables of the ancients' books "make us imagine [*font imaginer*] many events as possible [*possibles*] when they are not," while their *histoires* omit the less glamorous events of the past. There are two aspects to this rejection that are important to note for understanding the fable or *histoire* of the *Discourse*. First, Descartes did not reject ancient fables and *histoires* out of hand, but rather decided that he had spent enough time on them. Books of the past are not precisely to be rejected because they are of the past, then, but rather only because one has reached a point at which they fail to speak. In other words, only once one has already learned, whether in the formal arena of the classroom or in average everyday experience of the world, will one be prepared to unlearn this learning, thanks to the fable or *histoire* of this book, and to be shown how to instruct oneself. Second, this rejection is grounded in the way that reading books of the past for too long makes one like "one who spends too much time travelling [*voyasger*]," a stranger to the native land of experience. It is in response to the estrangement from experience, an experience that will come to teach him not to trust experience, that Descartes takes up the process of learning to unlearn through self-instruction and traveling the world, a process he calls seeking knowledge "in myself or in the great book of the world." Reading ancient fables and *histoires* is like traveling and traveling is like reading a book, and the latter will show its readers to unlearn what the former taught, a teaching that appears to have been necessary for Descartes if we follow this fable or *histoire* carefully. The voyage of his formal education is necessary to begin the voyage of his self-instruction, then. Their two paths meet at the crossroads at which he found himself when completing his formal learning (CSM I, pp. 113–115; AT VI, pp. 5–9).

What is the value of this fable, this *histoire*, this book? If it awakens the mind, the fable of the *Discourse* awakens it to its own potential, which can potentially explain the whole of the universe, prove the existence of god, and so on. This fable, then, awakens the mind to itself, to accomplish what it exists to do, and in doing so pulls the mind from its reveries. It does so by mentioning his retreat to the famous "stove-heated room [*poêle*]" where he had the three dreams that awoke him to his method, though Descartes does not, in this instantiation of the fable that would awaken the mind to itself, describe his dreams in their particulars, nor does he even mention the dreams themselves.[19] Instead, in the *Discourse*, he has "thoughts." Thus, this particular fable, a fable written to lenscrafters and

others who are not of the learned class, does not specifically awaken the mind by mentioning dreams, but by exposing the limits of formal learning. This fable awakens the mind of his undereducated readers by narrating, by telling the *histoire* of his education and of his rejection of it—it shows the reader how to awaken him- or herself, in imitation of this storyteller, but in imitation judged on personal utility (CSM I, p. 116; AT VI, p. 11).

This *histoire*, this history uplifts the mind and helps to shape one's judgment because its writer hopes his readers will find something to imitate in this story of education and rejection of education, though clearly one should not imitate everything in this *histoire*. The history Descartes tells in this *histoire* or fable, his fabular history or historical fable, is to ignore or reason beyond the bodily experiences of history, and certainly to ignore traditional education. What seems to be claimed here, then, insofar as the *histoire* qua history is concerned, is that Descartes hopes his experience may give rise to a reasoning beyond experience, that his experience may itself move beyond *his* experience and affect the experiences of his readers such that their minds are lifted up to follow him beyond experience, each according to their own experiences.

Such are the best of Descartes' thoughts, then, in this book, this history, this fable. The conversation he has rehearsed is to undercut the lessons we have inherited, to distrust the explanations of the world that we have been given up to now, when we read this *histoire* or fable, which itself does not purport to teach the world but to present the path taken by one person to uncover a method. It is the usefulness of this new, individualizable method that is the test for the intended readers of the *Discourse*, those craftsmen who will hopefully test out Descartes' geometry, optics, and meteorology. They will determine the value of this new method, which they generate on their own, set to work by the fable or *histoire* presented here. The best of Descartes' thoughts, then, are not his, nor can he know or interpret on his own which of them are the best, even while he is the author of them. The value or quality of his thoughts will be determined by these craftsmen by taking on his thoughts as their own and adapting them as utility and necessity dictates, judging their own thoughts as having been set into motion by Descartes' and thereby judging Descartes' thoughts in judging their own. This is the unstated premise or moral of the fable of the *Discourse* as it awakens the reader's mind through the *histoire* of Descartes' own discovery of 'his' *méthode*: This most individuated of approaches to uncovering the truth is not purely, solely, fully individual, even while the investigation into the truth

through this individuated method undercuts the authority of tradition and its *methodus*, because its value will always depend on the judgments of others.

The scene has been set, then, the mood created, the lighting established. Descartes has laid out the potential for the motion of the mind in his readers, grounding it in an appeal to a craft-like application of reason oriented around utility. He himself cannot be sure of the value or utility of what he will write, nor can he control the motions of those other minds once they have begun to think along their own paths, but he can inaugurate that motion by showing his own path. He has not so much established a moral to this fable or *histoire* ahead of the telling, since this setting of the scene is neither a demand for a certain interpretation of the *histoire* or fable, nor is it even distinct from the *histoire* or fable that he is telling, but the scene-setting has made the unstated premise of his fable or *histoire* clear insofar as its value or utility will be determined by the very minds he is setting into motion.

To be sure, the motion begun by the fable of the *Discourse* is different from the beginning of motion explained in the fable of *The World*, if only because motion has already been at work in the minds of the readers of the fable or *histoire*. That is, the author of the fable or *histoire* of the *Discourse* is not attempting to make a wholly new world, as the author of the world in the fable of *The World* will do. In the *Discourse*, the motion to be set is a renewal of motion, an interruption of the motion having been established by the conceivable if uninterpretable motions established by formal education and/or average everyday experience. The author of the *Discourse* enters the scene *in media res*, while the author of "the great book of the world" inaugurates a true beginning. Nevertheless, in renewing the motion of the minds of its readers, the fable or *histoire* of the *Discourse* is attempting, like the fable of *The World*, to help the reader suppose an entirely new world in imaginary spaces. The *puissance* of good sense, as *puissance*, is what makes this motion not merely inaugurable, but interpretable, and thereby a motion that can be self-instructed in the same moments of unlearning the uninterpretable motions already in motion. It is thanks to this potential that Descartes has hope for self-instruction through the telling of his *histoire* or fable, which is the great hope of his pedagogy.

Notes

1. The terms 'geometrized world' and 'algebraicized geometry' are taken from Maull (1978), Macbeth (2004), and Ribe (1997), though the last two do not use 'algebraicized geometry'. These phrases are my shorthand for the two stages of the mathematico-physical revolution Descartes inaugurated, most clearly in the *Optics* and the *Geometry*. The first stage occurs when he demonstrates that algebra, with its symbols, notations, and formulae, is capable of calculating geometric relationships more accurately than the pre-Cartesian reliance on figures. This demonstration constitutes the algebraicization of geometry. The second stage occurs when he demonstrates that geometry is applicable to an engagement with physical phenomena, for example through an explanation of measuring distance as operating according to a method of triangulation, where the eyes serve as the endpoints of the base of a triangle and the object in question as the third point. This demonstration constitutes the geometrization of nature or of the world. Through these stages, the application of algebra to the physical operations of the world becomes conceptually possible.
2. Nancy (1978, 1979) understands this non-elemental matter, to which I refer as 'pre-motive', as the "primary matter [matière *primitive*]" that is the model for the "fiction" of *The World*'s fable as distinct from thought insofar as that fiction includes the material of thought within its chaotic, non-elemental, and pre-motive structure or status (Nancy 1978, p. 650, 1979, pp. 118–119). Nancy's alignment between the primitive material of the fable (or fiction) and that of chaos leads him to claim, further, that the thinking self which emerges from the fable both is and is impossible to conceive (*conçu*) via thought (see Nancy 1978, p. 651, 1979, p. 119). While there is much with which I agree in "Mundus Est Fabula," this alignment is, on my reading, incorrect because chaos is aligned with poetry in *The World*, not fable. The alignment between chaos and poetry, I argue, hinges on the unworldly disordered quality of chaos and the inconceivability of poetry in the modeling relationship between them, and the consequent relationship to rules that fable and light have. That Nancy's misreading of this seemingly minor point leads him to consider the thinking self as emerging from a fabular, inconceivable chaos that is already the self (see especially his use of the second person in Nancy 1978, 1979) leads me to conclude that he begins from an assumption of the self as such, which I contest as possible in the Cartesian world and *The World*, and so as to at least wonder if Nancy's ontology does in fact come from a consideration that "the extra is the place of differentiation," or if the extra has not already been incorporated within a pre-formed and/or transcendental self, thereby disrupting its 'extra-neity' and capacity to differentiate (Morin 2012, p. 129).

3. Garber (1992) actually finds a fourth, hidden law here, “the principle of conservation of quantity of motion” (Garber 1992, p. 199), when Descartes writes, “supposing [*supposant*] that [god] placed a certain quantity of motions in all matter in general at the first instant He created it, one must either avow that He always conserves as many of them there or not believe that He always acts in the same way” (W, p. 14; AT XI, p. 43). Garber also finds “clear differences” between the three laws of motion and the conservation principle (Garber 1992, p. 201).

   In addition, Garber (1992) recommends against referencing Newton in connection with these Cartesian laws because of the difference in the meaning of the term ‘interia’ for their respective eras (see Garber 1992, p. 203). In Descartes’ era, ‘inertia’ was most commonly associated with its etymological source as ‘laziness’ (objects have an innate laziness as shown in their resistance to motion), though Descartes rejects this position and comes to understand inertia “as a kind of ‘imaginary’ force; while bodies behave *as if* there were some kind of internal resistance to being set into motion” (Garber 1992, p. 254). Although this understanding of what will be called inertia is similar to Newton’s in that it involves the claim that “motion persists in and of itself” (Garber 1992, p. 228), because Newton is generally credited with articulating this understanding of inertia as a real rather than an imaginary force or no force at all, maintaining the difference between their inertias is important for Garber (1992) (see Newton 1846, p. 73).
4. In English, “a motion is [defined as] the actuality of the potentially existing qua existing potentially” (Aristotle 1980, 201a).
5. If it is the case that conceiving the world as other than what is given can combine with the separation of things and words as leading to the fabulation of the world, this is perhaps a modification or questioning of the Husserlian epoché or parenthesizing that leads to the transcendental ego. For Husserl (1999), the deceptions and possible dream-ness of the world leads to the conclusion that “a non-being of the world is conceivable,” leading to the affirmation that there is a transcendental ego that “practices abstention with respect to what he intuits” (Husserl 1999, pp. 17 and 20). This abstention is a parenthesizing of existential positions concerning objects of the world, which also serves to prove the ego as a self-apprehending ego because “Anything belonging to the world, any spatiotemporal being, exists for me—that is to say, is accepted by me—in that I experience it, perceive it, remember it …” (Husserl 1999, p. 21). Thus, even if no world exists, the transcendental ego exists insofar as it has experiences, perceptions, and so on of a world, and the continual reproof of this ego’s existence can thereby become the transcendental foundation of experience. Yet, if the world is conceived as other than what is given while

words can fabulate a new world distinct from the words that create it, it appears that there is not merely a parenthesizing of the world but also a generation of the rules for the world, and for worldliness itself. The non-being of the world is conceivable in this way just as much as the operations of an old and new world. That the world is other than what is given requires, for Descartes, a world as fabulated, whether old or new, and its fabulation will generate the rules which these worlds may obey, even while the fabulation itself follows rules of generation in the telling of its fable. Such generation would be the fabulation of worldliness as well as the fabulation of the world, and doing so is neither specifically nor necessarily transcendental through the Husserlian ego because the otherness of or within the given world is always already at hand, always already informing the 'fabulatibility' of the supposedly transcendental ego, even while that fable of the new world generates the rules obeyed by that world, both as a fable and as a world.

6. In discussing La Fontaine's "The Wolf and the Lamb," Derrida (2009) points out that the irrationality and cruelty of the wolf's devouring the lamb is given reason and morality ahead of the showing of the irrational and cruel act, thanks to the moral at the beginning of the fable that "'The reason of the strongest is always the best'" (Derrida 2009, p. 34). This moral thereby functions like a prosthetic on or supplement to the body of the text such that what the reader will be made to know (*faire savoir*) is how the fable proper is determined in the moral (see Derrida 2009, pp. 34–35). Leaving aside, for now, Derrida's drawing out of the ethico-political implications to this traditional structure of fables (though this structure of moral to fable is not precisely traditional from Aesop, but from later collections of Aesopian fables [see Temple 1998, p. xv]), the structure of the Cartesian fable, at the very least as it appears in *The World*, is not that of a fable without moral. Insofar as this fable generates its own signifieds, it brings to light its own meaning. In bringing to light its own meaning, this fable is its own moral or meaning. The Cartesian fable is not, then, in a strict sense, subject to the same deconstruction between moral and fable proper to which Derrida (2009) subjects La Fontaine. Not that the Cartesian fable is undeconstructible, but that the deconstruction must find a different externality to bring inside the system.
7. Cavaillé (1991) takes the structural similarity between god and Descartes as indicative of a Diocletian-esque, isolated sovereignty of the philosophic, or at least Cartesian, 'I'. Much of his evidence for this position comes from Descartes' April 15, 1630, letter to Mersenne, comparing the known but impossible to grasp "greatness of God" to the majesty of a king, saying that "a king has more majesty when he is less familiarly known by his subjects, provided of course that they do not get the idea that they have no

king" (CSM-K, p. 23; AT I, p. 145). From this point, Cavaillé (1991) claims that Descartes' use of Mersenne to distribute his work anonymously means Descartes has "with his public a relationship similar to that which God holds with his creatures" by "exploiting Mersenne's zeal, in order to be made known while jealously defending his studious solitude from public intrusions" (Cavaillé 1991, p. 297; my trans.). Marion (2007) disagrees. For him, the fact that Descartes consistently solicited responses to his writings, especially in the *Discourse* and *Meditations*, indicates that he is not "anything like a solitary, or even autistic, thinker" (Marion 2007, p. 33). Instead, "Cartesian reason is communicative, precisely because truth manifests itself as a display of evidence; indissolubly, at one and the same time, it is to one's own reason and to the community of those looking on that the thing appears" (Marion 2007, p. 33). Dunn (1991) finds himself somewhere between these positions, claiming that Descartes' claims to isolation are "figurative," even "'fictional'" (Dunn 1991, p. 94). What Descartes does is distinguish his audience "neatly between different tracts," one formally educated and the other undereducated, as found in the audiences for the *Meditations* and *Discourse*, respectively, with the effect that he "[offers] only a partial version of his researches, a partial version of his self," even if "he has … pointed the way to a new rhetoric in which the author is figured as a public judge, a spokesman for a shared discourse, rather than a private advocate arguing for the relevance and legitimacy of his words vis-à-vis an authoritative tradition to which he can make reference but not ever fully represent" (Dunn 1991, pp. 102 and 107). Thus, for Dunn (1991), there is something of an anonymous fiction at work that affects different readers in different ways but does not appear to place Descartes in the position of a sovereign, divine or mortal. Rather, the anonymity and the fiction preserves the capacity for the generation of the thing which his evidence and demonstration would prove in dialog with others.

8. Marion (1999), however, wants to call *potentia* one of the divine names, the one under which "the attributes … creation and supreme power" fall (Marion 1999, p. 244). Human life is, for him, relegated to possibility, though possibility is the one mode of human existence that "exceeds necessary presence" (Marion 1999, p. 203). Possibility gives to humans our temporality in that necessity is distinct from the past and the future since "representation necessarily produces what is in presence," while the future is linked to possibility through freedom (and thus Descartes is linked to Kant), the past linked to it through "inattentive memory" (Marion 1999, p. 203). Because we must abandon the *cogitatio* in order to think the possibilities of the past or future, these temporal modes "confirm … the primacy of presence in the present" in Descartes (Marion 1999,

p. 203). I do not want to contest Marion's argument on temporality, but I am concerned that he defines too strongly the futural mode of possibility while also isolating *potentia* to a divine name. In discussing freedom, he says "Freedom is not represented, since representation implies the presence of an object to the *cogitatio*" (Marion 1999, p. 201). This much is undoubtedly true, but that does not necessarily mean that the future remains purely a possibility in the human sphere. If possibility, *pouvoir*, for Descartes is the power exerted once motion has already begun, then it is unclear that the future would necessarily be precisely possible for Descartes when linked with setting the faculty of thinking into motion. In terms of an already determined, Scholastic set of resources for this faculty, as a faculty of an already developed mind, the future would remain 'merely' possible. However, in terms of the project of setting the faculty of thinking into motion where 'faculty' is associated with *puissance* and *potentia*, this setting into motion looks to open onto a freedom perhaps wider, more indeterminate than the freedom of a possible future. I would claim that such a future is the *potentia* being engaged in the Cartesian fabular project, even from out of minds already set into motion, insofar as the very conceptualization of that mental motion by Scholasticism is already problematic.

9. Martin Joughin notes that, for Deleuze (1990), *puissance* is distinguished from *pouvoir* in that the former means "'actual' rather than merely 'potential' power: power 'in action,' implemented" (Martin Joughin, "Translator's Notes," in Deleuze 1990, p. 407n.b). However, he also notes that "this distinction remains merely implicit in the Latin *potentia*" (Deleuze 1990, pp. 407–408n. b). Thus, Deleuze (1990) finds in Spinoza a correspondence between *potestas* and *potentia* in that "To *potentia* there corresponds an *aptitudo* or *potestas*; but there is no aptitude or capacity that remains ineffective, and so no power [*puissance*] that is not actual" (Deleuze 1990, p. 93). This position emerges from an identification of essence with *puissance* in Deleuze's Spinoza since "existence, whether possible or necessary, is itself power [*puissance*]" (Deleuze 1990, p. 89). As a result, Spinoza can claim that god essentially exists as an actual, active power from which an infinity of things proceed. A similar distinction occurs in Descartes, though with a more explicit connection of *puissance* to *potentia*. That is, *potentia* and *puissance* both indicate a power which is potential, and not necessarily enacted, while possibility and *pouvoir* indicate a power at work in action. However, one distinction at work in Descartes that does not appear to be at work in Deleuze (1990) or Spinoza is that the potential of *potentia* and *puissance* is a power from out of which any action is at all made. There is no action in the pre-motive solid, though the potential for action within it is the potential for order as such. It may be that this distinction is why Spinoza has a difficult time imagining a world radically different from our

own that still remains identical with ours, a world of a fable or fiction where what occurs is not so much the creation of a new order of the world but the imagining of the world anew. Instead, he isolates himself to the possibility of god's creating a new world with a different order which would be understandable in terms of that new order (see Spinoza 1961, p. 160).

10. On the complex relationship between authority and authorship, see Marion (1977), pp. 112–114.
11. Gilson (1947) notes two different significations of the term *bon sens*. The first is "the natural faculty of distinguishing the true from the false," while the second is the Stoic sense of wisdom (Gilson 1947, p. 81; my trans.). Between them, "*bon sens* is the instrument which, if we use it well, allows us to attain *bona mens*, or Wisdom; and, inversely, Wisdom is only good sense reached at the point of the highest perfection of which it may be able" (Gilson 1947, p. 82; my trans.). However, both meanings must be distinguished for Gilson to avoid attributing perfection to everyone. In the context being noted here, significantly more emphasis is thus placed on the first meaning of *bon sens*. In addition, Gilson considers *puissance*, *potentia*, and *facultas* to be equivalent terms (see Gilson 1947, p. 84).
12. Vermeulen (2007), contests Baillet's account of the translation. Beginning from Baillet's general unreliability, she says that the translation began earlier than Baillet claims and that there is scant evidence that Courcelles had a personal relationship with Descartes, although it does appear that the translator would have been a friend (see Vermeulen 2007, pp. 10–12 and 27). In addition, it appears to her difficult to know whether Courcelles would in fact have translated the *Disours et Essais* since his student does not mention it at a eulogy for Courcelles and since Courcelles' Latin was overall better than what appears in the *Specimina*, even suggesting that there may have been a second translator of at least the marginalia, summaries, and table of contents (see Vermeulen 2007, pp. 11, 14, and 31–33). However, in that Baillet is the only source for anyone's claim to translating the *Discours et Essais*, and given that there is some mild evidence external to Baillet that Courcelles could have done the translation, she concludes that "I will on occasion refer to Courcelles as the translator" (Vermeulen 2007, p. 14). I see no reason to argue with her on this point.
13. On the discrepancies and Descartes' responsibility, and abdication of responsibility, for them, as well as other general issues concerning the discrepancies, see Vermeulen 2007, pp. 27–31. This particular discrepancy need not necessarily be laid at Descartes' feet, but only because there are only three corrections he is known to have made (see Vermeulen 2007, pp. 61–63). Vermeulen (2007) does specifically attribute translating *bon sens* with *bona mens* as a Gallicization of a living seventeenth-century Latin, but she does not concern herself with the translation of *puissance* with *vis*,

either in her introductory material, in her notes to the *Specimina* itself, or in her appendix on postclassical words in the text (see Vermeulen 2007, pp. 35, 43–61, 108, and 383–388).

14. On the influence on academic philosophy of the *Specimina* as opposed to the *Discours*, see Vermeulen 2007, p. 29, esp. p. 29n. 8.
15. In his reading of the *Discourse*, Vidricaire (1988) shows that, first of all, *enseigner* appears only ten times, while *faire voir* and variations on it (*dire*, *parler*, *montrer*, *représenter*) appear a total of a hundred times (see Vidricaire 1988, p. 97; my trans.). He finds that *faire voir* has two aspects that are "utilized in an equivalent manner," which follow Emile Benveniste's distinction between discourse and *histoire*, meaning that *faire voir* "cannot … have the meaning of 'récit'," or a simple (biographical) story (Vidricaire 1988, p. 103; my trans.). *Dire* and *parler*, however, "take the form of a *récit* and more precisely that of a history [*histoire*] of the discovery of metaphysical principles" while *enseigner* "is the attribution of an object from a sender [*destinateur*] to an addressee [*destinataire*]" (Vidricaire 1988 p. 104; my trans.). Vidriciare's primary interest is to show that "what is presented as an *histoire* or a fable is a discursive form in perfect concordance with philosophical theses" concerning the status of light and vision (Vidricaire 1988, p. 97; my trans.). However, if there is a problem with his reading, it would seem to be in the maintenance of the distinction between *faire voir* and *dire*, and their correlates, light and thought. Descartes recognizes the distinction between light and thought, of course, but Vidricaire (1988) does not seem to recognize that Descartes' fable or *histoire* is an attempt to *faire voir* self-instruction, to set into motion the mind such that it is possible for light to be understood in an appropriate manner. That is, it is true that the fable of the *Discourse* is no simple *récit*, but that does not mean that its telling can be understood simply as a *récit* either. The telling of the fable or *histoire* of the *Discourse* sets the mind into motion such that the metaphysical principles, the *histoire* of their discovery, can be comprehended. It may not be that what is sent to the reader is an object, as an *enseigner* would accomplish, but that does not mean that light and thought can be so easily distinguished. As in the fable of *The World*, the fable or *histoire* of the *Discourse* tells a particular tale, this time of method, *méthode* over *methodus*, and that method intends to allow for the comprehension of both the *histoire* of the discovery of the metaphysical principles and for the method itself. As a fable or *histoire* that *faire voir* what would allow for the *faire voir* of self-instruction, a self-instruction toward a better comprehension of light, the telling of the fable or *histoire* cannot then be so easily distinguished from the speaking about the metaphysical principles it purports to *faire voir*.

16. Thus, the *Discourse* does not fall under the categorization of what Derrida (2009) calls "the noblest tradition of the university institution, a seminar" and which he distinguishes from a fable (Derrida 2009, p. 34). What a seminar can do is "present itself as a discourse of knowledge *on the subject of* that law of genre that is called the fable," but it cannot be a fable or fabular (Derrida 2009, p. 34). A seminar is only supposed to dispense knowledge while a fable makes something known (*faire savoir*) in the sense that knowledge is brought to another and in the sense of giving an impression or effect of knowing on one's own part. However, the *Discourse*, even as a discourse, is not a "discourse of knowledge," but of method, and the method by which the method of the *Discourse* will be shown is through a story, not through a discourse proper, not through discussing the supposed subject at hand (method) but through *faire voir* what can be *faire savoir* should one follow Descartes on his path, but in one's own way because there is no absolute know-how (*savoir-faire*) to the *faire voir*, save the telling of the story itself. The *savoir-faire* of the *faire voir* itself can only be determined and judged by those who have told their own stories, moved their own minds in the wake of Descartes' fable, *faire voir* for and to themselves. Thus, what comes to be known in the *Discourse* is not dispensed in the manner of a discursive seminar, but is generated in the telling, is an effect of 'knowing' the story of knowing. This failure of the *Discourse* to operate as a discursive seminar and instead as a fable makes all the more sense when attention is called to Derrida's description of the seminar. The Descartes of the *Discourse* is not concerned with nobles but lenscrafters, not with traditions but self-instruction, not with universities but with those with good sense. To the extent he is concerned with institutions, it is limited to what those with good sense properly applied can establish. It is not so much that the *Discourse* escapes the distinction between discursive seminar and fable that Derrida (2009) lays out here as much as it is that Descartes is engaged in something like an ironic, if not deconstructive, relationship to the language of that noble tradition and institution because the knowledge, the *savoir*, being dispensed is not being dispensed with any *savoir-faire* and therefore cannot *faire savoir* anything useful. To be clear, Descartes is not a deconstructive thinker, even in the *Discourse*, where he simultaneously tears down and rebuilds the house of knowledge, if only because he finds another place to live while doing so (see CSM I, p. 122; AT VI, p. 22), but the fable of the *Discourse*, insofar as it explicitly does not teach, cannot be held on either side of the distinction Derrida (2009) lays out between the discursive seminar and the fable. It is not a discursive seminar for the reasons laid out above, but it is not a fable in the way Derrida (2009) describes, either, precisely because it is a *discourse*. Because it is a discourse on *méthode*, because it is a discourse on how knowledge would be dispensed, a discourse

on the *savoir-faire* of *savoir*, it cannot ever have been a simple repetition of dispensation, but must itself show how to know how to make known. Such a showing remains or involves a dispensation even while distinguishing itself from the noble traditions of university dispensation.

17. Verene (2006) sees the importance of paying attention to the fact that Descartes presents the work wherein he criticizes fables as itself a fable. It is, of course, first of all ironic and intellectually interesting for that reason alone but is also interesting because it should open up a different way of teaching not only Descartes but philosophy in general since, even though "Most philosophical education directs the student immediately to look for the arguments in a text," nonetheless "Argumentation without a larger context of thought is a dead end" (Verene 2006, p. 101). However, Verene (2006) does not focus on Descartes as teacher, as someone who is deploying the rhetoric of antirhetoric via a rhetorical trope (fable, *histoire*). In focusing on the relationship between the fable or *histoire* of the book titled the *Discourse on Method* and that book's argument against fable, *histoire*, and books of the past, Descartes as teacher may possibly emerge.
18. Nancy (1978) sees the antirhetorical rhetoric and the rhetorical antirhetoric in the fable or *histoire* of the *Discourse* as arguing against "classic readings of Descartes," even when those readings claim to read the *Discourse* as a fable or *histoire*, because they treat the fable or *histoire* "as a literary covering," a rhetorical trope not to be taken seriously for the generation, the discursivity, of method (Nancy 1978, pp. 641–642). For Nancy (1978), in recognizing the non-ornamental status of the supposed ornament of the fable or *histoire*, "Our difficulty lies then in bringing to light the **original** of the *Discours*" because its original issue cannot be a frank storytelling of one's own life insofar as the storytelling would be fabular (Nancy 1978, p. 644). This original would be in the frankness of the fabular storytelling, in calling attention to the fabulousness of the *Discourse*, which makes it "the original of all fables" (Nancy 1978, p. 646). One aspect of the list of things to be rejected and within which the *Discourse* can be said to participate—that is, books of the past—of which Nancy (1978) perhaps does not take account, however, is that the pleasures to be found in books is that they are like *rehearsed* conversations. In that sense, the fable of the *Discourse* would not be original, but a repetition of a conversation Descartes had with himself and with the reader, who will repeat this conversation anew, in an original and originary fashion, with him- or herself in the generation of his or her own fable or *histoire*, a new fable or *histoire* that would jettison fables and *histoires*. The originality of the Cartesian fable in Nancian terms, then, is in its non-originality, in placing and displacing its own origins onto a reader with whom Descartes has rehearsed as much as with himself.
19. The dreams are described in VMD I, pp. 80–86; quoted in AT X, pp. 180–88; and described in CSM I, p. 4n. 1.

References

Aristotle. 1980. *Physics*. Translated by Hippocrates G. Apostle. Grinnell, IA: The Peripatetic Press.

Cavaillé, Jean-Pierre. 1991. *Descartes: La Fable du Monde*. Paris: Librairie Philosophique J. Vrin.

De Salluste du Bartas, Guillaume. 1981. *La Sepmaine; ou, Creation du Monde*. Edited by Yvonne Bellenger. Paris: Nizet.

Deleuze, Gilles. 1990. *Expressionism in Philosophy: Spinoza*. Translated by Martin Joughin. New York: Zone Books.

Derrida, Jacques. 2009. *The Beast and the Sovereign, Volume I*. Edited by Michel Lisse, Marie-Louise Mallet, and Ginette Michaud and translated by Geoffrey Bennington. Chicago: The University of Chicago Press.

Dunn, Kevin. 1991. "'A Great City Is a Great Solitude': Descartes's Urban Pastoral." *Yale French Studies* 80: 93–107. https://doi.org/10.2307/2930263.

Garber, Daniel. 1992. *Descartes' Metaphysical Physics*. Chicago: The University of Chicago Press.

Gilson, Étienne. 1947. Commentaire Historique. In René Descartes, *Discours de la Méthode: Texte et Commentaire par Étienne Gilson*, 79–477. Paris: Librairie Philosophique J. Vrin.

———. 1964. *Index Scolastico-Cartésien*. New York: Burt Franklin.

Husserl, Edmund. 1999. *Cartesian Meditations: An Introduction to Phenomenology*. Translated by Dorion Cairns. London: Kluwer Academic Publishers.

Macbeth, Danielle. 2004. "Viète, Descartes, and the Emergence of Modern Mathematics." *Graduate Faculty Philosophy Journal* 25 (2): 87–117. https://doi.org/10.5840/gfpj200425212.

Marion, Jean-Luc. 1977. Annotations. In René Descartes, *Règles Utiles et Claires pour la Direction de l'Esprit en la Recherche de la Vérité*, translated by Jean-Luc Marion, conceptual notes by Jean-Luc Marion, and mathematical notes by Pierre Costabel, 83–294. The Hague: Martinus Nijhoff.

———. 1999. *On Descartes' Metaphysical Prism: The Constitution and the Limits of Onto-theo-logy in Cartesian Thought*. Translated by Jeffrey L. Kosky. Chicago: The University of Chicago Press.

———. 2007. "The Responsorial Status of the Meditations." In *On the Ego and on God: Further Cartesian Questions*, translated by Christina M. Gschwandtner, 30–41. New York: Fordham University Press.

Maull, Nancy L. 1978. "Cartesian Optics and the Geometrization of Nature." *Review of Metaphysics* 32 (2): 253–273. https://doi.org/revmetaph1978322132.

Morin, Marie-Eve. 2012. *Jean-Luc Nancy*. Cambridge: Polity Press.

Nancy, Jean-Luc. 1978. "Mundus Est Fabula." Translated by Daniel A. Brewer. *MLN* 93 (4): 635–653. https://doi.org/10.2307/2906598.

———. 1979. *Ego Sum*. Paris: Flammarion.

Newton, Sir Isaac. 1846. *Newton's Principia: The Mathematical Principles of Natural Philosophy*. Translated by Andrew Motte. New York: Daniel Addee.

Prendergast, Thomas L. 1975. "Motion, Action, and Tendency in Descartes' Physics." *Journal of the History of Philosophy* 13 (4): 453–462. https://doi.org/10.1353/hph.2008.0516.

Ribe, Neil M. 1997. "Cartesian Optics and the Mastery of Nature." *Isis* 88 (1): 42–61. https://doi.org/10.1086/383626.

Spinoza, Benedictus. 1961. *The Principles of Descartes' Philosophy*. Translated by Halbert Hans Britan. La Salle, IL: The Open Court Publishing Company.

Stewart, William McC. 1938. Descartes and Poetry. *The Romanic Review* 29 (3): 212–242. https://hdl.handle.net/2027/inu.30000097436673

Temple, Robert. 1998. Introduction. In Aesop, *The Complete Fables*, translated by Olivia and Robert Temple, ix–xxiii. New York: Penguin Books.

Verene, Donald Phillip. 2006. "Philosophical Aesthetics." *Journal of Aesthetic Education* 40 (4): 89–103. https://doi.org/10.1353/jae.2006.0038.

Vermeulen, Corinna Lucia. 2007. *René Descartes, Specimina Philosophiae. Introduction and Critical Edition*. Ph.D. diss. Utrecht University.

Vidricaire, André. 1988. "La vision comme procédé de communications dans le *Discours de la Méthode*." *Philosophiques* 15 (1): 95–105. https://doi.org/10.7202/027037ar.

CHAPTER 3

Fable-Structure or -Logic

Investigating Descartes' use of the fable in the strict sense has shown how he distinguishes the rule-generation and rule-obedience of fable from the chaos of poetry and shown that this form serves the pedagogical purpose of inaugurating a mental movement on the part of his readers. However, since 'fable' is mentioned and used only a few times positively over the course of Descartes' career, showing how it lays out a structure for his philosophy cannot be isolated to its precise mention. Thus, it is now necessary to show a fable-structure or -logic at work throughout. If it can be shown that there is such a structure or logic at work, the pedagogico-literary form of fable can be taken as a way to engage method and imagination.

Accomplishing this task will require two steps. First, it requires exposing the logic of the fable and its pedagogical purpose at work in other forms of writing, in particular history, treatise, dialog, novel, and hypothesis. Second, it requires examining and clarifying how deception and the technique of self-deception relate to the fable as deployed in Descartes and how this relationship exposes the deployment of the fable as a method for the construction of the self and for its self-instruction.

Fable and Other Forms

In the *Discourse*, the wide distribution of the *puissance* of good sense makes the fable pedagogically effective, regardless of the conceivable if uninterpretable motions in which they may have already been engaged.

© The Author(s) 2018

J. Griffith, *Fable, Method, and Imagination in Descartes*,
https://doi.org/10.1007/978-3-319-70238-4_3

The rhetoric of fable allows the reader to take on the rules laid out by and as fable, whether these rules are of physical or mental motions, as though they are the reader's own. For each reader, the path that generates obedience to the rules will be different, individual. And that same good sense, that is, each of our potentials for reason, will judge the utility of the method by which good sense is applied through our individual *histoires* or fables.

In the Poêle *and in* Histoire

Having set the scene, having shown to his readers why he abandoned his education to begin the process of self-instruction that ultimately led by fortune to the method, Descartes and his readers enter the *poêle*, where the 'true' content of the fable is held, to the extent that the scene-setting *histoire* of Part One of the *Discourse* could ever be distinct from the fable. That part of the fable or *histoire* does not explain why Descartes finds himself in the *poêle*. Indeed, more background, more history, is needed to make sense of the *poêle* of the fabled location of the fabled dreams.[1]

The book called the *Discourse* takes the reader to November 10, 1619, somewhere "in Germany" (CSM I, p. 116; AT VI, p. 11). Descartes has rejoined the army of the Catholic Maximilian I, Duke of Bavaria, also known as Maximilian the Great, after witnessing the coronation of the new Holy Roman Emperor, Ferdinand II, on August 30. From about 1618 to 1619, he has been a volunteer noble soldier in the army, one of the "*Attendans*," of the Protestant Maurice of Nassau, who becomes the Prince of Orange on February 20, 1618. He joins Maurice's army not with an eye to being a career soldier, "but only to Study the different natures of men more according to nature, and to make himself proof against all the accidents of life." Because life in Maurice's army failed to provide him with the "variety of occupation ... that he promis'd himself upon his leaving *France*," and because of the outbreak of the Thirty Years' War, at the Cessation of Arms between Maurice and Don Ambrogio Spinola Doria, First Marquis of the Balbases, he leaves for the coronation. Before leaving in September, however, he joins the Duke's army, and was to rejoin it after the coronation. He reaches the army's winter quarters on the banks of the Danube near Nuremberg in October. It is there that he finds himself in the *poêle* (LMD, pp. 22, 27, and 30; VMD I, pp. 45 and 77–78).

This is the history of his travel leading him to the *poêle*, almost none of which is indicated in the *histoire* or fable of the *Discourse*. But there is more to this history, beyond Descartes' *histoire* and his history. A *poêle* is no ordinary place in theologico-political and literary history. A century before Descartes, *poêles* were used by Protestants for meditation. A century earlier, they were used in poetry as symbols to mock the chilvalric ideal because they were used by errant or erring knights as quarters where they could pretend to run errands and instead "'se rigollent avec ces fillectes tout l'iver' [play around with girls all winter]" (Reiss 1991, p. 23). Reiss (1991) explains that he is not necessarily claiming that Descartes is in fact referencing this history in referencing the *poêle*, but that this metaphor "was a familiar one for a break with the past and an implication of revolt and renewal" (Reiss 1991, p. 23). However, the very fact that it was a familiar metaphor indicates that it would have been known by at least some of Descartes' readers.

This is the place where Descartes "stayed shut up alone" and "was free to converse with myself about my own thoughts." It is already embedded within his personal history, as the fable or *histoire* tells us, but it is also embedded within military and political history, which it only glancingly mentions. It is also embedded within religious, political, and literary history, at which it does not even hint, though at least some of his readers would have known the reference, no matter their formal education (CSM I, p. 116; AT VI, p. 11).

Two elements of this *poêle* must be noted. First, within the fable or *histoire*, Descartes tells us that a more perfectly crafted object is the result of one mind over and above many minds, whether the object is a building or a legal system. As a result, he can only focus on reforming his own thoughts, though he recognizes that his own example "may be too bold for many people," especially those who think themselves more clever than they are or those who are honest enough to recognize their modest abilities to judge. That Descartes was able to extract himself from the ranks of the former is due only to the fortune of having come to this *poêle* at the right time and because of his particular personal history of never being able to imagine anything so strange and incredible as to not already have been thought. This combination allows him to begin to develop the method of slow procedure, especially once he disregards the logic, geometry, and algebra of his education because of logic's confused precepts, geometry's tendency to tire the imagination, and algebra's inability to engage in the concrete world of experience. Thus, he determines the four

epistemological laws of his method: only accept as true that for which he has evidence, divide what is difficult into its simplest parts, direct his thinking in an orderly fashion from those simplest parts, and be as comprehensive as he can in his determinations (CSM I, pp. 118–120; AT VI, pp. 11–13 and 15–19).

None of this thinking is possible without his particular history, without the formal education he was able to gain throughout his life, without having been able to travel with armies in such a manner that he can, at a propitious moment, find himself alone in the *poêle* for an extended period. His dreams have been prepared for, even "from the time he left the Colledge." Where, in the *histoire* or fable, he specifically has this dream, he does not tell us. The dreams seem to have given rise, through interpretation and "reflections," to the four epistemological laws of this method, but the dreams themselves arose through having begun to think of crafted objects as more perfectly designed by a single person, a single mind. This is the story he is telling the reader, a series of preparations that are the *histoire* or fable of his discovery of his method, in the hope that this *histoire* or fable might initiate a motion in the reader's mind, particularly in the mind of the lenscrafter (LMD, pp. 34 and 36).

But this story, this history, extends beyond the story itself, in being in a *poêle*. He is in the *poêle* because of his relationship to the Protestant Maurice of Orange and the Catholic Maximilian I. Not having taken a side in the Thirty Years' War despite his own Catholicism, he finds himself ready to serve a Catholic army. But, in finding himself ready to serve a Catholic army, he also finds himself in a locus of Protestant meditation. Descartes, by and large unwilling to take a side in this debate (see CED, pp. 129–130; AT IV, pp. 351–352), finding it generally a matter of the same "custom" that tends to persuade most, confirms that position without saying a word here, provided we know the history that he does not mention but that many of his readers would have known. What the history—personal, religious, and political—of this fable or *histoire* does is further lay the ground for a rebellion against authority, regardless of the content, insofar as the rebel begins with modesty and focuses solely on him- or herself. The unmentioned history behind this *histoire* or fable tells us that Descartes finds himself between Catholicism and Protestantism, unwilling to adhere to any authority other than his own judgment (CSM I, p. 119; AT VI, p. 16).

For Flynn (1983), the excision of the personal history involved in Descartes' travels leading up to the *poêle* is indicative of a dehistoricization

of the Cartesian method. Descartes "finds more perfection in cities which architecturally have no history," "prefers societies which have no constitutional or juridical history," and "would prefer to be a man without a personal history" (Flynn 1983, pp. 17–18). The annulation or annihilation of one's own history in telling a story that accomplishes this annulation is the Cartesian resolution of a tension within Cartesian discourse because it generates an absolute self, one "given to itself absolutely and existing absolutely" (Flynn 1983, p. 16). However, as Flynn (1983) also acknowledges, the *Discourse* "addresses a contemporary reader," and so a reader who would have known what was at stake in the Thirty Years' War, as well as what it was for Descartes to have been called back to war as after witnessing a coronation in Germany (Flynn 1983, p. 17). Because these readers are also to judge the method of this *histoire* or fable, and judge it after or simultaneously to having engaged their own *histoires*, the absoluteness of the self that emerges from the *poêle* cannot fully be understood as being self-given. What is more, the literary history at hand here seems to both reinforce and further undermine Flynn's claims. The *poêle*'s status in personal and theologico-political history would reinforce Flynn's claims in that it is clearly a place where one reinvents oneself. However, in that this status emerges as a result of literary and theologico-political history, Flynn's claims are undermined. The self cannot extract itself from this history.

Yet the reader should not be too sure of Descartes' stance because this background history, on the literary side, also draws the reader's eye to deception. If the *poêle* is also a place where knights-errant would retreat in order to pretend to be on their errands, to deceive their masters as to their honest chivalry, then the reader, to whose good sense Descartes offers up his fable or *histoire* like an honest and honoring gift, should read this fable or *histoire* with a suspicious eye. Not only does the fable or *histoire* not draw attention to the history behind it, but part of that unacknowledged history is a history of deception. This history would uplift the mind insofar as it brings the reader's judgment to consider the possibility of deception, but Descartes does not mention it. Of course, insofar as his readers can read French, perhaps they could be assumed to understand the mockery of the good, honest authority of the medieval world, itself a goal of Cartesian philosophy in general. As Becker (1994) points out, when discussing the *Passions of the Soul*, Descartes sought to "substitute the discipline of [generosity] for Aristotelian magnanimity or the scholastic's conception of prudence," especially if generosity could be combined with humility (Becker 1994, p. 16). Generosity and humility come to replace

the more aristocratic, medieval values and passions of glory and shame throughout England, Scotland, and France, as civil society emerges in response to the religious wars of the seventeenth century. Following Descartes, Becker (1994) claims that the universally achievable value of "Good will" can give rise to a generosity of spirit that remained humble in its presentation (Becker 1994, p. 16). However, Cartesian generosity, "while considerably scaled down from its pretensions to grandiosity, munificence or extravagant display, did not altogether lose something of its archaic grandeur" (Becker 1994, p. 16). This reading of Becker's can be seen in the suspicion of the honesty of the medieval world on display through the literary history implied with the *poêle*. In referencing a literary history that mocks the medieval world in general, there is a reference to the dishonesty of that world. However, in himself being something of a knight delayed in his return to duty, the reference to dishonesty should also be applied to the fabulist himself, and the suspicion that should arise from the reference to this history of dishonesty is already beginning the suspicion to which Descartes himself will draw the reader's attention. Descartes, here, is humble, even humiliating himself, being generous and honest about his place, his non-elevated or even ignoble place in a world where good sense is potentially distributed among all people. But such humble generosity and honesty can only be made sense of in reference to the *histoire* or fable in the *poêle*, and in reference to the history of the *poêle*.

Thus, in not mentioning it, he perhaps thought he was instigating a suspicion not only of authority and tradition but of the honesty of the author, that evil genius who claims an interest in beginning a more proper mental motion on the part of modest and skeptical readers. Such a suspicion is the necessary inaugural step to the Cartesian method, of course, and is possible on the part of French readers because of the democratization of reason as potential in all readers, even those without much sophisticated philosophical training. This democratization is all the more at work in the unstated history of debasing the motivations of authority, regardless of the religious persuasion as persuaded by custom or meditation.

What is brought to light here, then, is that the fable or *histoire* are structurally connected to this history insofar as the story told in this *histoire* uplifts the mind to good sense and judgment. This fable, which inaugurates motion in its reader's good sense and tells the story of Descartes' fortunate discovery of his method, is *histoire*, is historical, both in the story it tells and in the history it does not. Its telling of method, then, will involve history, will be historical and historicized.[2]

The Fable-Treatise in the Fable or **Histoire**

In leading up to his discussion of the fable of *The World* within the fable or *histoire* of the *Discourse*, Descartes concludes Part Four by dismissing dreams and perceptual deception thanks to the power of reason over the imagination, as well as to knowledge of god and the soul (*âme*). Sleeping does not prevent a true idea from being true and the deceptive phenomenal content of dreams is of no more consequence than sensory deception is in waking life. The reason initiated by the fable or *histoire* at hand here is set into motion from out of the good sense *in potentia* for all, a fable or *histoire* that tells the story of a man in a *poêle*, which itself is already an appeal to meditation and solitude as much as to deception, such that the world's phenomenal rules and its history, may be given and interpreted according to the rules laid out in the meditative solitude of the deception-laden *poêle* by a reader who will tell, retell, him- or herself his or her own fable or *histoire* to arrive at the method to apply his or her own reason or good sense in a useful manner. This reason is what should convince, over and above the deceptions of the senses and the imagination or even the persuasiveness of custom, at least the old custom that the reader must unlearn in order to instruct him- or herself. While the senses may be deceived, my own imagination can deceive me, generating chimeras and griffins. Reason must be convinced, however, in dreamworld and waking life (see CSM I, pp. 130–131; AT VI, pp. 39–40).

At this point of introducing Part Five, Descartes explains that he would be happy to continue to show the other truths exposed by the method's deduction from the fundamental truths of soul and god. However, such truths would involve engaging the learned (*doctes*), which would not be a useful digression for lenscrafters, so he opts to explain what questions are raised by the fundamental truths, in order to "let those who are wiser [*plus sages*] decide whether it would be useful [*vtile*] for the public to be informed more specifically about them." Thus, Part Five is a summary of *The World* and *Treatise of Man*, which were begun with the intention of being published together (CSM I, p. 131; AT VI, p. 40).

Part Five is written to the learned as much as to craftspeople. Perhaps as a result of this supplementary reader—a reader who will judge the value and utility of what the general reader of French, whose good sense is equal to that of the learned, cannot judge—Descartes does not refer to *The World* as a fable here but as a "treatise," which it is in the title, but not within the text. If *The World* is a treatise, however, that does not make it

any less of a fable, no more than calling it a fable in the text makes *The World, or Treatise on Light* any less of a treatise. As he explains in the two-page summary of the fable-treatise, because he "did not want to bring … too much into the open" the metaphysical and/or religious depths of his claims on light, he opted to suppose the divine creation of a new world "somewhere in imaginary spaces [*Espaces Imaginaires*]" that would suffice to explain his theories. Thus, two paragraphs after explaining that reason must take the lead in conceiving and understanding over and above the imagination, Descartes describes his treatise as being located in imaginary space. It is an imaginary treatise, then, or a treatise of the imagination. It is unclear, within the fable or *histoire* of the *Discourse*, whether this treatise is a treatise in a normal, academically accepted fashion, or whether it should be placed in a separate literary category, perhaps under 'fable' (CSM I, p. 132; AT VI, p. 42).

But the *Discourse*, insofar as it itself remains a fable as well as a history and *histoire*, has the goal of beginning motion in the potential of good sense or reason such that its readers may judge the value of this work for themselves. Insofar as Part Five is written to the learned as much as to craftspeople, the learned whose judgments of utility will supplement or perhaps even correct the judgments of the modest craftspeople, and insofar as the goal of beginning motion remains, naming *The World* a treatise here is an excusable rhetorical gesture to the learned, who perhaps might not take a fable as seriously as it deserves and who therefore deserve to be deceived as to the metaphysico-theological seriousness of the fable-treatise of *The World* when they encounter its summary in the fable or *histoire* of the *Discourse*. The treatise thus becomes connected to the fable and *histoire* insofar as the goal is to inaugurate mental motion.

Treatise and Dialog

In moving from the fable of light that is the world of *The World* to the fable or *histoire* of the *Discourse* that opens that inaugurating structure of fable to history and storytelling in general—to history beyond the *histoire* of the story told within the *Discourse* but which tells the reader, learned or lens-crafter, much about the anonymous author who wants to set good sense into useful motion—even the treatise as a form can take on the appearance of a fable as much as a fable can take on the appearance of a treatise. In the portion of the fable or *histoire* of the *Discourse* that prepares the reader to enter the fabled *poêle* with Descartes, the preparatory work of the fable,

the preparation of good sense in potential good use, the perhaps necessary relationship between fable and preparation is shown, though this preparation is decidedly not of the same order as the moral in the traditional fable because it prepares the reader to tell his or her own fable or *histoire*. Nonetheless, preparation is necessary as a way to move the reader away from the path of thinking on which he or she had been, whether formal academics or average everyday experience, such that the relationship to history—personal, political, religious, or literary—is always already incorporated in the movement set to work by the Cartesian fable.

What appears as a treatise can thus take on the inaugural and preparatory structure of a fable, especially when what the treatise prepares the reader to encounter is another explicitly didactic or pedagogical literary form, like a dialog, as occurs with *The Search for Truth*. The treatise-fable leading up to its dialog does, however, have a moral, where Descartes writes that the natural light, which he will set into motion, "*determines what opinions a good man* [honeste homme] *should hold*" on any topic, and that it can determine these opinions outside of philosophy or religion. Such a good, honest man does not need to read every academic book, and he should especially determine, thanks to the natural light set into motion by this very rule, how to "measure out his time so as to reserve the better part of it for performing good actions [*bonnes actions*]." Thanks to the moral's placement in the text, leading to a certain interpretation of even the preparatory treatise-fable that precedes the dialog, this appeal to the pragmatic or useful ways of spending time, or good actions, *The Search for Truth* may appear to be less of a fable than either *The World* or the *Discourse*. It might appear as if the treatise-fable is interested in teaching rather than showing. Descartes even writes in the second paragraph that his intention is "to explain [*enseigner*]." However, this treatise-fable is the preparation for a dialog, where characters speak. These characters—Polyander, Epistemon, and Eudoxus—embody and enact the roles of an everyman, a man of knowledge, and a man of good or right opinion, where Polyander is shown, shows himself in fact, through, by, and with Eudoxus' help, that Epistemon's claims to knowledge are unfounded. The reader of this dialog, perhaps sympathizing or identifying with Polyander, is also shown the truth of Eudoxus' opinions and the falsity of Epistemon's knowledge claims. In addition, what Descartes wants to teach here is the falsity of the knowledge claims of the learned as well as of average everyday experience. What he will teach is unlearning, which is neither necessarily the learning that a good, honest man could have achieved without the

misguided lessons of his past nor that a good, honest man could achieve thanks to the fortune of a "great natural talent, or else the instruction [*instructions*] of a wise teacher [*sage*]." What will be shown, what will be brought in as evidence (*mettre en evidence*), and so what will be presented before sight or seeing, will be the value of the soul that can teach itself proper pragmatic conduct and useful application of reason such that true knowledge is acquired, although Descartes never completed this dialog. In preparing the reader for this showing, in showing the reader what will be shown, the treatise-like propaedeutic to the dialog takes on the qualities of a fable (CSM II, p. 400; AT X, pp. 495 and 496).

What is more, in its structure of showing the average everyday man his own potential to himself, with as little interruption from the learned as possible, the reader is shown the same potential. The potential as a potential, as having been less applied in the useless endeavors of the learned, will make this showing to Polyander within the showing that is the dialog all the more beneficial to Polyander because he is "unprejudiced [*n'estes pas préoccupé*]," that is, has less to unlearn, less to be taught of unlearning, and can therefore begin on the Eudoxian path for himself all the easier. Epistemon, all the learned, must admit of their prejudices and useless preoccupations. His words are preoccupied with useless syllogisms and the interrupting *quaestiones* of academic life, not directed toward good actions. He wants to teach Polyander, not show him how to set his natural light into motion and conduct his life.

For Brewer (1983), *The Search* continues philosophy's tradition of silencing others insofar as it ends "when Poliandre, the 'joyeux compagnon,' becomes no more than the dummy for the ventriloquist Eudoxe" and thereby becomes a mechanism for imposing a master–student relationship between them and, by extension, between Descartes and reader (Brewer 1983, p. 1239). As he also indicates, however, "the way Descartes is read depends entirely on how his readers understand the term *faire voir*" (Brewer 1983, p. 1238). He seems to think that *faire voir* should be read in its forceful capacity to silence critics and others. What he does not seem to acknowledge is who that other is that is being silenced in the content of this dialog and what relationship that other has to others. If the other is Epistemon, then this other is not satire or poetry, à la a certain Plato. Epistemon and Scholasticism are other than Descartes' philosophy in their own attempts to silence others. This is why they teach as opposed to make shown. A teacher for Descartes is a master, a master with all knowledge, who brings the truth from on high to fill his or her students' minds.

Thus, what happens when Epistemon is silenced cannot be precisely understood as a silencing of an other to philosophy, but a silencing of another philosophy, another philosophy which may be conceivable but remains uninterpretable. What the forcing of a truth that occurs in *The Search for Truth* is doing in operating as a *faire voir*, is a counterforce, a force that sets off the unlearning of what has been learned, a counterforce to the force of Scholasticism.

No doubt, Brewer (1983) is correct when he claims that we need "*to read* this classical form [i.e., dialog] *against itself*" via the fiction at its structural heart that is too often disregarded, but this reading against its form, as a form that would appear to efface its fictionality in the very appearing as fiction, need not limit itself to the force of dialog qua form and qua forming of truth (Brewer 1983, p. 1246). Reading the form against itself can also address, as is the case with *The Search*, the force of dialog as counterforce to a force that has already enforced itself within, against, and upon the reader as well as the interlocutors.

All of this is shown within the dialog itself, for which the reader has been prepared by the treatise-like introduction, which itself is given an organizing principle not unlike a moral at the beginning of this beginning. That treatise-like beginning brings the dialog proper within the inaugurating structure of the fable (CSM II, pp. 404 and 403; AT X, pp. 504 and 502).

Hypothesis-Fable-Novel

The fable is a crucial concept and device in Descartes' career, whether it is an *histoire* or a fable proper, if these can be distinguished. It appears in many forms and ways. Appearances, of course, can be deceiving, and this applies to philosophico-pedagogico-literary forms as well as to things in the world. Indeed, that appearances may deceive is all the more important to bear in mind when encountering what will establish the possibility of clarifying the true nature of things in the world. These things, these books, fables, treatises, may all deceive us in their appearances, but if we are attentive to the fabular nature, to the fabulous essence that they are and not that they possess, then perhaps we can see the foundational demands of the fable as a form for Descartes.

In this way, we can make sense of what Descartes means when he writes to Denis Mesland a year after the *Principles*' 1644 publication that the last two parts of the *Principles* can be taken "as a pure hypothesis or even a

fable" should the reader decide to doubt their truth. The book remains a "treatise" since its form is that of laying out *principia* rather than telling an *histoire*, but its second half can be taken for hypothesis or fable (CSM-K, p. 249; AT IV, p. 217). Descartes has changed his approach to laying out principles primarily in order to "make it easy to teach [*enseignée*]," as he writes to Mersenne in 1640 (CSM-K, p. 167; AT III, p. 276). Thus it does appear Descartes is abandoning the fabular quality of his earlier work that show his readers how to think along with him in their own ways. Now, and especially when writing in Latin, it would appear that he is writing a textbook, a technique for teaching the learned how to unlearn all that they have learned but in a fashion more amenable to the methods and forms of presentation to which they are accustomed.[3] It would seem that way, but the letter to Mesland ought to cause suspicion concerning Descartes' interest in writing the *Principles* in the way he did. That is, when he meets resistance as to the content of his claims about the physical operations of the universe, he offers up these writings as hypothesis and fable, even while they remain part of a treatise. This relationship of treatise to fable and hypothesis is the case even within the text itself. In Part Three, titled "The Visible Universe," he writes that he will make false assumptions in order to explain all physical phenomena, while he begins Part Four, titled "The Earth," by claiming that these false hypotheses are necessary to explain "*the true nature of things*." The treatise incorporates false assumptions so that the true nature of things might be exposed, but if any reader finds these false assumptions problematic, he or she is free to take them as hypothetical and fabular, as merely pedagogical tools to set the mind into motion. If that is the case, then the second half of the *Principles* apparently must be taken as a fable, despite the appearance of operating in the traditional philosophical mode of a treatise, because the *Principles*, as a textbook, as an attempt to teach, is interested in setting the mind into motion over and above the proof of its principles as such. Thus, treatise and hypothesis can be incorporated within the structure of the Cartesian fable that, because hypothetical, obeys rules it generates (CSM I, pp. 256–257 and 267; AT VIII, pp. 100–101; pt. 3, arts. 45–46, and pt. 4, art. 1).

Incorporating hypothesis within the structure of fable shows not only a difference between Descartes and, say, Galileo but also of what marks Descartes as a thinker whose scope is wider than what Galileo could have hoped to accomplish (see Garber 1992, p. 2). When Cardinal Bellarmine (2008) writes his certificate for Paolo Foscarini on April 12, 1615, he writes that both Foscarini and Galileo "are proceeding prudently by

limiting yourselves to speaking suppositionally and not absolutely [ex suppositione *e non assulutamente*], as I have always believed that Copernicus spoke" (Bellarmine 2008, p. 146; 1934, p. 171). The latter himself writes that the Copernican system is demonstratively persuasive and is therefore "worthy of being very carefully considered and pondered" concerning its truth (Galilei 2008a, p. 151). Thus, he explains in the preface to the *Dialogue on the Two Chief World Systems*, addressed to "the Discerning Reader," that he is deploying the Copernican system "in the manner of a pure mathematical hypothesis [*pura ipotesi matematica*]" with the intent of showing it as superior to the geocentric system "though not absolutely [*non … assolutamente*]" (Galilei 2008b, pp. 190–191; 1970, p. 3). Hypothesis and supposition are laid out for the purpose of demonstration to the persuadable, and thus are laid out for a rational mind in opposition to the irrational, or at least in opposition to the stubborn.

Descartes' insight on this point exceeds Galileo's attempts to evade being placed on the *Index* in that what Descartes is always after is a generation of the rational mind itself. Galileo's claims always leave open the possibility of empirical support or refutation, but Descartes' claims are intended to generate the ground for the possibility of an empirical search in the first place. Whether he ever muttered "but still it moves," what Galileo does claim is that the movements themselves are to be witnessed in some fashion. What makes Descartes a philosopher, beyond the 'mere' scientificality of Galileo's research, is the recognition that, before the witnessing of given facts is possible, the mind itself needs to be moved.[4] "But still it moves" can be known as true only if we can get outside the world, or at least the Earth, but the world as a fable can be known as true only if we first accept the fabularity of the world, only if the truth of the claim is accepted as a story that opens our minds to moving in some way, regardless of the alternatives, because these motions of the mind will leave us in the position of being persuadable by the hypothetical attempts on the part of scientists to demonstrate the motions of the heavens. To accept this fabularity is not an acceptance on the level of demonstration, nor can it be, which is the fundamental reason for accepting it qua fable. The demonstration is found within the fable itself, and is found in it as fable, as *histoire* and hypothesis. From that point, it is possible to discern other demonstrations. Thus, Descartes' fables are more difficult to place on the *Index* not because they are more persuasive or because he was more dissimulative, but because the fables tell the story of becoming persuadable, they persuade to persuasion, over and above persuading anyone about any particular claim.

Of course, the relationship between the fable of *The World* and hypothesis of the *Principles* is not merely accidental. Descartes writes to Constantijn Huygens in 1642 that he is writing what will come to be titled the *Principles* because he wants to make *The World* learn (*faire aprendre*) "to speak Latin."[5] The Latin title he is considering at this point, "*Summa Philosophiae*," is specifically designed to "make it [i.e., *The World*] more welcome to the scholastics [*il s'introduise plus aysement en la conuersation des gens de l'éschole*]." So the *Principles* is once again the fable of *The World*, only now shown to his readers, in particular his learned readers, as *principia philosophiae* rather than as *les principes de la philosophie*. Thus, the fable has been made to learn not only to speak Latin but also not to appear as a fable, which makes Descartes' appeal to reading the second half of the treatise as a hypothesis or fable all the more intriguing.[6] That is, if the *Principles*, as *principia*, takes on the motivational role of a fable for the good sense of those who have spent too much time with uninterpretable books, then the form of presentation of this text qua treatise, qua principled and syllogistic also shows that Descartes is always and primarily concerned with not merely showing his theories and proofs, but with doing so in a fashion, through a method of presentation that will most appeal to his readers, whether in Latin or in French, and that his attempts to do so always entail initiating the unlearning of what has been learned by these readers in such a way that each can find his or her own way to this unlearning and the subsequent learning (CSM-K, p. 210; AT III, p. 523).

The *Principles* is a hypothesis-fable-treatise, then, while *The World* is a fable, the *Discourse* a fable or *histoire*, and *The Search* is a treatise-fable-dialog. But the *Principles* is even more structured by the fabular, since it was itself made to learn French, a translation by Abbé Claude Picot being published in 1647. The treatise that is the result of making the fable learn Latin itself turns back to the initial and initiatory language. And Descartes makes the *Principles* learn French in the hope that it will be "better understood" (CSM I, p. 179; AT IX-B, p. 1). He hopes, then, that translating the *Principles* will initiate that much more movement in that many more minds, though he is also concerned that the title, with its treatise-like tone and implication, will put off more people than otherwise would find it worthwhile, those who are unlearned as well as those who find academic philosophy unsatisfactory. Indeed, when writing to Princess Elizabeth soon after the translation's publication, he explains that he has given up on writing a treatise on learning (*Traité de l'Erudition*) because, among other reasons, the preface to the French edition of the *Principles*

touches on a number of the points he would have covered in that treatise. So, in making *The World* learn Latin and in making the *Principles* learn French, Descartes has written more or less how he considers learning in general (CED, p. 168; AT V, pp. 111–112).

The fear he has that *Les Principes* will not be read by those who could better understand it involves its form and method of presentation, the residue of its apparent learnedness as *principia*. It is precisely not as *principia*, however, that Descartes wants his French readers to approach the text. On coming across the text, he writes, “I should like the reader first of all to go quickly through the whole book *like a novel* [Roman].” Only after having gone through the novelistic, cursory reading should the hoped-for reader read the text again, though only if certain issues need further investigation and curiosity is piqued. Thus his approach is to appear at first to encourage a light and unserious manner of reading, much like his appeals to fabulizing his physics and his biography. One can, one should approach Descartes without expecting the demands of a self-declared serious work of Scholastic philosophy. Only after such an unserious reading will curiosity be piqued so as to pick up the book a second time. But even this second reading is not meant to be serious, so as not to destroy the curiosity that has been piqued. Instead, on this second reading, the hoped-for reader should “mark with a pen the places where he finds the difficulties and continue to read on to the end without a break” (CSM I, p. 185; AT IX-B, p. 11; my emph.). Here, one should not linger over difficulties, but merely note them. Should curiosity remain piqued, should the reader want to dip back into the *Principles* a third time, Descartes predicts the difficulties will be solved, and if not on the third read, then by the fourth. It seems that only the third time is a more serious reading to be expected, but even then Descartes predicts that it need not be too serious because it will merely be to clarify lingering confusions. None of these proposed readings, though there are a number of them, are described as needing to be detailed or close. Rather, Descartes expects his readers, at least in French, to read quickly, barely marking the page. Despite all appearances, then, *Principia Philosophiae* or perhaps only *Les Principes de la Philosophie* is not a work for scholars who examine each word, considering its import, weighing it against other texts both by the same author and by different authors.[7] Only after multiple, quick reads will the importance of this work wash over the reader presumably because, if the reader’s curiosity has remained piqued throughout this process, he or she is learning to think along with Descartes. It may be a novel, but it

is a pedagogical novel, like a fable. And thus, like the dialog of *The Search for Truth*, this novel works to unwork, shows how to unlearn the problems established by the learned.[8] Like the fable of *The World*, however, this novel does this unworking by way of conjuring "*false*" principles. Also as in *The World*, Descartes claims it is the utility of "explanation" that makes these principles valuable, not their content per se (CSM I, p. 256; AT VIII, pp. 99–100; arts. 45 and 46).[9]

So the value and utility of the unserious novel of *Les Principes* is to be found in the explanatory power of its false principles. Meanwhile, the riskiest elements of the *Principia*, those very same false principles, can be excused if one reads them as merely hypothetical or fabular. And these false, hypothetical, fabular principles in the treatise-novel of the *Principles* are those which best match up with *The World*, the fable that generates the rules that will set into motion the reason always already *in potentia* or *en puissance*, and always already *in potentia* precisely as following those rules that have been generated, which is the good sense of those who read what Descartes has to tell them, evaluated and judged, interpreted as useful by those readers according to the same reason set into motion by the fable-*histoire*-treatise-dialog-hypothesis-novel which is the Cartesian corpus.

Fable and Deception

So the things called books can be deceptive, where what appears to be a treatise can be a fable, a novel, a hypothesis, and so on. And the content of these books frequently begins with an appeal to the deceptiveness of the things of nature whereby they are other than what is merely given to the senses. The fable-structure or -logic of these beginnings operates as a way to correct the presuppositions of what is given to the senses, since what is given is so often deceptive. Finally, the use of a particular language to interpret the operations of the world, either Latin or French, can be deceptive insofar as what can appear to be serious academic work is in fact not nearly as serious as it would appear and the content of the interpretation should be evaluated only on its utility through a judgment that has been newly accustomed to a particular form of judgment by the deceptively serious or unserious language of the books that themselves deceive as to their seriousness. Correcting presuppositions, correcting the deceptions that emerge from taking the world as it appears to the senses, thus itself involves deception, a deception that takes the form, appearance, or structure of a fable. Given the fable's intricate relationship to deception, it

is time to focus more clearly on deception itself to connect it to the fable but also, and more importantly, to open a more serious understanding of the method that deploys it, especially in its construction and self-instruction of the self.

Deception and Self-Deception

There is deception in the *Meditations*, to be sure, but attentiveness to the fable-structure or -logic can bring to light a further complication in these meditations that purport to prove the existence of god and the soul with the utmost clarity and distinctness. The first sentence of the First Meditation famously begins, “Some years ago I was struck by the large number of falsehoods that I had accepted as true in my childhood.” These falsehoods will be conjured away once the book has done its work, but for some time, Descartes writes, he did not have time to deal with his recognition. There are already two layers of history at work in this beginning of the *Meditations*, then: the history of a youth spent accepting falsehoods and the history of the time after the recognition of the falsehoods but before meditating on the meaning of the recognition and how to deal with it. In that secondary or second history, Descartes realized that conscious and comprehensive demolition of accepted falsehoods would be necessary to have a solid foundation, but awareness of his own immaturity and of the enormity of the task led him to procrastinate. In the interval between recognition and meditation, Descartes is pulled in multiple directions, between the exigencies of life, the desire for a solid foundation, and intimidation at the thought of throwing over every belief he had ever had. There is, then, a feeling of being caught between the different experiences of time: present exigencies, future foundations, past beliefs (CSM II, p. 12; AT VII, p. 17).

This secondary or second history, especially its relationship to temporality, is necessary to understand the state of mind in which Descartes finds himself “today,” when he has finally sat down to engage the recognition of his accepted falsehoods. ‘Today’ is the setting of the rest of the *Meditations*. For the next six days, Descartes will devote himself to the serious task that he had recognized in the secondary or second history concerning the primary or first history described in the beginning of the first paragraph to the First Meditation. These histories are thereby interwoven within the present and future as it presents itself to him over the course of his meditations (CSM II, p. 12; AT VII, p. 17).

However, there is another issue to be taken account of concerning this shift to the present, over and above the use of the first person. That is, the present is a deception, on two levels. First, Descartes wrote the *Meditations* between 1638 and 1640 (see Gaukroger 1995, p. 336). He did not, then, write out these meditations over the course of a week. Rather, even if he did initially sit down and write it in a week, he also rewrote, edited, deleted, arranged, rearranged, and engaged in all the other processes necessary to preparing a text for publication. The present is a fictional deception, a deception inherent to fiction, a deception concerning what was never written at the moment of declared writing.

Second, even if readers who have only been made to learn French, do not know about the years of composition involved with the *Meditations*, there is a clue in the letter to the faculty of the Sorbonne, where Descartes writes, "I was strongly pressed to undertake this task by several people who knew that I developed a method for resolving certain difficulties in the sciences." Although there is no direct reference to the composition of the *Meditations* here, a sense that the method, which has developed over time according to the above claim, could contribute to the arguments laid out could very easily be drawn from this claim, which remains in the French translation. In addition, if any of those readers of French had read the *Discours*, published a decade before *Les Méditations*, then they would have encountered a more succinct version of these meditations in Part Four. However, Descartes explains in the Fourth Set of Replies, to Antoine Arnauld, that he did not want to engage in the hyperbolic doubt of the First Meditation in the *Discourse* because such doubts "are not suitable to be grasped by every mind." It is clear that at least some French readers would know that the *Meditations* not only was not written in six days, but also that the concepts had been thought through at least a decade before the translation of the *Meditations* (CSM II, pp. 4 and 172; AT VII, pp. 3 and 247; AT IX-A, pp. 6 and 191).

Thus, readers of the *Meditations* in any language of which Descartes approved should all know that this shift to the present is a deception of a fictional type, one that involves complicity or a treaty between author and reader, and a deliberate self-deception on the part of each.[10] Descartes knows, more than anyone, that he is lying, deceiving, fictionalizing to himself as much as his readers, and his readers as well as he himself must agree to this deception, ostensibly with the goal of eliminating deception. But it is an open question whether deception as such can or even should ever be eliminated from the *Meditations*.

Cavaillé (1991) notes that Descartes deploys a chiaroscuro effect in *The World* when he "sets out … an entire body of physics through the study of the luminous phenomenon alone" (Cavaillé 1991, p. 189; my trans.). The premise to treat the world through a treatise on light allows bodies to appear solid thanks to the reflection and refraction of light rays against solid and liquid objects which take on their apparent shape and solidity or liquidity insofar as light moves across and through them. This technique is as illusory as the shadings of chiaroscuro painting that give the illusion of three-dimensionality on canvas because the rhetoric of light, light being an element of the world it would illuminate, functions as a "synecdoche of the world" (Cavaillé 1991, p. 190; my trans.). It would seem that deception itself is the chiaroscuro element at hand in the *Meditations*. It is the inescapable shading to the whole text, its founding element, giving the appearance of having disappeared at various moments, but never being eliminated because the rhetorical effect of its meditative procedure depends on the operation of deception. Deception becomes the synecdoche of knowledge, the part that stands in for the whole of the capacity to make the distinction between the false and the true. In operating as this synecdochal part, deception would appear to in fact become the whole, or at least would be inextricably woven into the fabric of the true because, at every turn on the path to truth, deception returns, even when, after the Second Meditation, the path seems clear and distinct, because the very uncovering of that path was made possible by a series of deceptions and self-deceptions.

The question remains, then, why exactly Descartes wrote the text in this way. In taking up the most serious task he could ever take up, proving the existence of god and of the soul such that even atheists and non-believers are convinced, why begin the process that will eliminate deception with a deception, let alone a deception that nearly every reader knew to be a deception, thus making themselves and himself complicit in the deception and demanding a self-deception? It certainly seems odd for the man who wrote to Princess Elizabeth, on October 6, 1645, while discussing whether it is better to be cheerful or knowledgeable, "I do not approve of trying to deceive oneself in going over false imaginings. On the contrary, great joys are ordinarily somber and serious" (CED, p. 116; AT IV, pp. 305–306). At least one answer can be found in considering the title itself. Descartes had initially thought of the *Meditations* as a metaphysics, and, even after sending it to the publisher, titled it "*Metaphysics.*" He had changed his

mind by at least November 11, 1640, when he tells Mersenne to give it the title of "*René Descartes' Meditations on First Philosophy* [*Renati Descartes Meditationes de prima Philosophia*] because I do not confine myself to God and the soul, but deal in general with all the first things to be discovered by philosophizing" (CSM-K, p. 157; AT III, p. 235).

By the time of publication, because he does not deal only with abstruse proofs for the existence of god and the soul, he understands the text as deploying a literary form less syllogistic and associated with *quaestiones*, although he is willing to engage them in the *Objections and Replies*. The deception and self-deception interwoven and never escaped within the text qua meditative thus follows the fable-structure or -logic that has already been associated with *histoire*, treatise, hypothesis, and novel. The history of Descartes' experience with deception and falsehoods, recognized but not dealt with until "today," is incorporated into the meditation-fable that is written to open a reasoning and method to exceed deception, even while the meditation-fable is itself deceptive and requires self-deception on the part of author and reader.[11]

Finally, however, a question about the seriousness and sincerity of this task appears necessary. It is serious and sincere, even if it is interwoven with deception and self-deception, but for whom? Insofar as it is written for academics and the most learned, it is serious and sincere in that it is written to prove the existence of god and the soul, along with other principal points of philosophy. However, at least by the French translation, these serious and sincere academics have already shown themselves to be lacking in true seriousness and in seriousness about the truth since he excludes the letter to the reader but keeps the preface to the faculty of the Sorbonne. The seriousness of the task only seems possible for those who are able to sincerely think along with Descartes in his meditative investigation of these serious matters, rather than engage in what he considers the quibbling of so many of the objectors. That is, it is only possible given the proper inauguration of motion in the mind of the potential, the *potentia*, the *puissance* of those with good sense, the good sense to think in the same way as Descartes. And yet, this serious and sincere task is only inaugurated through a deception and self-deception on the part of the reader by an author who must deceive himself into thinking in the present beyond the precise presence of the thoughts that are articulated.[12] What is more, this deception leads Descartes to the method understood precisely as doubt, a doubt that appears sincere, but which remains interwoven with the deception that inaugurates the meditations proper. And it is doubtful

whether doubt can ever be sincere, even if it is serious, as Descartes himself intimates when he expresses his concern about and distinction from skepticism and academic quibbling in, for instance, the Second Set of Replies, mostly to Mersenne. The question of whether and how this doubt can ever exceed the realm of unseriousness, especially since it is persistently interwoven with deception and self-deception, thus requires looking into his discussions of it with those possibly unserious objectors (CSM II, p. 94; AT VII, p. 130).

Hyperbole and Seriousness

Descartes considered 'metaphysics' and 'hyperbole' interchangeable as to the doubt deployed in the *Meditations*: "I was dealing merely with the kind of extreme doubt which, as I frequently stressed, is metaphysical [*metaphysicam*] and exaggerated [*hyperbolicam*]." The connection between hyperbole and metaphysics can be most clearly seen in the impracticality of the doubt that Descartes considers both hyperbolic and metaphysical. Its impracticality is not, just because impractical, an argument against the doubt. Rather, Descartes wants to divide hyperbolic doubt into foolish and appropriate. Foolish hyperbolic doubt occurs, according to the Fifth Set of Replies, to Gassendi, "when it is a question of organizing [*regenda*] our life." That is, just as the mark of academic, metaphysical questions and syllogisms can be found in the impracticality, the uselessness of the endeavors, to engage in hyperbolic doubt in the attempt to organize, regulate, or rule over life on the pragmatic or practical level is foolish, a joke. Indeed, anyone who did such a thing, who attempted to organize his or her life grounded in hyperbolic doubt would "deserve to be laughed at." So, on the practical level, hyperbolic doubt is a joke, is comic, foolish, and unserious. However, that same laughability, comedy, and unseriousness is "crucial" for philosophy, according to the Fourth Set of Replies. It is crucial for those whose minds are properly attuned or accustomed to understand the seriousness interwoven with the unseriousness of the hyperbolic quality of the doubt. If and when unsuitable minds—careless people, children, and the like—take up hyperbolic doubt, they make it a foolish joke because they do not understand how to use it, how to make it useful, just as a knife will be misused by a child despite its utility (*utilis*). But the unseriousness of hyperbolic doubt does not demand that it remain foolish if and when a serious mind takes it up. A serious mind can understand and laugh at the joke with the appropriate seriousness because it

understands the necessity and seriousness of exaggeration when in search of "what can be known," according to the Fifth Set of Replies, "with *complete* certainty" (CSM II, pp. 308, 243, 172; AT VII, pp. 460, 351, 247; my emph.).

So the exaggeration at hand in hyperbolic doubt is an attempt to come to know what can be known with complete certainty, and this requires a doubt that matches the completeness of the attempted knowledge. In the hands of the foolish, such doubts deserve to be laughed at because such people would only engage such doubt on the level of practical utility. However, "The philosopher knows that it is often useful [*utiliter*] to assume falsehoods instead of truths in this way in order to shed light on the truth." Philosophical utility is of a different order than practical utility, then. What makes the philosopher able to understand the seriousness of the unserious or exaggerative quality of the hyperbole of Cartesian doubt is that philosophical utility is involved in the search for a certainty beyond that of practical utility. Ultimately, this philosophical utility will of course help shore up the practical utility Descartes is concerned to help those with good sense apply, but the completeness of the certainty born of the complete doubt that would give rise to a certainty of practical utility is precisely what careless people do not understand about hyperbolic doubt, thereby making it deserving of laughter. That completeness of doubt and certainty, beyond the practical, in its very apparent unseriousness, is however what makes the doubt serious (CSM II, p. 242; AT VII, p. 349).

It is also the completeness, the exaggerative and apparently unserious quality of the doubt, beyond any practical usefulness, that throws the hyperbole of it beyond rhetoric for Descartes (see DCB pp. 30–31; AT V, p. 165). For him, Gassendi fails to understand this thrown-beyond-rhetoric quality of the hyperbole when he asks Descartes, in the Fifth Set of Objections, why he insists on the "apparatus [*apparatu*]" of hyperbole, especially that of the evil genius. For Gassendi, a brief note to the reader explaining that the doubts are doubted in order to be resolved would be helpful, if only so that his Latin readers would not think he is fully serious in these doubts. For Descartes, to object to hyperbole in this fashion is to "employ rhetorical tricks instead of reasoning." Instead, Gassendi should be focused on the preparatory quality of the apparatus of hyperbole, a preparation for serious minds to think about what is beyond practical utility such that both practical and philosophical utility will be given the complete certainty for which philosophical certainty searches. It may be that, for Descartes, as he explains in a letter to Mersenne, "there is nothing at all in

Mr. Gassendi's objections which gives me any trouble, and I will have nothing more to consider than the way of speaking [*eloquution*]" (Descartes 2010, p. 295; my trans.). However, it is clear that the question of how to speak is not merely a question of style, of eloquence, of rhetorical technique. In this way, Descartes' understanding and deployment of rhetorical and stylistic techniques goes beyond Grene's claim when she says "one uses one's reader's language when one can. Descartes is neither a liar nor a hypocrite, but a superb philosophical rhetorician" (Grene 1991, pp. 6–7). It is true that Descartes is a superb philosophical rhetorician in the sense that he periodically tries to adopt the language of Scholasticism in order to make himself better understood by those critics, in the *Objections and Replies* and the *Principles* for instance. However, here Descartes is making a claim for his rhetoric not as a mere addendum to his philosophy, but as in itself crucial for the philosophical concepts, for the philosophizing itself. The seriousness of the doubt, in its very exaggerative and unserious fashion, throws it beyond 'mere' rhetorical gamesmanship and into the realm of completeness—complete certainty, complete doubt—that is the hallmark of metaphysics, a hallmark precisely because not practical, since the practical is always at the mercy of the deceptions of things of the world as they are given to the senses (CSM II, pp. 180 and 243; AT VII, pp. 259 and 350).

Marion (1999) claims that "the initial hypothesis of the *Meditationes* appears to be not only hyperbolic, but also incoherent" (Marion 1999, p. 215). It is incoherent for him because it operates "by confusing two contradictory characteristics," that of an omnipotent authority which annihilates mathematics and logic and that of the same authority being identified as god (Marion 1999, p. 215). These characteristics are contradictory because they result in the paradoxes of the evil genius or of the god "who created the conditions of my self-deception" (Marion 1999, p. 215). Marion (1999) appears here not to take the unseriousness of hyperbolicity seriously enough. If the order of the philosophical or the order of reason allows us to imagine what is exaggerated, false, impossible, contradictory, or incoherent, then the attempt to demand an adherence to a logic that has not yet established itself within the philosophical order is not a serious demand. Indeed, much of the point of hyperbolic doubt is to establish what will allow for logic to establish itself through establishing a self that can establish itself even in the face of an unestablished logic. The self, after all, survives even the mad logic of the evil genius. In other words, Marion (1999) here appears to be playing a similar role as Gassendi, of

assuming that the order of philosophical utility, whereby even logic can be jettisoned, requires references back to the 'sane' world of practical order such that a 'serious' reader will not be alarmed by the exaggerated, unserious 'disutility' of the hyperbole.

The *apparatus* of hyperbole serves the purpose, beyond rhetorical technique, of preparing the mind of the serious reader for a doubt interwoven with the unseriousness of exaggeration such that these minds can be engaged in the most serious task of complete certainty. This preparation shows that there is a fable-structure or -logic to the very hyperbole of hyperbolic Cartesian doubt in the sense that Descartes intends to initiate a new kind of motion on the part of these learned and serious minds, a motion of unlearning what they have already learned such that they can instruct themselves. That this motion toward complete doubt that will lead to complete certainty despite the deceptions of things of the world is inaugurated by a move to deceive the reader, or at least to demand that the reader deceive him- or herself, shows that deception and self-deception are necessarily interwoven with the hyperbole of the doubt such that deception can never be clearly and distinctly eradicated from the certainty that purports to be complete. Interweaving doubt into certainty in this way leads to questions of a possible supplementarity inherent to the completeness and seriousness of the method.

The Evil Genius and the Self

Descartes begins the Second Meditation by reminding himself of the great or "serious [*tantas*]" doubts "into which I *have been thrown* [conjectus sum]" the day before. His doubts are so hyperbolic that they throw him into doubt of even their resolution. He can only conjecture, can only be a *conjector*, an interpreter of dreams, if he is to recover the stability of the 'real' world beyond this hyperbolic world. If he is to recover the physical world, his hyperbolic doubt that has made it all seem or appear as if a dream must be satisfied through the conjecture of nothing less than the imaginary evil genius. This hyperbolic doubt that introduces the inability to distinguish reality from dreamworld requires a hyperbolic and imaginative figure to satisfy itself. Thus, the arc of a hyperbole is met with another hyperbole, another throw beyond all reasonable, practical doubt such that the initially impractical, unreasonable doubt may be satisfied and some substance established (CSM II, p. 16; AT VII, p. 23; my emph.).[13]

Substance, that which, according to the Fourth Set of Replies, "can exist by itself, that is without the aid of any other substance," is of course what is proven by the end of the third paragraph of the Second Meditation in that even the hyperbolic image of the evil genius cannot take away the thinking of the thinking thing insofar as thinking is equatable with the hyperbolic doubt which itself doubted substance as such to begin with. In something like a tautological relationship or a virtuous circle of Archimedean foundations, the substance that doubts, doubts substance itself and thereby proves itself as substance. And yet the doubt, in order to find itself resting upon itself qua solid foundation, needs to doubt itself as foundational, needs to conjecture the evil genius as the final guarantor against dreamworld. The doubt, then, qua hyperbolic, the hyperbolicity of the doubt demands that the doubt throw itself beyond itself qua substance in order to find itself resting upon itself in the action of its self. The adjective does more than describe or supplement the noun here—it demonstrates the excessiveness that is the internal structure of the method such that substance itself can be given ground. It is not precisely that the method qua doubt grounds the substantiality of substance and thereby opens Descartes onto the conflation of extension with being. Rather, the hyperbolicity of the doubt qua method necessarily supplements or substantiates itself such that substance as that which needs nothing else can be uncovered in that same method-doubt-cognition-substance (CSM II, p. 159; AT VII, p. 226).[14]

Despite the preparatory self-pedagogical work of deception's utility, the rigor demanded in the self-deception of exaggerated, hyperbolic doubt overwhelms Descartes. The fear or the worry that he cannot maintain the rigor leads to another self-deception. In the final paragraphs of the First Meditation, after he has reiterated the standing rule of doubt that he must maintain "if I want to discover any certainty," Descartes worries about his ability to maintain this rigor since "My habitual [*consuetae*] opinions keep coming back [*recurrunt*]." Hence the importance of establishing a new habit or custom through the useful showing of self-deception's use established in the first paragraph with the fiction that Descartes is sitting in a room, writing his meditations as the thoughts come to him. Hence the importance of the continued present tense, the continual showing and making seen, in the moment of declaring the return of bad habits for maintaining and sustaining the deception necessary to find the truth. Thus, what Descartes will do, since "I shall never get out of the habit [*desuescam*] of confidently assenting to these opinions," is "turn my will in

completely the opposite direction [*versa*] and deceive myself [*me ipsum fallam*]."[15] The result of this self-deception, this artifice or stratagem of the self by the self is to "suppose [*Supposonam*] therefore that not God [*non optimum Deum*], who is supremely good and the source of truth, but rather [*sed*] some malicious demon of the utmost power [*potentem*] and cunning has employed all his energies to deceive me [*me falleret*]." (CSM II, p. 15; AT VII, p. 22).

Marion (2007a) attempts to find otherness inscribed into the assertion of the knowledge of the self's existence as well. However, he does not find it in the self-deception involved in supposing the evil genius, but in the otherness that is the being of god on which the self ultimately depends.[16] I question an element of the first point in his argument, where he claims that the other to the self "is exercised first under the mask of an omnipotent God, at one time confused (against all coherence) with the evil genius who deceives" (Marion 2007a, p. 26). The evil genius is never confused with god, even if it may have all the power that god has. As evidenced by "non optimum Deum" and "sed," the very point of introducing the evil genius is to distinguish it from god. This non-confusion would be at least in part because the evil genius would be a deceiver, but it is also in part because the existence of the evil genius could just as easily imply the non-existence of god because god would be an idea the self thinks it has but about which it is deceived. Indeed, for this reason disproving of the existence of the evil genius must come before the proof of the existence of god. Without the separation of the evil genius and god, the hyperbolic proof of the existence of the self, despite the deceptions of the evil genius, could return in the proof of the existence of god insofar as the only reason the self could have to believe the proof of the existence of god would be the self's insistence on the non-deceptiveness of god. The mere fact that the evil genius and god could have all the same power is not enough to claim them as confused or conflated. The deceptiveness of the evil genius must be eradicated, and this is done through the understanding that the self deceives itself in supposing the evil genius, thereby undermining the potential power of the evil genius as compared to god. That is, the self must show itself to itself as potentially more deceptive than the evil genius in that the self deceives itself by supposing an interlocutor beside itself. This proof of the existence of the self against the potential deceptions of the evil genius emerges because it overpowers the deceptiveness of the evil genius and so becomes the model for the proof of the existence of everything else, including of god since that proof must be believed despite any

attempts to deceive oneself into believing there not to be a god. Insofar as this is the case—and insofar as the evil genius is a supposition, a speculation, a conjecture, or a conjured dream—the interlocution is always an interlocution with the self and therefore would not precisely escape the solipsism Marion (2007a) thinks it does here, or at least not in the way he thinks. The originary otherness of the ego is not found by an 'incorporation' of god into the self, but by an othering of the self such that the self demonstrates itself in the kind of ecstatic auto-affection that Marion (2007a) shows through other points of his argument.

Of course, neither god himself nor god as supremely good and the source of truth has been shown yet, and so must remain a residue of the habitual thoughts he is trying to eradicate but cannot, at least until he has established the self that deceives itself in strategically supposing the evil genius at this moment of faltering rigor and recurring bad habits. Thus, the self is shown and proven in deceiving itself as having substance through the doubt that doubts substance.

Again, the self-deception that creates the evil genius allows for the self to be established. This self-deception has precedent in the opening paragraph of the work proper, when the author deceives people who know that he is doing so, thereby setting the tone of deception as the mode of rehabituating, reeducating bad habits that have deceived in the past. And it is the self-deception as a *self*-deception that will fully establish and secure, in two ways, the apodeictic truth of the self as a thinking substance. First, in acknowledgment of the possible authorship of the evil genius, Descartes knows he exists as "the author [*author*] of these thoughts." Second, if the deceiver truly exists, it remains that "I too undoubtedly exist, if he is deceiving me [*me fallit*]." Finally, then, the self has been indubitably established, through doubt, because one cannot doubt that one doubts when one is doubting, even if one is doubting one's own existence, one's self, oneself. However, this doubt that secures the self, especially as it maintains its rigor in the turn to the self-deception of the evil genius, is itself made possible, given a habitual principle in the deception of the opening paragraph (CSM II, pp. 16 and 17; AT VII, pp. 24 and 25).

The seemingly rhetorical apparatus of hyperbolic doubt sets off a motion in the mind of the reader whereby he or she unlearns the certainty of the world as given so as to learn how to achieve certainty on his or her own through the doubt. As such, it operates on the structure of a fable, an *histoire* whose mere appearance generates a new way to engage philosophy. Thus, the fable is to be taken not so much as a literary technique as a

structure or even logic of inauguration whereby the reader begins to think along with Descartes. It is that by which thinking and logical investigations of the world begin to take shape, to be formed.

To bear this structure or logic in mind or to attend to it will have an effect on other aspects of Descartes' philosophy. Because the fable has begun to show itself as a structure or logic that runs to the heart of this philosophy from its beginnings and because this remains a pedagogico-literary form, the question of Descartes' understanding of logic, the order and/or structure of thinking, and its relationship to other, less exalted philosophical concerns like rhetoric and history is the appropriate direction in which to turn next. This understanding comes to light in Descartes' discussions of method.

Notes

1. Ricoeur (2004), in explaining why he prefers the phrase 'historical condition' over 'historicity', identifies two aspects to the former: first is the "situation in which each person is in each case implicated" and second is the "condition of possibility on the order of the ontological, or … the existential, in particular in relation to the categories of critical hermeneutics" (Ricoeur 2004, p. 284). Thus, if the project in which Ricoeur (2004) engages is to have coherence, there must be a hypothetical, non-a priori passage from historical knowledge to critical hermeneutics to ontological hermeneutics. To engage in a critical hermeneutics that arises from the historical situation, then, involves "imposing limits on any totalizing claim attaching to historical knowledge," while to engage in an ontological hermeneutics that arises from the critical form is to "[explore] the presuppositions that can be termed existential, both those of actual historiographical knowledge and those of the preceding critical discourse" (Ricoeur 2004, p. 283). What is being engaged here remains more or less within the realm of the historical situation of the historical condition in which Descartes finds himself when he has his dreams in the *poêle*. However, insofar as the condition of the situation of finding himself in the *poêle* is historical, it has bearing on the status of history as Descartes understands, and criticizes, it.
2. Thus there is a residue of the Renaissance in Descartes, in a fashion to which Foucault (1994) may be blind. The Renaissance *episteme* gives rise to a knowledge the function of which is "interpreting" (Foucault 1994, p. 40). What was necessary to move from a Renaissance mode of interpreting things' history "within the whole semantic network that connected it to the world" to the Classical mode whereby history is itself natural was for

a gap to open between things and words such that the historian of nature engages in "a meticulous examination of things themselves … and then of transcribing what it has gathered in smooth, neutralized, and faithful words" (Foucault 1994, pp. 129–131). Although words and things are separate for Descartes, in examining his personal history as a fable or *histoire*, he is engaged in an interpretation of the semantic network between himself and the world, in the ways in which words, his words, his words of the formation of his very self, can help others form themselves. Despite Descartes' claims that words are distinct from things, there remains a non-neutrality to their status in the fable or *histoire* he sets out to tell, and it is their non-neutrality that will allow them to inaugurate motion in others, even as his control over the effects of these words exceeds his control. Indeed, it could very well be that, because of Descartes' claims to the separation between words and things, his words take up a non-neutral status in the fable or *histoire* in that these 'neutral' words tell the story of a suspicion of the 'faithful' words of authority and words of fidelity to authority.

To the extent the above is true, Nancy (1977) is correct when he writes, "Beyond the order of authority, beyond that of demonstration, there must be produced the presentment of the author, or more exactly, of the 'becoming-oneself-author'," which thereby explains "the *narrative* mode of Cartesian exposition" (Nancy 1977, pp. 16 and 34n. 4). However, he also considers the presentation of the self as becoming an author to be derived from the method (see Nancy 1977, p. 16). The way in which truth is communicated in Descartes, by different authors who judge each other's claims, depends on "the very process whereby this truth is constituted as *certitude*" (Nancy 1977, p. 15). Thus, the certification of truth by different authors in their attempts to communicate truths would give rise to the narrative mode of exposition to show how one became an author, distinct from authority. Nancy (1977) offers a parenthetical alternative here, where "this constitution [of certitude] is dependent in turn upon the project itself of communicating truth" (Nancy 1977, pp. 15–16). Such an alternative is what is on offer here. That is, it is not entirely the case that the communication of truth is dependent on a process of constituting its certitude, which would be truth as communicated simply by readers judging the claims in the *Discourse* to be certain. Rather, to communicate truth depends on the constitution of certitude, which itself depends on a communication of truth, because the fundamental truth being communicated is a truth that would constitute the different authors who would certify the truths that follow. It is not so much, then, that the truth and/or certitude of the method imposes the narrative mode, but that the narrative, fabular, *historique* mode generates both the method and the minds who will judge the

method's certitude, which in turn opens up the truths that can be certified. The fable, then, imposes a certain organization onto the truth and/or certitude of the method at least as much as that truth and/or certitude imposes something on the fabular mode of presentation.

3. Daniel Garber (1992) notes that the *Principles*' form, where short paragraphs precede elaborations on those paragraphs, "is quite unlike any textbook then currently in use" (Garber 1992, p. 316n. 95). However, in that it does "resemble theses posted for disputation, short statements, printed on a placard and posted, which were then defended in an oral disputation," the *Principles* would appear to resemble the announcement of Descartes' law thesis (Garber 1992, p. 316n. 95; see Descartes 1986). Marion (1999) notes that the four parts of the *Principles* matches the number of divisions if not the content of philosophy at La Flèche into logic, metaphysics, physics, and ethics (see *The Jesuit Ratio Studiorum of 1599* 1970, pp. 40–45). He explains the lack of ethics in Descartes by claiming that "it shows up in the global opposition between what holds 'in Ethicis' and what holds 'in Metaphysicis'" (Marion 1999, p. 13). For more detail on textbooks in Descartes' time, see Reif (1969).
4. Hence the late portrait with "Mundus EST fabula": Before the world can be understood as moving, it must first be understood as fundamentally fabulistic, as a world to be engaged as open to varying degrees of interpretation. However, in order for this possibility to be opened up, the mind itself must first be moved, and this movement can only be initiated by engaging the world fabularly, by offering up not only a hypothesis, but also a hypothesis of the fabularity of the world as such. Such a dissimulation is not precisely dissimulating in that it does not present itself as a story or hypothesis that can be believed, but is rather the generation of a story that would allow for the world to be a world of hypothesis or fable. Hence the ostensibly serious look in Descartes' face in that portrait: It is not a lie to say that the world is a fable.
5. Cottingham translates "ie veux auparauant luy *faire aprendre* a parler latin" as "I want *to teach* it to speak Latin first" (CSM-K, p. 210; AT III, p. 523; my emph.). Though "made to learn" is far from perfect for similar reasons, it has the virtue of maintaining the importance of *faire*.
6. Garber (1992) claims that "What is rhetoric in *The World* becomes the official argument in the period of the *Principles*," though he does not precisely clarify what he considers rhetoric in *The World* (Garber 1992, p. 216). His comment is made in the context of discussing the conservation principle and the three laws of motion as articulated between the two texts. He does say that "what will later become Descartes' conservation principle in the *Principles* … is supposed to support the first law of *The World*" but that Descartes did not live up to a promise to demonstrate this

principle in *The World* and that "it is not isolated *as* a principle" (Garber 1992, pp. 215 and 204). It seems, then, that Garber's use of 'rhetoric' here is indicative of exaggeration rather than a particular technique in the text of *The World*.

7. This description of the curious reader seems to ask for a comparison to Heidegger's critique of curiosity (*Neugier*). What is peculiar about curiosity is that it perceives, sees the world "not in order to understand what is seen (that is, to come into a Being towards it) but *just* in order to see. It seeks out novelty [*Neue*] only in order to leap from it to another [*erneut*] novelty [*Neuem*]" (Heidegger 1962, p. 216; 1967, p. 172). As a result, curiosity "is futural in a way which is altogether inauthentic," constituted in its inauthenticity by a "making-present" that seeks out distraction, thereby forgetting what it has already sought out (Heidegger 1962, pp. 397 and 398).

   In *The Passions of the Soul*, Descartes gives the closest definition of curiosity in his corpus, as a desire that pursues knowledge (see CSM I, p. 359; AT XI, p. 394; art. 88). There is nothing here that would necessarily argue against Heidegger's analysis of curiosity, especially in the plurality of objects of the desire for knowledge found in curiosity. However, a glance at the etymology of *curiosité* may lead to a modification of the Heideggerean position as regards curiosity in this instance. *Curiosité* comes most directly from *curiositas*, which indicates a desire for knowledge, but it is also related to *curiosus* and *cura*, both of which at least can indicate a care for, even an anxiety toward what is curious.

   Curiously, *Kuriosität* never appears in *Sein und Zeit*. The potential care-structure of curiosity seems to have been lost in the analysis of *Neugier*, then. To take this potential care-structure seriously in this moment of the *Principles* need not disregard Heidegger's analysis of curiosity, and it is clear that at least some of this analysis could remain applicable to the *Principles*. However, it does not appear that Descartes is asking his readers to move from object to object, if only because he suggests reading the text three or more times. Even if such a reading is not careful at any given moment, it does demand attention and retention, perhaps even a dwelling in the *principes* at hand.

   Where the Heideggerean analysis of curiosity might have a foothold could be in the fact that Descartes is asking his readers to read lightly, not to spend too much time in scholarly attention, but to find satisfaction in the repetition of a non-taxing reading. Yet such a critique should perhaps also bear in mind the context of this call to curiosity, a context not unlike the invocation of fable and *histoire* in the *Discourse* and the treatise-like beginning of *The Search*. That is, Descartes is calling on his French readers, his non-scholarly, non-Scholastic readers, to read this textbook like a novel,

like a curious object, so that they not feel intimidated by the object in hand, so that their good sense, equally *in potentia* as in scholars, can begin to move. Such motion may require repetition, out of careful curiosity, out of care for the curious, but it need not be, in itself, overwhelming or tedious. Indeed, what Descartes may have in mind when he invites his French readers to read this textbook like a novel, like a new and curious object of the new and newly 'romantic' way of engaging the world, could be something closer to what Blanchot (1999) describes as the "infinite lightness" that a reader brings to a book without "add[ing] himself to the book" even while it tends toward "unburden[ing the book] of any author" (Blanchot 1999, p. 431).

8. Marion (1999) divides being in Descartes into *ousia* and *sum*, the latter of which is equal to *esse*. As a result of this equivalence, "the question of *esse* has neither the time nor the freedom to undo itself … from the authority of the *ego*" (Marion 1999, pp. 70–71). The question of being disappears with the self and being itself disappears into that self, according to Marion (1999). However, the undoing which Marion (1999) references which *esse* does not do would seem to be accomplished in the very appearance of the self to which Marion (1999) claims *esse* amounts. If "*esse* amounts to the *ego*" as soon as the self appears, and if that self appears through an unworking and unlearning of what the self had learned, then it would seem as though *esse* does undo itself, if only through the unworking and unlearning of the self that allows for the appearance of the self (Marion 1999, p. 71).
9. When Derrida (2004) discusses this moment in the *Principles*, he distinguishes it from every other use of *roman* in Descartes' corpus, in particular the letter to Mersenne on November 20, 1629, where he argues against hope for the use of a truly universal language because "the order of nature [*l'ordre des choses*] would have to change so that the world turned into a terrestrial paradise; and that is too much to suggest outside of fairyland [*pays des romans*]" (CSM-K, p. 13; AT I, p. 82). The letter's meaning is of "a work of the imagination, the fabulous description of an unreal country, a fictitious paradise" while the *Principles*' meaning "insists on a certain mode of reading: to read a romance is to be taken up in a story [*histoire*], to run through a narration without meditating, without reflecting, and without backtracking" (Derrida 2004, p. 30; 1990, p. 325). What unites both uses of *roman* is order, though the order at hand is different in each—an order of what should but cannot be in the letter and an order of reading in the *Principles*. Thus, when Derrida (2004) claims that "the romance is not to be confused with the fable," the question remains which *roman*, which order cannot be confused with fable (Derrida 2004, p. 30). In insisting that "The fable is a narrative, or *récit*, whose factual truth need not be verified," even if it can signify or bear truth, and that the end of the similarity between

roman and fable is in avoiding tedium, in addition to noting that the *Principles*' use of *roman* is unique in the Cartesian corpus, it seems clear that the *roman* that Derrida (2004) is distinguishing from fable is not the one used in the *Principles* (Derrida 2004, p. 31). The order in the *Principles* to read in a certain order with the hope of ordering the mind would appear to in fact change the world, the order of the world, even if it would not necessarily be of the universal order that Latin could hope to achieve. In such an ordering, this *roman* can be merged (not confused) with the fable, and not only because the *Les Principes* is *The World*'s relearning French after a detour into Latin—and a detour into a Latin that would teach its readers how to unlearn a Scholastic Latin. Thus, Derrida (2004) remains correct when he writes that "History [*histoire*] cannot be written as a romance [*roman*]; the romance does not tell a true story [*histoire*]" but he remains correct in reference to only one of Descartes' uses of *roman* (Derrida 2004, p. 42; 1990 p. 341). In reference to the use found in the *Principles*, *histoire* can easily be written as a *roman* which tells a true *histoire*, even an *histoire* of the truth, perhaps a true *histoire* that orders the ordering of the truth.

10. This self-deception would thus appear to be of a different order from the self-deception, split self, bad faith, and false consciousness that Bok (1984) identifies as "compelling metaphors" that "point to internal conflicts and self-imposed defeats that we all recognize as debilitating" (Bok 1984, p. 64) because this self-deception is not a metaphor. She understands 'self-deception' to be metaphorical because she relies on the psychoanalytic concept of a self that hides things from itself through disavowal, denial, and so on. There is more to this self-deception insofar as the *Meditations* begins as a search for the self itself. Because of the pedagogical, fabular goal of the *Meditations* to achieve a new way of thinking in its readers, the self-deception at hand founds the very meaning of self as something to be discovered. The self must deceive itself in following Descartes that it also must find itself, that it does not know whether it itself is, and so on. The self-deception of the *Meditations* is not a self-deception of failing "to perceive and react," but rather, since founded from out of a recognition of failing to accurately perceive, allows the self, and its perceptions and reactions, to be discovered in their essence and truth (Bok 1984, p. 64).
11. Verene (1989) considers narration "The natural form of the meditation" (Verene 1989, p. 144). Narration, in turn, gives form to the context within which philosophical arguments develop. However, that context "is not itself argued" because it establishes the ground for argumentation (Verene 1989, p. 143). Thus, the *Meditations* takes up a narrative form, which "sets the tone of modern philosophy" because it identifies philosophy with argument, but does so while deploying rhetorical tropes "to accomplish the basis and communication of his philosophy" (Verene 1989, p. 144). He is

correct in a broad sense as to why Descartes takes up a narrative form consistently. However, Verene (1989) does not appear to have noticed that Descartes in fact gives an argumentation for the meditative, narrative form. The logic that justifies, even if retroactively, Scholastic philosophy is insufficient for what Descartes pursues, which is why he needs to take up a meditative, narrative form in the first place. The argument for the meditative, narrative form may not be given, but the argument against the Scholastic syllogistic form is reasonably clear (hence the importance of attending to the historicized status of the Cartesian project). In this sense, the narration of the Cartesian meditation does not form the context within which arguments will develop, but the context also gives rise to a demand for narration as such. What is more, because the fundamental failure of Scholasticism is the failure of foundations, such narration must take on the fabular form, structure, or logic. Because the formal, structural, or logical context of Scholasticism makes Cartesian philosophy impossible, the new form, structure, or logic that Descartes is attempting to found and communicate could only be understood through a distinct form, structure, or logic. Such a distinction of the fundamental forms, structures, or logics of philosophy is not reducible to concept of 'narration'. The distinction must take account of the fundamental status of the content of 'the narrated', which is why 'fable', the imaginary space or place of the fable, appears a more appropriate framework within which to understand the Cartesian project as a whole.

12. Because of the necessity of self-deception for the seriousness and sincerity of the meditative task, it is difficult to adhere to the claim that Descartes is involved in a "*hypothesis of the Nichtigkeit of the world*" (Merleau-Ponty 1968, p. 172). Descartes does not intend to negate the world or to make it null, but to deceive himself and to have his readers deceive themselves such that the deceptions from the world are taken up qua deceptive, rather than through naïve or Scholastic ingenuousness such that the world's deceptions are passively believed. In the deceptions and self-deceptions that are interwoven into every element of the *Meditations*, the world as such is neither negated nor ignored, but recognized as that which can deceive. If it is that which can deceive, then the self-deceptions that set so many of the moments of the *Meditations* to work, especially early moments, is a repetition of the world, something imagined. To be sure, the exteriority of the world, what about it that escapes the 'bracketing' of the Cartesian fabulation, is not brought into the fabular world. However, this exteriority's remaining exterior is an indication of neither a negation nor a neutrality on the part of the Cartesian world, especially in consideration of the Sixth Meditation's demands for habituation to account for the deceptions that the world presents to the meditator. What is exterior about the world

as such could very well remain exterior, as unignorable and generative of deceptions, which is why one must habituate oneself to trust the world even while engaging it as deceptive. The world deceives and, to account for this, the deceptiveness of the world must be repeated by oneself to oneself, to make oneself the world and to repeat the world's exterior 'worldliness' within oneself. Such a process does not negate any more than it ignores the world's exteriority. It is founded on that exteriority, maintains its distance from that exteriority while simultaneously repeating it within itself.

13. For Cottingham (1976), there is no special metaphysical role for the evil genius. It rather reinforces the dreamworld thesis, the evidence for which he finds in the fact that, when Descartes introduces the evil genius, "he specifically refers back to the dreaming argument" (Cottingham 1976, p. 264). However, he does not consider that the reference to the dreamworld might indicate not merely a reinforcement of that world, but also an intensification of what is shown to be at stake in it. Most of Cottingham's argument in this vein centers on the question whether the evil genius is "designed to pose a new and distinct epistemological threat" (Cottingham 1976, p. 261). But if the evil genius is an intensification, then it is not so much an epistemological as a metaphysical figure, an unimaginable figure who is figured thanks to the hyperbolicity of the doubt which had begun in the possibility of the dreamworld. It would seem, then, that Cottingham's claim that there is no special metaphysical role for the evil genius is centered on a confusion of the epistemological with the metaphysical. The evil genius may not be a unique epistemological threat, but it is a serious metaphysical question, not to say possibility, if only because it is a question figured from out of the hyperbolic, metaphysical doubt that inaugurates the *Meditations.*
14. The definition of substance at hand here is consistent with what Marion (2007b) identifies as the first definition of substance in article 51 of the *Principles.* As he points out, however, article 52 introduces a second definition of substance, "as the substrate known by its attribute(s)" (Marion 2007b, p. 89). Marion (2007b) defends this second definition because, without it, all substance would be radically distinct from every other substance, and thereby unknowable since, following the statement on method in Rule Six, some things are only known in relation to others. Marion's point here is thus that some substances are known by themselves alone, without supplement, while others are known via supplements, in relation to other substances, which themselves may be known either by themselves alone or in relation to other substances. With the understanding of the self at hand here, however, neither of these definitions would precisely apply because the doubt, the doubting substance, supplements itself. This is not to say that the doubting substance stands alone, but that doubt itself stands

in need of supplement, if only because something, some substance must be doubted—and that the hyperbolicity of the doubt, as hyperbolic, is excessive, beyond what is necessary (practically or otherwise) to supplement that which requires supplementation. That this doubt is what will establish the self, necessarily through the most hyperbolic moment of the evil genius, through another possible substance that itself is the result of a self-deception, establishes the substance of the self as in relation to itself, in relation to itself as another, and in relation to another that is only in relation to the self that made it come to be as a fiction but a fiction for and of the self. Thus, the self in the *Meditations* must be understood as falling under both definitions of substance simultaneously.

Marion (2007b) uses his defense of Descartes' two definitions of substance to critique the Heideggerean critique of this point in Descartes. For Heidegger (1962), Descartes needs two definitions of substance because the meaning of being is "something incapable of clarification," leaving substance defined through substantial entities, such that "something ontical is made to underlie the ontological" and *substantia* can mean something ontical or something ontological (Heidegger 1962, p. 127). For Marion (2007b), if the two definitions of substance refer to kinds of substance that can be known on their own (like the self) or kinds of substance that can only be known in reference to other things (like most external objects), this means that Descartes recognizes that "only substance," and only according to the first definition of substance at that, as opposed to "substance in general," affects us (Marion 2007b, p. 94). More, in that Descartes' second definition emerges from recognizing a problem with his first definition being the exclusive definition of substance and in that this recognition does not result in denying that access to substance in general indicates that Descartes does not in fact think of being as incapable of clarification. But perhaps Marion's critique of Heidegger (1962) can be pushed further. That is, if the self is, as one of the substances that can be known through themselves, is always also known through something else insofar as the structure of hyperbolic doubt operates as something else such that the self's falling under the first definition of substance is also a falling under the second definition because it is known through itself and known through its relation to itself, then it begins to appear as if the effect that a substance known through itself (i.e., the self) has on us can give us an indication of an effect of substance in general insofar as that substance known through itself is also known through the self-substantiating relationality to itself that is the hyperbolicity of the doubt qua method.

15. It is moments like this that will lead me to conclude that Brann (1991), along with most, including Descartes himself at points, cannot be entirely right that Descartes "excludes the imagination from the human essence" (Brann 1991, p. 70). This is not to say that the imagination in Descartes is

not something distinct from what it was in ancient and medieval philosophy, but rather that the way the imagination changes is not what the tradition has told us it is. At the heart of this change will be a way of addressing whether the claim that the self "can know itself by itself, without the mediation of the imagination" is a fully correct one, and the question of its full correctness will rest on the question of whether the self can know itself without the imagination at all or if it can know itself without the imagination as a mediator between itself and its knowledge (Brann 1991, p. 72).

16. He does this by showing that (1) the other, god and/or the evil genius, is supposed or hypothesized before the self; (2) the self that is proven as existing and the self that is persuaded of its existence serve different illocutionary functions; (3) there is thus a difference between the First and Second Meditations in that the First involves an implicit dialog between the self that must be persuaded of its existence, while the Second involves an implicit dialog between the self and the evil genius whose existence precedes but does not prevent the existence of the self; and (4) the confirmation of the self involves a speech-act concerning the self that results in a self that is always outside itself (see Marion 2007a, pp. 13–19).

References

Becker, Marvin B. 1994. *The Emergence of Civil Society in the Eighteenth Century: A Privileged Moment in the History of England, Scotland, and France*. Bloomington: Indiana University Press.

Bellarmine, Cardinal Robert. 1934. "Roberto Bellarmino a Paolo Antonio Foscarini [in Roma], Roma, 12 aprile 1615." In Galileo Galilei, *Le Opere di Galileo Galilei*, edited by Antonio Favaro, vol. 12, 171–172. Florence: G. Barbéra Editore.

———. 2008. "Cardinal Bellarmine's Letter to Foscarini." In Galileo Galilei, *The Essential Galileo*, edited and translated by Maurice A. Finocchiaro, 146–148. Indianapolis: Hackett Publishing Company, Inc.

Blanchot, Maurice. 1999. "Reading." Translated by Lydia Davis. In *The Station Hill Blanchot Reader*, edited by George Quasha, 429–436. Barrytown, NY: Station Hill Press.

Bok, Sissela. 1984. *Secrets: On the Ethics of Concealment and Revelation*. New York: Vintage Books.

Brann, Eva T. H. 1991. *The World of the Imagination: Sum and Substance*. Lanham, MD: Rowman & Littlefield Publishers, Inc.

Brewer, Daniel. 1983. "The Philosophical Dialogue and the Forcing of Truth." *MLN* 98 (5): 1234–1247. https://doi.org/10.2307/2906069.

Cavaillé, Jean-Pierre. 1991. *Descartes: La Fable du Monde*. Paris: Librairie Philosophique J. Vrin.

Cottingham, J. G. 1976. "The Role of the Malignant Demon." *Studiana Leibnitiana* 8 (2): 257–264. www.jstor.org/stable/40693809.

Derrida, Jacques. 1990. "S'il ya lieur de traduire II: Les romans de Descartes ou l'économie des mots." In *Du droit à la philosophie*, 311–341. Paris: Éditions Galilée.

———. 2004. "If There Is Cause to Translate II: Descartes' Romances, or The Economy of Words." Translated by Rebecca Comay. In *Eyes of the University: Right to Philosophy 2*, 20–42. Stanford: Stanford University Press.

Descartes, René. 1986. "1616 Law Thesis – English Translation." Translated by Holly Johnson and Kurt Smith. *Stanford Encyclopedia of Philosophy*. http://plato.stanford.edu/entries/descartes-works/tenglish.html. Accessed 1 Nov 2010.

———. 2010. "Descartes to Marin Mersenne (Paris), [Endegeest castle], 27 May 1641." In Erik-Jan Bos, "Two Unpublished Letters of René Descartes: On the Printing of the *Meditations* and the Groningen Affair." *Archiv für Geschichte der Philosophie* 92 (3): 290–303. https://doi.org/10.1515/agph.2010.013.

Flynn, Bernard Charles. 1983. "Descartes and the Ontology of Subjectivity." *Man and World: An International Philosophical Review* 16 (1): 3–23. https://doi.org/10.1007/BF01261114.

Foucault, Michel. 1994. *The Order of Things: An Archeology of the Human Sciences*. New York: Vintage Books.

Galilei, Galileo. 1970. *Dialogo sopra i due massimi sistemi*. Turin: Giulio Einaudi Editore.

———. 2008a. "Galileo's Considerations on the Copernican Opinion, Part I." In *The Essential Galileo*, edited and translated by Maurice A. Finocchiaro, 148–160. Indianapolis: Hackett Publishing Company, Inc.

———. 2008b. "From *Dialogue on the Two Chief World Systems* (1632)." In *The Essential Galileo*, edited and translated by Maurice A. Finocchiaro, 190–271. Indianapolis: Hackett Publishing Company, Inc.

Garber, Daniel. 1992. *Descartes' Metaphysical Physics*. Chicago: The University of Chicago Press.

Gaukroger, Stephen. 1995. *Descartes: An Intellectual Biography*. Oxford: Clarendon Press.

Grene, Marjorie. 1991. *Descartes Among the Scholastics*. Milwaukee: Marquette University Press.

Heidegger, Martin. 1962. *Being and Time*. Translated by John Macquarrie and Edward Robinson. Malden, MA: Blackwell Publishing Inc.

———. 1967. *Sein und Zeit*. Tübingen: Max Neimeyer Verlag.

Marion, Jean-Luc. 1999. *On Descartes' Metaphysical Prism: The Constitution and the Limits of Onto-theo-logy in Cartesian Thought*. Translated by Jeffrey L. Kosky. Chicago: The University of Chicago Press.

———. 2007a. "The Originary Otherness of the Ego: A Rereading of Descartes' Second Meditation." In *On the Ego and on God: Further Cartesian Questions*, translated by Christina M. Gschwandtner, 3–29. New York: Fordham University Press.

———. 2007b. "Substance and Subsistence: Suárez and the Treatise on *Substantia* in the *Principles of Philosophy* 1, §51–§54." In *On the Ego and on God: Further Cartesian Questions*, translated by Christina M. Gschwandtner, 80–99. New York: Fordham University Press.

Merleau-Ponty, Maurice. 1968. *The Visible and the Invisible: Followed by Working Notes*. Translated by Alphonso Lingis. Evanston, IL: Northwestern University Press.

Nancy, Jean-Luc. 1977. "Larvatus Pro Deo." Translated by Daniel A. Brewer. In *Glyph II: Johns Hopkins Textual Studies*, edited by Samuel Weber, 14–36. Baltimore: The Johns Hopkins University Press.

Reif, Sister Patricia. 1969. "The Textbook Tradition in Natural Philosophy, 1600–1650." *Journal of the History of Ideas* 30 (1): 17–32. https://doi.org/10.2307/2708242.

Reiss, Timothy J. 1991. "Descartes, the Palatinate, and the Thirty Years War: Political Theory and Political Practice." *Yale French Studies* 80: 108–145. https://doi.org/10.2307/2930263.

Ricoeur, Paul. 2004. *Memory, History, Forgetting*. Translated by Kathleen Blamey and David Pellauer. Chicago: The University of Chicago Press.

The Jesuit Ratio Studiorum of 1599. 1970. Translated by Allan P. Farrell, S. J. Washington, DC: Conference of Major Superiors of Jesuits.

Verene, Donald Philip. 1989. "Philosophy, Argument, and Narration." *Philosophy & Rhetoric* 22 (2): 89–103. www.jstor.org/stable/40237582.

CHAPTER 4

Method

Coming out of an investigation of the fable, where it is shown to hold a crucial pedagogical role both in terms of how the world is to be interpreted and how the self can construct itself, it is now possible to examine what effect this fabular structure has on our understanding of the Cartesian method in general. The traditional understanding of the method is, roughly, an intellectual reduction of the complexities of the way things of the world present themselves to the simple essences of those things, whether they be oneself, god, or a piece of wax. Of the material objects of the world, in their materiality, a reduction to their geometric essences, especially expressed in algebraic notation, is the clearest and most distinct expression of their truths, and will be an expression of eternal truths.

However, having attended to the use and mention of fables throughout Descartes' career, especially insofar as they relate to a consideration of the deceptiveness of things in the world and the self-deception required to assure oneself against deception, the Cartesian method can no longer be considered a simple, straightforward path to clear and distinct ideas, nor are the truths expressed in these ideas necessarily eternal in the sense of being removed from history, be it personal, political, religious, or literary. Instead, three things will hopefully become clear over the course of this chapter. First, what appears to be simple in the method is in fact complex, especially insofar as the analytic method is always interwoven with or supplemented by the synthetic method. Second, the relationship of literary and politico-religious history to this method shows it, even in its supposed

© The Author(s) 2018

J. Griffith, *Fable, Method, and Imagination in Descartes*,
https://doi.org/10.1007/978-3-319-70238-4_4

analytic structure, to be less an unknotting of what is complex than itself a knot of what is exact (science proper) and of what is inexact (history and etymology). Third, the relationship between the ordering of the life of the metaphysician and that of practical life, whether in the crafts or in ethico-political decision making, is one of mutual imitation and/or supplementation, which in turn exposes a supplementation between rule-obedience and rule-generation in general for Descartes, a dilemma that was already at work in the earliest discussion of fable.

Simplicity and Complexity

I take the hyperbolicity of the doubt at heart of the Cartesian method as exceeding the limitations of rhetoric. The link between this hyperbolicity and other rhetorical and literary forms of presentation, especially fable, shows that there is a thread of inaugurating motion in the minds of his readers throughout Descartes' career that persistently requires deployments of deceptive forms of presentation that the reader may or may not take as deceptive. Interweaving deception within the very forms of presenting his way of thinking places Descartes in an interesting position with regard to the method that is supposed to develop from that motion. That method, inspired by geometry, by and large is supposed to follow the steps of analysis. These steps that guide the method, then, are the method in the sense of being the *methodos*, the path before, beyond, behind the path of applying the method. As Heidegger (1992) explains it, the etymological source of 'method' is *methodos*, which did not mean the same thing for the Greeks as it does for us, since it was a combination of *meta* and *hodos*, such that *methodos* meant "to-be-on-the-way, namely on a way not thought of as a 'method' man devises but a way that already exists, arising from the things themselves" (Heidegger 1992, p. 59). An *apate*, a detour or deception, is an acceptable form of method because it "[makes] available another prospect and supporting it in such a manner that, as way, it might indeed be the one going 'straightaway' toward the unconcealed" (Heidegger 1992, p. 59). *Apate* is distinct from the deceptions of both *pseudos* ("counter-essence") and *sphallein* ("'to mislead'") which thereby do not lead one on a path to unconcealedness insofar as they are false and dissembling, even opposed to the truth (Heidegger 1992, p. 58). The deceptive method of hyperbolic doubt, then, is in line with *apate*'s detour, an arc away from traditional methods that unconceals the essence of the self, god, and other things. All the more, insofar as hyperbole follows the

fable-logic or -method, insofar as it interweaves its deception within the revealing of truth, the Cartesian method qua hyperbolic and fabular reveals in a concealed, deceptive manner, leaving the essences it unconceals to emerge in their lack of showing, at least a straightforward showing, even if the ideas of them show themselves clearly and distinctly, because the showing is always a chiaroscuro showing.

Analysis and Synthesis

For Descartes, method comes in two (*duplex*) opposed (*oppositam*) methods: analysis and synthesis. To begin, as he puts it in the Second Set of Replies, "Analysis shows the true way by means of which the thing in question was discovered methodically and as it were *a priori* [*Analysis veram viam ostendit per quam res methodice & tanquam a priori inventa est*]," allowing a reader to come to understand the truth discovered "as if he had discovered it for himself [*quam si ipsemet illam invenisset*]," although it cannot guarantee compulsion on the part of readers unwilling to take on the method for themselves and it does not always mention truths that are clear if given more attention (CSM II, p. 110; AT VII, p. 155). Cicero (2006) points out that *inventio* is one of the principal parts of rhetoric and is "the discovery [*excogitatio*] of seemingly valid arguments to render one's case plausible" (Cicero 2006, 1.7.9), the *inventa* of which lay out the terms of an argument. Thus, analysis shows the way by which a thing's discovery was made plausible a priori.[1] Synthesis, however, "employs a directly opposite method where the search is, as it were, *a posteriori* (though the proof is more often *a priori* than it is in the analytic method)" through definitions, postulates, axioms, theorems, and problems to demonstrate a conclusion such that even the most stubborn reader will be compelled to agree with the truth discovered (CSM II, pp. 110–111; AT VII, p. 156). Descartes is indicating that, for him, analysis operates through a reduction of the complications of the world as it appears to first principles and a simplification of the process of that reduction such that a reader may take on the reduction for him- or herself. Synthesis, in bringing its theses and claims together, would be a more complicated process, even if it compels stubborn readers to accept its conclusions.[2]

Descartes believes that ancient mathematicians like Pappus of Alexandria and Diophantus of Alexandria primarily employed synthesis over analysis because they kept analysis to themselves as a part of their sacred mystery cults (see CSM II, p. 5 and 111; AT VII, pp. 4–5 and 156 and CSM I,

pp. 18–19; AT X, pp. 376–377).[3] The result of emphasizing synthesis over analysis in the public writings is twofold. First, it "is so closely tied to the examination of figures that it cannot exercise the intellect without greatly tiring the imagination" (CSM I, p. 119; AT VI, pp. 17–18). Second, in addition to boring or exhausting the reader, synthesis "does not show [*docet*] how the thing in question was discovered" according to the Second Set of Replies (CSM II, p. 111; AT VII, p. 156). Ancient mathematics, in its synthetic approach, bores its readers with endless definitions, axioms, and so on that still fail to show how the conclusion was reached, perhaps because the lack of proof of those definitions, axioms, and so on leaves the reader with a sense that the conclusion is based on unproven assertions (DCB, pp. 19–20; AT V, p. 156).[4] Definitions, after all, only show how a given writer will use a given word. Indeed, this approach, insofar as it is typically Aristotelian, argues from ends for Descartes and begins from the purpose of a thing rather than from the thing itself.

The lack of utility found in synthesis can also be found in the academic syllogistic reasoning Descartes was taught. All syllogism does, in the words of the *Discourse*, is "[explain] to others the things one already knows" (CSM I, p. 119; AT VI, p. 17). Syllogism is not, then, following the Second Set of Replies, how "we should search for the truth" because it begins too late in the process, which should always begin from the analytic reduction and simplification such that the syntheses of syllogisms are built on simple notions (CSM II, p. 271; AT IX-A, pp. 205–206). Now, like academic logic, Cartesian analysis also begins from a presupposition of understanding the problem. However, as he explains in Rule Thirteen of the *Rules*, Descartes does not "distinguish … a middle term and two extreme terms" (CSM I, p. 51; AT X, p. 430). That is, Descartes does not distinguish between the term shared by the major and minor premises and the terms used in only either the major or minor premise. Rather, he understands three elements to every problem: the unknown, the delineation of the unknown, and the known by way of which the unknown is to be delineated. In its algebraicization of logic, he brings together syllogism and analysis thanks to an emphasis on self-instruction, while also distinguishing what would appear to link them to an academic approach, that is, the presupposition of understanding.

In calling this aspect of Descartes' project an 'algebraicized logic', I am building on certain claims made by Gaukroger (1995). At La Flèche, Descartes' exposure to logic would have involved Pedro Fonseca and Francisco Toledo's commentary on Aristotle's logic (see *The Jesuit Ratio*

Studiorum of 1599 1970, p. 41). As Gaukroger (1995) explains them, these commentaries provided two things: (1) "an account of the difference between syllogisms which, while formally identical, nevertheless differed in that some of them yielded conclusions that were merely descriptive, while others ('demonstrative' syllogisms) yielded conclusions that were genuinely explanatory" and (2) "a normative theory of thought, a set of rules for thinking correctly" (Gaukroger 1995, p. 54). In addition, syllogism is associated with synthesis in that each is "a form of deductive demonstration" (Gaukroger 1995, p. 125). Since Descartes rejects syllogism "at quite an early stage of his career" and prefers "analysis at the expense of synthesis," the rejection of medieval logic and mathematics would seem to be intertwined (Gaukroger 1995, pp. 54 and 124). He also rejects attempts at 'algebra' such as that of Christoph Clavius that make "analysis … little more than a preparation for synthesis; it is simply an exercise in translating geometrical propositions into syllogistic form so that the deductive structure of geometrical demonstrations can be shown for what it really is, namely Aristotelian logic" (Gaukroger 1995, p. 125). As Descartes develops his algebraicization of geometry, by which geometrical problems can be solved through mathematical symbols, notations, and formulae without the need for tracing lines, he is developing an algebraicization of logic such that it is not a handmaiden to an already rejected Aristotelian logic (see E, p. 178; AT VI, p. 371). Logic is no longer a syllogistic building up "from something [i.e., the premises] taken as *understood*" (Aristotle 1981, p. 71a) but a procedure or method whereby, "if we wish to solve some problem, we should first of all consider it solved, and give names to all the lines—the unknown ones as well as the others—which seem necessary in order to construct it. Then, without considering any difference between the known and unknown lines, we should go through the problem in the order which most naturally shows the mutually dependency between these lines, until we have found a means of expressing a single quantity in two ways" (E, p. 179; AT VI, p. 372). Between the known and the unknown, then, there also appears to be no middle term for the logic that this algebraicized geometry shows itself to be. Thus, I call this an algebraicized logic.

As Mahoney (1980) points out, Descartes is in this way following the example of Petrus Ramus, whose simplifications of ancient mathematical treatises "represents the beginnings of the writing of textbooks" (Mahoney 1980, p. 149). As a result, "Analysis … is not logically rigorous but does have its own sort of rigour," the rigor that an "attentive student" will

deploy in learning how to teach him- or herself (Mahoney 1980, p. 149). This shift in the conception of logic and pedagogy is part of what allows for mathematics to shift from being an *episteme*, as it was for the ancients, to being an *ars* or *techne*, as it became from at least François Vieta on, according to Mahoney (1980). As he explains it, "Only what had been proved by strict synthetic deductions by means of Aristotelian logic counted as *episteme*, as science" because analysis necessarily assumes as solved the theorems it analyzes by investigating the consequences of its assumed solution (Mahoney 1980, p. 147).[5] The return from analysis to synthesis was required for the proof to be given the stamp of rigor, and thereby *episteme*. The new kind of rigor found in an exclusively analytic approach, the rigor of the attentive student learning on his or her own through a simplified textbook of techniques, is possible because the algebraicization of mathematics and of logic, the deployment of universal symbols, operates on the assumption not only that "an algebraic derivation can always be reversed to yield a strict synthetic proof," but also that this synthesis is unnecessary in the showing of the analysis (Mahoney 1980, p. 147). It is something the attentive student can do on his or her own time, in his or her own way, should he or she desire to show him- or herself this 'more rigorous' proof. Indeed, it would be for this very reason that demonstrating a synthesis is both boring and explains to a student what is already known.[6]

When Descartes writes, in the *Geometry*, that the first step of his method is to "assume the problem to be already solved," he is not placing his method in the same position as academic syllogism's explaining to others what is already known. Rather, he is operating on the presumption that the unknown element can become known through a delineation via what is already known, a delineation and reduction set up so that his readers can have "the pleasure of learning it [i.e., the method of delineation and reduction] for [themselves], as well as the advantage of cultivating [their] mind[s] by training [themselves] in it" (E, pp. 186 and 180; AT VI, pp. 383 and 374). Through such a process, those simple known notions can build together to show what is heretofore unknown. Thus, even if there is a pedagogical benefit to the process of dialectical *quaestiones* and syllogisms in what he calls, in Rule Two, the "certain rivalry" formed, the self-instruction opened up by a more analytic, algebraicized approach to logic and problems in general is preferable (CSM I, p. 11; AT X, p. 363).

Syllogisms in themselves are not the problem, and, as he writes in the Seventh Set of Objections with Replies, to Bourdin, "indeed, I used

syllogisms throughout my writings, when I needed to," specifically citing the end of the Second Set of Replies (CSM II, p. 371; AT IX-A, p. 544). The problem is that they cannot be formed without already knowing the conclusion rather than an algebraicized logic's reduction and simplification allowing previously unknown truths to emerge. The conclusion is known ahead of the investigation because, as he explains in Rule Ten, academic syllogism "can nevertheless draw a conclusion which is true simply in virtue of the form." As a result, Descartes wants to place it in the realm of rhetoric. If the hyperbolicity and fable-structure or -logic of the *Meditations* throws its technical apparatus of methodical doubt beyond the realm of rhetoric, then the technique of memorizing syllogistic forms is thrust into the realm of rhetoric because it gives its answers ahead of any content. The technical apparatus of hyperbolic doubt, like that of an algebraicized logic of analytic reduction and simplification, allows its students to instruct themselves and determines the truth and discovery of unknowns through knowns without predetermining the conclusion of the unknowns because the knowns, not the form of reasoning itself, give the content to the unknowns. (CSM I, pp. 36 and 37; AT X, p. 406).

Thus, to return to the Second Set of Replies, "analysis … is the best and truest method of instruction," while "synthesis … is a method which it may be very suitable to deploy in geometry as a follow-up to analysis, but it cannot so conveniently be applied to these metaphysical subjects." However, Descartes does perform a synthesis at the end of these Replies as well as in the *Principles*.[7] In the opening sentence of the *Rhetoric*, Aristotle (1984) describes rhetoric as a "counterpart [*antistrophos*]" to dialectic (Aristotle 1984, p. 1354a). If dialectic is a strophe and rhetoric an antistrophe, if they face and correlate with each other, wind around each other, as the stanzas in a choral ode, without being precise copies of each other, and if one of the constant dilemmas concerning the relationship between analysis and synthesis is which in fact holds a rhetorical position and which a more properly philosophical one, then it would seem that a perhaps more generous understanding of analysis and synthesis would be to consider them in a strophe–antistrophe relationship. This would indicate, among other things, that the Cartesian concept of analysis and synthesis is distinct from the relationship indicated in ancient mathematics, where synthesis is a "reversal [*hypostrophes*]" of analysis (Pappus 1986, pp. 82 and 83). For Pappus (1986), synthesis was a reversal, even a relapse, of analysis, the method reserved for those who sought a deeper understanding of geometry and which therefore must be kept relatively secret.

In their opposing, antistrophic relationship, synthesis and analysis form the duplex of demonstration, the latter reducing problems to simple notions that can subsequently be brought back together through the former.[8] If the syntheses of syllogisms are considered rhetorical because of their formal overdetermination of possible conclusions, this overdetermination would be permissible and possible on the Cartesian schema thanks to analysis' having pulled apart the apparent duplicities of a given problem such that a synthesis can be understood as legitimate and already proven, which is why he can engage in the syllogistic synthesis at the end of the Second Set of Replies and repeat both *The World* and the *Meditations* in the *Principles.* (CSM II, pp. 111 and 113–120; AT VII, pp. 156 and 160–170; DCB, p. 12; AT V, p. 153).

However, in the appeal to content over form thanks to the analytic algebraicization of logic, whereby knowns give rise to the delineation of unknowns, there is something of an appeal to the rhetorically inductive technique of example in that the two forms of example are understood as historical facts and fables. As Aristotle (1981) explains it, "syllogism proceeds from something [from premises] taken as *understood*, whereas in the case of induction, the universal is proved because [its truth] is clear in each particular" (Aristotle 1981, p. 71a). In rhetoric, induction's particulars take on the form of examples for the purpose of persuasion. Though there is some contention as to the precise accuracy of this claim, especially in relation to other claims made late in the *Prior Analytics* (see Apostle 1981, p. 77), it is consistent with what Aristotle claims in the *Rhetoric*: "for it [i.e., example] has the nature of induction" (Aristotle 1984, p. 1393a).[9] He divides examples into two categories, historical and invented (*poieo*), and invented examples are further divided into illustrative parallels and fables.

Descartes' attempts to set motion to work on the part of his readers through his various forms of fable-structure or -logic can thus be understood as operating rhetorically in this Aristotelian sense, even if Descartes understands this structure or logic as being thrown beyond rhetoric thanks to its hyperbolicity. The relationship between rhetoric and logic, synthesis and analysis, and all four together is thereby more complicated than the appeal to the simplicity of analysis would appear to make it. It is not merely a realignment of the relationship between, on the one hand, rhetoric and logic, and, on the other, synthesis and analysis. Rather, in its deployment of a rhetorical technique to initiate a different form of logic while simultaneously making clear the rhetorical dependence of traditional logic (and pedagogy), how and why logic, both the logic of the Cartesian analytic

method and that of the uninterpretable old world of synthesizing and syllogizing academics, can be distinguished from rhetoric with any simplicity is made more complex, if impossible.[10] Indeed, the complexity of what appears to be simple, for and in all practical engagement, may show itself as the necessary (rhetorical) duplicity, perhaps even a necessary double supplementarity, inherent to the method.[11]

The Whole Method

What is the whole method, if it is whole?

> *The whole method* [Tota methodus] *consists entirely in the ordering and arranging of the objects on which we must concentrate our mind's eye* [mentis acies] *if we are to discover some truth. We shall be following this method exactly if we first reduce* [reducamus] *complicated* [involutas] *and obscure propositions step by step* [gradatim] *to simpler* [simpliciores] *ones, and then, starting with the intuition of the simplest ones of all* [simplicissimarum intuitu], *try to ascend through the same steps* [per eosdem gradus] *to a knowledge of all the rest.*

For Descartes, Rule Five covers almost the whole of human industry, though keeping to it carefully and closely appears to be rare and difficult. This rarity of following the method is a result of a failure to reflect upon it (*reflectere*), of ignoring it, or of presuming it unnecessary. Committing these errors results in a disorderly (*inordinate*) approach to problems (*quaestiones*), driven in particular by a desire to leap ahead by too many steps (*scalae gradibus*) and make claims that have not been earned by the proofs at hand. Studies that are specifically named as committing these errors are astrology, mechanics without physics, and philosophy that fails to take account of experience (see CSM I, pp. 20–21; AT X, pp. 379–380).

However, Descartes recognizes the difficulty of following the whole method, in particular because "the order [*ordo*] that is required here is often so obscure and complicated [*intricatus*] that not everyone can make out what it is," which is why Rule Six is required to supplement the whole method of Rule Five. Rule Six claims,

> *In order to distinguish the simplest things* [res simplicissimas] *from those that are complicated* [involutis] *and to set them out in an orderly manner* [ordine], *we should attend to what is most simple in each series of things* [rerum serie] *in which we have directly deduced some truths from others, and should observe how all the rest are more, or less, or equally removed from the simplest* [maxime simplex].

This rule, even if not new or unique (*novum*), is considered the most useful (*utilissimus*) in or of the *Rules*. It is more useful than the whole method of Rule Five, then, because it shows how to arrange things into groups according to previously known things such that difficulties can be regularly, serially, usefully resolved through comparison of knowns and unknowns grounded in their relative or absolute utility. Those of absolute utility are "whatever has within it the pure and simple nature [*naturam puram & simplicem*]" of independence, causality, simplicity (*simplex*), universality (*vniversal*), singularity (*vnum*), equality, similarity, straightness (*rectum*), and so on, while those of relative utility share at least something of the nature of those of absolute utility like dependence, and so on. What is most important in Rule Six is the emphasized attention to the most absolute, and thus what has the simplest nature, of which there are only a few and these can be immediately intuited (*intueri*) by experience or by the natural light, allowing the numerous relatives to be deduced immediately or with a few inferences. However, since Descartes' interest is not in retaining all these intuitions and deductions in memory and since maintaining deductions is difficult, becoming accustomed to reflecting (*reflectere*) on details of what has already been determined will be the wisest approach, even if the reflective process can seem childish at times, as with reflection on mathematical relationality. It is the wisest approach because such attentiveness will steadily and serially give rise to coming to terms with more complex problems and because it will show that, while there may be diverse paths (*diversae viae*) to the same solution, one will be clearer and more direct than another. (CSM I, pp. 21 and 22–24; AT X, pp. 381 and 382–387).

Here, I want to focus on the necessary supplementation of Rule Five by Rule Six, and the latter's superiority to the former. At first it appears as though Rule Six is a guideline for ordering and arranging things upon which the mind's eye, the acumen, the mental power of Rule Five must focus. However, to know how to order what appears before the mind's eye requires attending to things that have already allowed some truth to emerge. That is, for the mind's eye to properly observe and deduce truths, some observations and deductions of truths must have already occurred. This deduction may very well be the result of an analysis, a pulling apart of the complicated, involved, and relatively simple truths bound or rolled up within the complex of the world as given, so that an intricate or complicated synthesis of steadily more complex and relative truths can be brought together from out of the analysis' reduction to absolutely simple

truths. Yet this would mean that the absoluteness of the absolute and simple truths that are the ground for arranging and ordering the relationality of relative truths can itself only be relative to relative truths, since they emerge qua absolute only in comparison with the relativity experienced by the remainder of the things of the world as given. Thus, the simplicity of the truths being pursued in the whole method of Rule Five has itself already been given to us, if in a complicated and involved manner, according to Rule Six. Nancy (1978a) makes much of the fact that Descartes did not write the *Rules* on a scroll (*volume*), but rather "on the *codex*, whose paper does not close up on itself in a process of involution, as is the case with the volume, but offers its plane surfaces always ready in advance for writing as for reading" (Nancy 1978a, p. 7). And yet, though it is true that Descartes writes in a codex, it is perhaps too much to say that he is not involved with scrolls and rolling. According to Rules Five and Six, the method is intended to be an unrolling, an evolution of simples from out of complicated, involved things, but these Rules are involved with each other insofar as Rule Six gives to Rule Five what was necessary to have noticed before the whole method of Rule Five could have been applied. In the very serial laying out of the rules for the method in the codex of the *Rules*, these rules fold back on each other and into each other, making a scroll of the codex, perhaps even a scroll within the codex. This would seem to complicate the code of the truth in the book even as this truth is "inseparable, indissociable and indiscernible from the operation which here and now inscribes the rules" (Nancy 1978a, p. 7) since even a simple truth is necessarily more complicated and involved than a simplex of laid-out truths would appear to be, and is more complicated precisely because of the seriality involved in that laying out.

This thus means that Rule Six supplements Rule Five in a deconstructive, sense since it not only adds onto Rule Five the necessary guidelines for the whole method but also indicates what is necessary to have noticed before beginning the process of determining a need for method.[12] More than the luck that contributes to a curious person's hitting on a truth that otherwise results in deception that begins Rule Four's explanation why "*We need a method,*" Rule Six's double supplementation of Rule Five indicates a method before or for the method, a method for identifying what is simple as opposed to what is complex, such that the method can be applied in its useful and simple manner. The whole method would appear not to be whole at all, then. Rather, it requires a method to identify how and why it is to come to be (CSM I, p. 15; AT X, p. 371).

In its supplementation of Rule Five, however, Rule Six is itself supplemented by Rule Five. Rule Six, in indicating the method necessary for the whole method through the identification of the absolutely simple relative to the relative and complex from within the complex of the world as it is given, gives rise to the whole method qua whole, total, complete, pure, and simple. It is this very totality and simplicity, even if it is an intricate simplicity, that gives credence to the necessity of the supplementation of Rule Six as laying out a guideline for the simple procedures inherent to Rule Six. Thus, the totality indicated by Rule Five supplements the procedures of Rule Six by indicating the absoluteness and simplicity to be pursued by those same procedures, procedures that themselves derive their seriality and utility from out of the clarification of absolute and relative. In short, then, the very simplicity of the method, a method that opens a less obscure and more direct path to truth, is justified by its procedures for identifying the simple truths it pursues, but its procedures are themselves derived from out of its absoluteness, totality, and intricate simplicity. Rules Five and Six are interwoven within and involved with each other, supplement and justify each other, which, even in their ostensibly superficial separation into two rules, indicates a lack of wholeness on the part of the method presented as whole, and thereby a complexity to it that it otherwise would deny.[13]

The fable-structure or -logic that gives rise to a deployment of analysis that thereby interweaves analysis and synthesis within rhetoric and logic, thus has an effect on the conceptualization of the whole method qua whole, in the conceptual connection between wholeness, purity, and simplicity. The intricate and complicated totality of the method, which needs to be unknotted in a supplemental rule that simultaneously gives the justification for the whole method as a pure and simple analysis in search of simple truths, as an effect of the fable-structure or -logic that interweaves analysis and synthesis within rhetoric and logic, thereby complicates that totality by involving it within the relativity of effects rather than being purely an absolute as much as the structural relativity of the absolute's relationship to relatives does the same. That fable-structure or -logic then has an effect on the whole of the Cartesian corpus.

The Self and God

As a supplemental example to the above claim, I would like to turn attention to the first proof for the existence of god in the *Meditations*. I tried to establish above that the fable-like hyperbolicity of the doubt at hand, in giving rise to the self-deception of the evil genius who deceives, opens

onto the proof of the existence of the self as a thinking, because doubting, substance. Following the clarification in the Seventh Set of Objections with Replies, doubt is in "our thoughts [*nostra cogitationes*]" and not "in the objects." This means, then, that the doubt that inaugurates the need for the deception and self-deception that prove the existence of the self is itself in the self whose existence it proves.[14] But since the object being doubted, in the doubt inaugurated by the self-deception that conjectures the evil genius, is that same self, then this doubt is in the object being doubted. Such is the virtuous circle of the Archimedean foundation for the rest of the *Meditations*, the hyperbolicity of the proof of the existence of the self (CSM II, p. 319; AT VII, p. 475).

This Archimedean ground, this hyperbolicity and virtuousness not to say the intricate virtuosity of the proof of the existence of the self, is never merely proven, however. Because it is the Archimedean ground for all other proofs, it is, even if only formally, but not just formally, reproven with every other proof of every other thing. That is, the proof of everything that follows after the proof of the existence of the self moves through the operation of intellectual perception presenting ideas for judgment to determine their clarity and distinctness. This is the same operation by which the self is proven to itself, and the idea of the self is the model of clarity and distinctness against which all other ideas will be judged. But what is more, because the operation of judgment whereby the self proves its existence to itself is simultaneously all that is known of the self, this operation is also all that the self is at the moment of the Archimedean foundation for all other proofs of clear and distinct ideas. As a result, all other proofs are always also proofs once again of that self, both in that they expand the knowledge which constitutes that self and in that all knowledge moves through the operation which is always also the proof of the self's existence (i.e., the intellectual presentation of ideas for judgment concerning their clarity and distinctness). The self is the model of proof, and is thereby proven again and again with every consequential proof (see CSM II, p. 24; AT VII, p. 35), just as Descartes describes the mathematical example as a model of the whole method in Rule Six (see CSM I, pp. 23–24; AT X, pp. 384–387). What is more, insofar as the object and cognizer in this proof are identical, there is a coincidence of subject and object. As a result, there can be no middle term from which a syllogism can form, no logical demonstration of the self. It is this identity that demands a different form of proof in order to prove the existence of the self, not only because the self is an object unlike any other, but also and all the more precisely because it is the foundational model, reproven with

every subsequent proof, for all other proofs. Thus, the hyperbolicity of the proof of the existence of the self is indeed hyper-bolic in that it throws itself beyond itself and the self that it proves as object and cognizer of the doubt, a relationship between object and cognizer that itself is hyperbolic in throwing the self beyond itself in ob-jectifying itself, in throwing itself up against itself, via doubt.

However, this cognitive substance, which proves itself in doubt thanks to the self-supplemental relationship between object and cognizer in this particular proof that is then reproven with every new proof insofar as it is the model for proof itself, remains not fully proven. It remains unproven because the cognitive substance, which proves itself as a substance itself via doubt, cannot derive itself from itself, despite the coincidence of object and cognizer in the proof. If doing so were possible, "I should neither doubt nor want, nor lack anything at all; for I should have given myself all the perfections of which I have any idea." Thus, even the existence of the substance that is proven in a self-supplemental proof, is proven not to be derived from itself with the same certainty as the proof of its existence, following its model of proof (CSM II, p. 33; AT VII, p. 49).

Blizman (1973) establishes a spectrum or hierarchy of concepts, analogies, symbols, models, and images where analogies are "the vanishing point of the image," though their use "does not preclude the use of images but only imposes special conditions on their use" (Blizman 1973, pp. 183 and 184). On this reading, the proof of the existence of the self would appear to be the model for the proof of the existence of god. The proof of the existence of the self is the most familiar structure Descartes has, in fact the only such structure at this point in the text, but it remains incomplete and must reach out to something else in order to fulfill itself as a proof. Thus, in order to fully prove the self's existence, its proof must prove something beyond itself, something that has not yet been proven, on the model for proof that is the proof of the existence of the self. Because of the need for some other proof in order to prove the self's existence to itself, and because the substance of what is proven in this proof cannot derive itself from itself, it appears that the substance of the self is a relative and dependent truth, caused and preserved by the being that can derive itself from itself, an absolute and independent truth: god.

The analytic method that proves the existence of this independent and absolute god does so by modeling its proof on the Archimedean proof of the existence of the self, which has already thrown itself beyond itself by objectifying itself in that proof. Thus, it appears less Archimedean in

requiring a supplement to give ground to the ground. Yet the ground for the ground requires that same Archimedean proof in order to give credence to the form of the proof for the ground of the ground. In other words, the method whereby the existence of the self is proven gives credence to the proof of the existence of god, but the proof of the existence of the self requires the proof of the existence of god insofar as the substance of the proven self depends on the substance of an otherwise unproven god. It would seem that under no circumstances could the structure of the proofs of the existence of either the self or god be complete in themselves enough for an analogy to condition the use of the 'images', abstract as they are, between the proofs. It is for this reason that I would contest Blizman's claim that the evil genius is a mere "heuristic device" and that "there is no question of trying to *imagine* a real item" there (Blizman 1973, pp. 204–205; my emph.). If the proof of the existence of the self is a model for the proof of existence of god, which itself requires the supplement of the proof of the existence of god, such that the proofs of the existence of both self and of god would appear to reflect and supplement each other, interweaving themselves into each other, and if the evil genius is the apotheosis of the hyperbolic doubt that finally brings the proof of the existence of the self into clarity and distinctness, even if this proof requires supplementation, then there is no analogy between god and the self which could condition the use of imagery in either proof. Indeed, this relationship would make much more sense of Descartes' claim that

> it is no surprise that God, in creating me, should have placed this idea [of a being with all perfections] in me to be, as it were the mark of the craftsman stamped upon the work—not that the mark need be anything distinct from the work itself. But the mere fact that God created me is a very strong basis for believing that I am *somehow* [quodammodo] made in his *image* [imaginem]. (CSM II, p. 35; AT VII, p. 51; my emphs.)

There is some mode by which the self is the image of god, some way in which the self is modeled on god, some mode of being that makes the self a minor mode, a *modulus*, of god, through an unconditioned imagery—unconditioned because there are no models other than the self and god, and the structure of the proof of the self remains a model, a *modulus*, of the proof of god as much as the structure of the self itself is modeled on the image of the structure of god. Here, then, we can see how the relationship between deception and self-deception exposes the fable as a method

for constructing the self and for self-instruction. In deceiving itself, that self finds a proof for its own existence as made in the image of god, but that proof itself serves as the model for the existence of the god in whose image the self proves itself to have been made. This story of deception and self-deception, involving images and imagination, a story of an independent substance supplementing itself through another independent substance that in turn comes to depend on the first substance, adheres to the structure and follows the logic of fable of an element of a system generating that system's rules, rules that the element itself obeys in the telling.

Thus the proof of the existence of the self and the proof of god's existence supplement each other. This double supplementation need not be considered circular, at least not viciously so, but rather as a complication, an involution of the most simple and straightforward proof that gives ground to all other proofs, even while it is itself reproven in all other proofs.[15] The point from which Descartes would be able to prove the whole of the world, to escape the conjecture of the dreamworld, is in fact no point at all. It is closer to a knot, a tight wrapping together and interweaving of a series of at least one line or thread, but seemingly more than one, concerning the most serious proofs and doubts that one can ever encounter if one is to engage the world seriously, practically, and methodically.[16]

Error and Inexact Science

I must now turn back to the *Rules*, to those Rules that precede the whole method as well as what shows the need for a method at all. If the whole method is complicated by its relationship to what lays out the intricate procedure involved with following the method, complicating the already complicated relationship between analysis and synthesis, then attending to what precedes the whole method will show this method as not necessarily maintaining the foundational status it would otherwise claim for itself. Thus, I here want to turn to the first three Rules.

Before the Whole Method

The *Rules* begins with the claim that "*The aim of our studies should be to direct the mind* [ingenij] *with a view to forming true and sound judgements about whatever comes before it*" (CSM I, p. 9; AT X, p. 359). Thus, the end of the *Rules* is a directing of *ingenium*.[17] Insofar as Rule One begins with

a description of the ends for the other Rules, it cannot be considered, in itself, a rule for the direction of *ingenium*. It is, rather, something of a preface or prelude to these Rules. The Rules here appear to need to be told not merely in what direction they are to direct *ingenium*, but that they need to direct it at all. By implication, then, *ingenium* needs to be told not only how to form true and sound judgments, but to do so at all. Descartes' claim concerning *ingenium* seems to be more radical than even similar claims concerning good sense in the *Discourse* and *The Search*. In those later texts, good sense in its potential is ready to be placed on the path to true and sound judgments, requiring only doubt to begin that process. In the *Rules*, it appears that both *ingenium* and its potential for rule-obedience require a rule for the rules to be obeyed, a meta- or proto-rule, if *ingenium* is to even make sense of the rules that will direct it toward true and sound judgment. Marion (1977b) sees in this moment a "radical reversal" of Ignatian vocabulary (Marion 1977b, p. 88; my trans.). Whereas Ignatius lays out a course of study with the transcendence of knowledge (*cognitio*, *connaissance*) through theology as an aim, Descartes "situates the aim of studies within knowledge [*connaissance*] itself" so that, following Bacon, "the *finis* of knowledge [*connaissance*] depends on *principia* which precede it, without in any way being confused with the very practice of knowing [*savoir*]" (Marion 1977b, p. 89; my trans.). Marion (1977b) and I appear to agree, then, on the strange status of Rule One: It is a principle for the operation in which it simultaneously claims to participate, that operation being the directing of the mind, at least if Rule One is a rule for directing the mind, if it participates in the practice of knowing even while it identifies the *principia* by which this practice is to be practiced.

To be sure, it also appears that Descartes pulls back from the radicality of this claim in the text of the rule, when he claims that "what makes us stray [*nos abducit*] from the correct way of seeking the truth is chiefly our ignoring the general end of universal wisdom and directing our studies towards some particular ends." We stray from the path of true and sound judgment because of the bad custom of faulty comparison between the arts and sciences (*artes* and *scientiae*) so that we assume the difficulties of one playing the harp well and of farming well apply to the sciences as well (cf. Plato, *Republic*, 397e–398b). As a result, the sciences are studied separately when they should be studied in relation to each other with an eye "to good sense—to wisdom [*de bona mente, sive de hac vniversali Sapientia*]." The separation of the study of the sciences leads to a focus on

discoveries that are either overly interested in increasing worldly comfort or in impractical contemplation of the truth such that we might overlook important truths which appear uninteresting or useless. Thus, for Descartes, one should study the sciences together with a focus only on "how to increase [*augendo*] the natural light of his reason … in order that his intellect should show his will what decision it ought to make in each of life's contingencies." Descartes has not, at this point in the text, actually begun the process of inaugurating that increase of the natural light (*lumen naturale*). Instead, Rule One remains a rule for the *Rules*, removed from the actual operation of their inauguration and regulation of *ingenium*, but regulating the Rules themselves in this inaugural gesture (CSM I, pp. 9–10; AT X, pp. 360 and 361).

However, Rules Two and Three still do not give the method itself, while Rule Four only establishes why a method will be needed. They are also removed from the Rules that direct *ingenium*, and thus are rules for those Rules. Rule Two explains that "*We should attend only to those objects of which our minds seem capable* [videntur sufficere] *of having certain and indubitable cognition*," while Rule Three clarifies what is meant by objects of which *ingenium* could have certain and indubitable cognition: "*what we can clearly and evidently intuit* [intueri] *or deduce with certainty, and not what other people have thought* [senserint] *or what we ourselves conjecture* [suspicemur]."[18] Thus, the objects to which we can attend are only those that we can intuit or deduce with certainty, rather than any which others put before us or what we suspect without clear evidence. The problem with the education system of syllogism and *quaestiones* is not, of course, that it fails to give exercise and "a certain rivalry" to the mind and prevents some from falling off a cliff. Rather, the problem is that this system tends to ignore the simpler steps and heads straight for the most difficult issues such that its practitioners "ingeniously [*ingeniose*] construct the most subtle conjectures [*conjecturas*] and plausible arguments on the most difficult questions, but after all their efforts they come to realize, too late, rather than acquiring any knowledge, they have merely increased the number of their doubts." If Descartes' self-instruction is to avoid this problem, he must focus only on what he can intuit and deduce clearly (CSM I, pp. 10, 13, and 12; AT X, pp. 362, 366, and 364).

This multiplication of doubt is a result of the faith in one's masters and in books of the past, a faith established by a non-rigorous attention to method. Descartes defines method in general in Rule Four as "reliable rules which are easy to apply, and such that if one follows them exactly, one will

never take what is false to be true or fruitlessly expend one's mental efforts, but will gradually and constantly increase one's knowledge [*scientiam*] till one arrives at a true understanding [*cognitiam*] of everything within one's capacity." The syllogistic, academic approach, which does not see the interwoven quality of the sciences but treats them as distinct, has a tendency to go straight to the most difficult questions of the particular study of the queen of the sciences rather than seeing its relation to other sciences. Thus, this approach does not lead to the slow, methodical building of simple and simply deduced *scientia* toward the more general *cognitio*. As a result, students of this non-methodical method become reliant on their masters, whether present before them or as found in books, for guidance in these most difficult matters, faithful in the belief that these masters and that the educational methods presented by them are true. But what is required for method as Descartes understands it is a faith that the false can be taken for the true, a faith in deception (CSM I, p. 16; AT X, pp. 371–372).[19]

A faith in deception would lead students who free themselves from their masters to recognize that "even if all writers were sincere and open [*ingenui & aperti*], and never tried to palm off doubtful matters as true, but instead put forward everything in good faith [*bona fides*], we would always be uncertain which of them to believe, for hardly anything is said by one writer the contrary of which is not asserted by some other." The good faith of those who work in a non-methodical method that fails to begin with an understanding of the interwoven quality of the sciences in order to build to *scientia* is, ultimately, a bad faith. The contradictions, counterclaims, the *disputationes* and *quaestiones* of the academic, syllogistic methodology are a result of leaping into the most difficult matters ahead of the simpler, scientific knowledge, especially algebra and geometry, that can be acquired thanks to a faith in the interwoven quality of the sciences that can be, so Descartes believes, brought together in an understanding. By having leaped straight into the most difficult matters, students' reliance on masters leaves them unable to be sure of the ground from which they make inferences. While the inferences themselves are not faulty, the judgments they make with them are, because groundless, "rash." As a result, it is doubtful and unclear whether any knowledge claim has ever actually been made. Instead, in the end, "what we would seem to have learnt would not be science but history [*non scientias videremur didicisse, sed historias*]." It is learning history, which can only be doubtful, that leads academic, syllogistic studies astray (CSM I, pp. 13, 12, and 15; AT X, pp. 367, 365, and 370).[20]

However, history is to be distinguished from memory because the synthetic deduction to follow the analytic reduction is grounded in the certainty of intuition's direct impact on *ingenium*.[21] Such, then, is the necessary prelude or propaedeutic to method, or what Marion (1999) calls the "originary primacy" of science's universality found in the first four Rules (Marion 1999, p. 63). These first four Rules are distinct from the Rules that direct *ingenium* because they prepare *ingenium* for coming to grips with the whole method itself. They do not themselves direct *ingenium*, but prepare it for the importance of analysis, for what will not lead it astray.

Error

Before turning to Descartes' understanding of history more directly, it is important to become clearer on what he means by error, the going astray to which academic non-methodical methods lead. This error-prone quality of academic synthesis will hopefully be made clear by turning to the 'synthetization' of the *Meditations* as found in the *Principles*. What Descartes means by the *Principles* being synthetic while the *Meditations* is analytic is not precisely clear (except to say that the second proof of the existence of god comes later in the *Meditations* than it does in the *Principles* because the former operates a priori and the latter from effects) since the first seven articles of the former are a reduction to the *cogito*, unless he merely means that he runs through the analysis so quickly that the bulk of the book is a synthesis from that fundamentally simple truth. However, we can take Descartes at his word that the *Principles* is synthetic and can thus show, from out of a method closer to the academic one, how error occurs and what can be done to prevent it (see DCB, p. 12; AT V, p. 153).

If the *Principles* is a combination or even synthesis of the *Meditations* and *The World*, it is interesting to notice how it begins, with faith, and how it ends, with submission to the Church, perhaps even to faith, especially in those judges of prudence (*prudentiorem judiciis*). He is appealing, then, to those with judiciousness, cleverness, and sensibility to the practical and pragmatic. However, the truths under discussion here are absolutely, and thereby "more than just morally, certain." They are grounded in an impractical, extraordinary doubt. Whether the prudent judges in fact have ground for judging these truths is uncertain, since they may have, as Descartes claims repeatedly in the *Objections and Replies* as well as in the *Rules*, already begun from an erroneous ground. Thus, the appeal to the

prudent authority of the Church would seem to belie an irrelevance on the part of that authority, all the more so if the methods that have defended that authority qua prudent judgment are grounded in an erroneous, overly faithful starting point. At any rate, the *Principles* travels from an unconditioned faith in doubt to a conditioned faith in the authority of prudence, an authority that the book itself exceeds. However, doubt needs a *raison d'être*, which is why Descartes always feels the need to give a rational account of its necessity. The reasons for doubting are always, of course, error and deception, which are countered by the faith in doubt. Thus, in discussing error and how it comes about, Descartes will give an account of how it is that we are deceived and make seen the reason for doubt, thereby conditioning or relativizing the faith in doubt even while absolutizing the truths to which that doubt gives rise (CSM I, p. 290; AT X, p. 328; pt. 4, arts. 206–207, and pt. 1, art. 3).

Error can be avoided primarily thanks to the freedom of our arbitration (*liberum arbitrium*), which can rein in our tendency to believe in the world as it is given. However, it occurs "*when we make judgements about things we have not sufficiently perceived* [percepta]." Judgments are made through a combination of the perception of the intellect (*intellectum*) and the operation of the will (*voluntatas*), which are the only two modes of thinking (*modos cogitandi*) according to article 32. Because the will has a wider scope than the intellect, because we want to judge to have knowledge of more than we can clearly perceive intellectually insofar as the intellect can only perceive a few objects offered before it, error occurs when the will is allowed to extend beyond the intellect's perception. The intellect's perception is found in "Sensory perception, imagination and pure understanding [*sentire, imaginari, & pure intelligere*]," while the will's operation is found in "desire, aversion, assertion, denial and doubt [*cupere, aversari, affirmare, negare, dubitare*]." There are, then, four causes of error: (1) prejudices (*praejudiciis*) from childhood that trust the world as given to the senses; (2) not forgetting those prejudices; (3) exhaustion from attending to what is other than the world as given; and (4) attributing concepts to words, which do not correspond (*respondent*) to things of the world. Thus, insofar as doubt is an element of the will, we have to want to doubt the world as it is given in order to counter the prejudices of childhood and the exhaustion and linguistic laziness that can maintain those prejudices even in the face of the will to doubt and of doubting. Such a will can only be initiated from the development of reason that, first, distinguishes between sensations and things and, second, recognizes and

remembers the inherited prejudices that the failure to distinguish between sensations and things developed (CSM I, p. 204; AT VIII-A, p. 17; pt. 1, arts. 6, 32–35, 1, and 71–74). In other words, it is only through what the *histoire* of the *Discourse* calls "the great book of the world," which is so "soon to punish the man if he judges wrongly [*mal jugé*]," that Descartes or anyone of reason will be able to experience the failures of childhood prejudices as errors and maintain the will to doubt and of doubting them in the face of exhaustion and linguistic laziness. Such experience, especially the memory of this experience, is why, in the *Rules*, memory is distinguished from history (CSM I, p. 115; AT VI, p. 10).

However, it remains the case that past events remain the impetus for the inauguration both of the will to doubt and of the doubting that will, eventually, give rise to the method, whether in the *Rules* or the *Principles*. That the method of doubt needs a *raison d'être*, which develops from an appeal to the past, in particular to the experience of error in the great book of the world, is thus evidence of the need for a pre-, proto-, or meta-method, a path before the path that opens onto the path to the proper interpretation of the things of the world. That this appeal to experience is made, when addressing lenscrafters, through Descartes' own *histoires* and, when addressing students of philosophy, to their experience (i.e., their *histoires*) in that the *Principles* is written in the first person plural, complicates the relationship between reason and history or *histoire* or *historia*. That we know error qua overextension of the will thanks to the will to doubt and of doubting things of the world as given, a will that is itself inaugurated thanks to our own *histoire*, shows that the unlearning to which experience and memory should give rise if we have an appropriate, analytic method to find the foundational point from which we can begin a more appropriate synthesis is grounded in *historia* at least in the broadest sense. Thus, a more careful examination of the distinction between history and memory, and whether they in fact can be distinguished on Descartes' grounds, is necessary.

Etymology and History

Descartes' denigration of history, even if he simultaneously lauds *histoire*, leaves a reader in a strange position when reading his texts, especially those doing so almost four centuries after his death.[22] What is there to learn from a historically important writer who denigrates history as a scientific enterprise? It is not that history in itself is to be eliminated, of course, in

particular for its ability to broaden awareness of customs (*Discourse*) or to offer up the useful labors of others (*Rules*), but that it is not to be understood as a rigorous science since it displays so many omissions and contradictions. Nonetheless, the difficulty of coming to terms with Descartes' conception of history from such a temporal distance remains.

This difficulty can perhaps be engaged, if not eliminated, by first attending to his critique of etymology. In the *Principles*, the fourth and final cause of error is attaching concepts to words that do not correspond to things of the world, and is the one cause of error not directly related to childhood prejudices. Memory holds both the thing and the word, but words are easier to recall than things, though they are conceptually distinct and so not modally or really distinct.

For Descartes, there are only three kinds of distinction: modal, real, and conceptual (*modalem*, *realem*, and *rationis*). Modal distinctions are either "between a mode … and the substance of which it is a mode" or "between two modes of the same substance." A mode is modally distinct from its substance when "we can clearly perceive a substance apart from the mode which we say differs from it, whereas we cannot, conversely, understand the mode apart from the substance," while a mode is modally distinct from another mode when "we are able to arrive at knowledge of one mode apart from another, and *vice versa*, whereas we cannot know either mode apart from the substance in which they both inhere."[23] Real distinctions are distinctions between two substances. Conceptual distinctions are between a substance and an attribute of the substance, marked by the "inability to form a clear and distinct idea of the substance if we exclude from it the attribute in question, or, alternatively, by our inability to perceive clearly the idea of one of the two attributes if we separate it from the other" (CSM I, pp. 213–214; AT VIII-A, pp. 29 and 30; pt. 1, arts. 74 and 60–62). In the First Set of Objections, Caterus claims that the distinction between soul and body should be considered formal, which falls between conceptual and real distinctions. He claims this because the distinction between soul and body is grounded in "the fact that the two can be conceived apart from each other" and, following Scotus, "in order for one object to be distinctly conceived apart from each other, there need only be what he calls a *formal and objective* distinction between them" (CSM II, p. 72; AT VII, p. 100). Descartes' reply is that "this kind of distinction does not differ from a modal distinction; moreover, it applies only to incomplete entities," which the soul and body decidedly are not (CSM II, p. 85; AT VII, p. 120).[24] 'Attribute' is deployed "when we are

simply thinking in a more general way of what is in a substance" (CSM I, p. 211; AT VIII-A, p. 26; pt. 1, art. 56). That is, an 'attribute' is more general than both 'mode', used "when we are thinking of a substance as being affected or modified," and 'quality', used "when the modification enables the substance to be designated as a substance of such and such a kind" (CSM I, p. 211; AT VIII-A, p. 26; pt. 1, art. 56).

The conceptual distinction between word and thing in memory rests on the first kind of inability involved in conceptual distinction, the inability to form a clear and distinct idea of the thing without the attributed, corresponding word, at least within a given language. Error occurs when we assume that the distinction between words and things is an inability of the second kind, such that we think we cannot clearly perceive the idea of the thing without the idea of the word. Because words, as human inventions, merely signify things, regardless of the language, and thus many words can signify the same thing, the idea of the thing remains distinct from the idea of the word (see CSM II, p. 126 and CSM-K, p. 187; AT VII, pp. 178–179 and AT III, pp. 417–418). Thus, the overextension of the will in this fourth kind of error is involved with the mistaken faith in a one-to-one correspondence between words and things, which then gives rise to "people [giving] their assent to words they do not understand [*intellectis*], thinking they once understood them, or that they got them from others who did understand them correctly" (CSM I, pp. 220–221; AT VIII-A, pp. 37–38; pt. 1, art. 74). In asking what the word 'mathematics' means in Rule Four, Descartes does not want to depend on others' understanding but he wants to know he has a clear understanding of the word. Hence, "it is not enough to look at the etymology of the word, for, since the word 'mathematics' has the same meaning as 'discipline' [*disciplina*]," so studies like optics and mechanics, sometimes considered dependent on arithmetic and geometry, can equally be considered mathematics (CSM I, p. 19; AT X, p. 377).

In coming to terms with what *mathesis* might mean on its own, what distinguishes it from *disciplina*, and doing so independent of the etymological connection between the Greek and Latin words, Descartes concludes that *mathesis* is concerned with order and measure (*ordo* and *mensura*) in general, regardless of the material being ordered and measured.[25] The disciplines that come under its sway are those that deploy *mathesis* in terms of number, light, movement, and so on. This recognition leads him to the conclusion that there must be a *mathesis universalis*, the ordering principle as such, the order for ordering. The analytic

reduction to *mathesis*, the name of which "everyone knows … and without even studying it understands what its subject-matter is [*circa quid versetur*]," will lead him, in the next two Rules, to show the method. Thus, there would seem to be no need to engage the etymological debate over the relationship between *mathesis* and *disciplina*, and thus not to engage the historical contingencies involved in that relationship, because analytic reduction, which has itself not been presented yet and which is an unlearning of childhood prejudices, can expose the *mathesis universalis* that gives rise to the method according to which we will build knowledge in persistent reference to the individual experience of deduction, or at least the experience of taking note of another's deductions, in persistent reference to fundamental, simple truths (CSM I, p. 219; AT X, p. 378).

Taking note of another's deductions is why it is sometimes useful to read the ancients, to engage with history, with books of the past. Such utility is limited, in Rule Three, by the "considerable danger that if we study these works too closely traces of their errors [*errorum*] will infect us and cling to us against our will [*invitis*]" (CSM I, p. 13; AT X, p. 366). However, these errors could only come to be seen as errors later in life. Just as with childhood prejudices, the limitations of books that make the mistake of assuming a one-to-one relationship between things and words, of assuming that the conceptual distinction between them is of the second kind described in the *Principles*, are seen only to the extent that the interpretability of the words and the consequential utility of the knowledge claims reaches a saturation point or a point of exhaustion. Whereas there are at least two stages to the rejection of childhood prejudices, both of which depend on awareness "of the difference between things and sensations," the rejection of non-Cartesian knowledge claims depends on awareness of the precise form of conceptual distinction between ideas of things and ideas of words, an awareness that can only come with the method of analysis. Yet analysis, which hinges on the faith in doubt based on the experience of deception, engages in a deliberate process of unlearning prejudices, prejudices which favor synthesis. In other words, to show the superiority of analysis, to learn why we should unlearn, an engagement with history, with books of the past, is not only assumed but structurally necessary to the Cartesian method. History as well as *histoire* is interwoven within the process of unlearning that is analysis (CSM I, p. 219; AT VIII-A, p. 35).

It is because of this structural necessity and interweaving of history and *histoire* within analysis that Descartes deliberately begins so many texts with the rhetoric of a fable-structure or -logic. This structure or logic is

what allows the reader to begin to see, on his or her own terms through the story Descartes tells, whether of his own life or in formal analysis or synthesis, that the childhood prejudices he or she has inherited, not only from individual experience but from the accumulation of habitual and customary or accustomed conceptual errors as to the form and possibility of knowledge claims, are erroneous, misleading, have led him or her astray. History is crucial to Cartesian knowledge claims, if only as that which is to be rejected. This is not to say that history and science exist in a kind of dialectical relationship whereby the negation of the former is included in the supersession of the latter. There is rather the analysis toward simple, fundamental, and eternal truths that can be utilized in syntheses to deduce more complex truths. But this analysis, qua analysis, is embedded in both memory and history and can never, as a method, a meta-hodos, a path before or beyond or behind the path of utilization of analysis, escape the unlearning of childhood prejudices that are themselves inherited from individual experiences of underdeveloped reasons and from erroneous habits and customs that articulate claims to truth. Analysis always requires a knot to untie, whether that knot is born of oneself or of the historical circumstances within which the analyst finds him- or herself.

It is with this understanding of the relationship to history that one must read Descartes nearly four hundred years after his death. Here are books of the past, which present a knot to the reader, a knot inherited in one's own engagement with the world. That knot is not merely that of the self, which shows itself to be interwoven with the knot of god through the double supplementation they have between themselves. It is also the knot of analysis itself, the knot of that which leads to the knot of the self, and so a knot of unknotting, as an intricate interweaving with things of the world, synthesis, rhetoric, and history. Analysis of things of the world already begins with the argued-for interpretation of things of the world as other than given, as syntheses of simples. The argument for an engagement with things of the world in this way hinges on the failure, limitation, or exhaustion of the interpretation of things as matching up well with words. It hinges on this failure, limitation, or exhaustion in that a rhetorical appeal to what I am calling the fable-structure or -logic is necessary to begin the unknotting of historico-cultural and individual prejudices such that analysis in itself can be seen, on the reader's terms, as a superior method. The knot of analysis, then, is its structural inability to escape from what it would consider inexact, possibly even disordered and ill-measured—that is, history—at the point immediately before it shows itself as a method.

Histoire, Rule-Obedience, and Rule-Generation

Along with the question of supplementation and the knots it exposes comes the question of rule-obedience and rule-generation. An analysis of the fable-structure or -logic at work throughout the Cartesian corpus, the pedagogical role that fables and their ilk, in its precedent status over discovery of any thinking proper, shows an intricate and complex relationship between the fables or *histoires* each of Descartes' readers tells themselves on the way to discovering the method for themselves. In addition, the effect of attending to this fable-structure or -logic leads to an internally complicated and doubly supplemental structure to the method itself in its relationship to and justification of itself as well as to both etymology and history, both of which the method claims it ought to be able to regard as inexact and, overall, useless. Here, I would like to press on this effect more to see how attending to the fable-structure or -logic affects practical life, both for craftspeople and in ethico-political life, in order to gain a wider understanding of the supplemental relationship between rule-obedience and rule-generation at work throughout Descartes' works.

Obedience, Habit, and Imitation

The method is not intended for practical life any more than the hyperbolic doubt that both deploys and discovers the method is. As Descartes explains in the *Principles*, hyperbolic doubt is supposed to be taken up, at most, "*once in the course of* [*one's*] *life*," while the explanations deduced from the deployment of the method "*possess more than moral certainty*" (CSM I, pp. 193 and 290; AT VIII-A, pp. 5 and 328; pt. 1, art. 1, and pt. 4, art. 206). As Ariew (2005) explains it, "Moral certainty accrues to physical principles about particular things that cannot be perceived. We do not have real doubts about these principles, but they fail the test of hyperbolic doubt, because we understand that God could have brought about things in some other way" (Ariew 2005, pp. 137–138). This means that Parts One and Two contain the general physical principles about which Descartes can be absolutely certain because derived from the absolutely certain metaphysical principles and self-evident truths, but Parts Three and Four are morally certain and hypothetical. The claim to Parts Three and Four being more than morally certain is grounded in their connection with the absolute certainty of Parts One and Two, though Descartes is unwilling to fully commit himself to the absolute certainty of Parts Three and Four because he recognizes that their connection to Parts One and Two must

be accepted first (see CSM I, p. 290; AT VIII-A, p. 328; pt. 4, art. 206). Such acceptance is what he seeks in the appeal to the prudent in the Church, which would bring what is now morally certain into absolute certainty. The appeal to prudence for this task would, again following Ariew (2005), not necessarily bring this certainty outside of 'morals'.

Practical life ought to be ordered on obedience to one form of rule or another. The remaining questions center on what kind of practical life is under discussion and what kind of rule that life ought to obey. To address these questions, it seems appropriate to turn to what moral philosophy is for Descartes. To be clear, Descartes does not appear to distinguish very carefully, if at all, between moral and political philosophy, ethics, and a virtuous life. These terms will be investigated as roughly synonymous.

The preface to the French edition of the *Principles*, where he exhorts the reader to approach his textbook as a novel, contains the famous section describing philosophy as a tree. Metaphysics is the roots; physics the trunk; and other, practical sciences the branches. Those other sciences are reducible to the principal ones of medicine, mechanics, and morals. The last of these is the only one Descartes describes: "the highest and most perfect moral system [*la plus haute & la plus parfaite Morale*], which presupposes a complete knowledge [*entiere connoissance*] of the other sciences and is the ultimate level of wisdom" (CSM I, p. 186; AT IX-B, p. 14).[26] Thus, morality is not a pursuit that appears to interest Descartes much, at least not until metaphysics and physics have been known entirely, with totality, and thereby absolutely. In other contexts, it is not merely a lack of interest in the name of intellectual priority that leads to Descartes' attempts to do his best to avoid moral philosophy, but perhaps even a moral imperative. For instance, in a letter, dated June 15, 1646, to his close friend, the diplomat Hector-Pierre Chanut, whose "principal study" was moral philosophy, Descartes writes,

> Of course, I agree with you that the safest [*le plus assuré*] way to find out how to live is to discover first what we are, what kind of world we live in, and who is the creator of this world, or the master of the house we live in … . [A]nd so I must say in confidence that what little knowledge of physics I have tried to acquire has been a great help to me in establishing sure foundations in moral philosophy.

The most assured and safest, the clearest and most preserving path to take in discovering the right way to live is to begin from questions of metaphysics and physics, even if this path leads one not necessarily to "preserve life"

through medicine, but to take "another, much easier and surer [*plus sur*] way, which is not to fear death." Moral philosophy most assuredly gains its importance through metaphysics and especially physics. Thus, even if moral philosophy is the last and most important science and can only be established from out of an absolute knowledge of metaphysics and physics, it appears to be the case that metaphysics and physics, and of course the right direction of the mind that the method gives for their pursuit, have a moral quality to them in that pursuing them with absolute clarity and distinctness are of a piece with the pursuit of having clear and distinct moral ideas (CSM-K, pp. 289 and 386; AT IV, pp. 441 and 442).

With this relationship between moral philosophy and the more intellectual pursuits in mind, in a letter to Princess Elizabeth dated August 4, 1645, Descartes writes that, while reason does not need to be completely free of error (*ne se trompe point*) in order to lead a virtuous and thus content life, "virtue unenlightened by intellect can be false [*lorsqu'elle n'est pas esclairée par l'entendement, elle peut estre fausse*]" (CED, p. 99; AT IV, p. 267). If the intellect fails to clarify for the will, the will can, as with nonmoral pursuits, take what is false to be true. The source of error or of being deceived, the overextension of the will, is precisely the desire for a good, honest life as well as the thoughts associated with that life produced by virtue. It produces this desire because, as Descartes claims in *The Passions*, virtues are passions and passions produce desires as well as thoughts (*pensées*) (see arts. 160, 144, and 161). In that, according to the *Principles*, ideas (*ideae*, *idées*) are modes of thoughts (*cogitandi*, *pensées*), the passions that are virtues can be considered as indirectly productive of ideas via being productive of thoughts, so if virtuous desires are not clarified by the intellect, the ideas produced will not be clear or distinct (see CSM I, p. 198; AT VIII-A, p. 11; AT IX-B, p. 32; pt. 1, art. 17). As a result, to return to the letter to Elizabeth, false virtues "can carry us toward bad courses [*choses mauuaises*], even though we think them good," while "the right use of reason [*raison*], giving us a true knowledge of the good, prevents virtue from being false. In making virtue accord with licit pleasures, reason makes practicing virtue quite easy; and in giving us knowledge of the condition of our nature [*nostre nature*], it restrains our desires" (CED, p. 99; AT IV, p. 267). So reason must temper the desire to be good in order to be truly good through reason's power, its *puissance* to discern between the false and the true. Otherwise, this desire, as with all other operations of the will, will produce a thought the mode of which is not a clear and distinct idea as perceived by the intellect and, in the name of the

good, evil will be done. All of this is in line with much of what Descartes wants to claim about the pedagogical element of a new habituation of thought through the method generated by his fable-structure or -logic.

However, at this point of reason's tempering of the desire for a good, honest life, I want to turn back to the *Passions*, to articles 161 and 144, while bearing in mind this pedagogical habituation. In article 161, centered on generosity, Descartes writes, "what we commonly call 'virtues' are habits in the soul which dispose it to have certain thoughts: though different from the thoughts, these habits can produce them and in turn be produced by them." This movement of production between habits and thoughts, especially in the relationship between the habits called virtues, means that the relationship between the false and the true in morality is more complicated than it might otherwise appear. That is, insofar as reason can clarify what are clearly perceived ideas as modes of thought and unclearly perceived ideas that the will to and of desire to lead a good, honest life would direct the mind in a method that habituates the self in the direction of clarity, everything seems clear, simple, and straightforward. Yet, if habits produce thoughts that themselves produce habits of clarification, it is unclear how or why the discernment of reason is to be trusted or at least considered not to be deceptive. The habit of thinking as oriented to clearly perceived ideas is a virtue, and a virtue that will lead the self to the complete system of morals after the complete cognizance of other sciences. But if the habit of thinking, as a virtuous habit, is itself produced by a thought of clarification, as opposed to a clearly perceived thought or idea, what would be the source of this habit is not, cannot itself be clear. It cannot be clear because the thought of clarification cannot rest on clarity. Such would come down to claiming that clarity itself can be clearly perceived, which is akin to claiming that the condition for the possibility of seeing can be seen (CSM I, p. 387; AT XI, p. 453).

For Page (1996), "Certainty in all its forms entails a meta-reflection" (Page 1996, p. 237). This meta-reflection is necessarily retroactive and depends on the evidentiary standards for the context (i.e., mathematical reasoning has a higher standard for evidence than other forms of reasoning). The satisfaction that comes from properly defined and established mathematical proofs arises "because reason has determined the specifications in accord with its own design, what reason thus begins with is to that extent *clear*. Clear means, in this context, that the identification of the object is exact" (Page 1996, p. 238). Reason cannot err in the identification of a mathematical object, even if it can mistake reality for that

identified object. Such a meta-reflection is fine as far as the practices, habits, or virtues of mathematical reasoning go, or any practice of reasoning, for that matter. However, what is at stake here is not so much the meta-reflection that makes sense of the clarity of the objects of reasoning, but the clarity of the habit to clarify, whether methodically rigorous or not. The clarity involved here would demand, to manipulate Page's language, a meta-meta-reflection. The practice of meta-reflection, what we could perhaps simply call 'philosophy', remains a habit, practiced to a better or worse degree by practitioners. However, just as the practitioners of mathematics need not concern themselves with why the practice of mathematical clarity is satisfying, not all practitioners of meta-reflection need concern themselves with the satisfaction derived from the certainty and clarity of their own proofs. But to such reflection on meta-reflection is what the investigation of article 161 and the relationship between habit and thought has led.

A claim that the condition for the possibility of seeing can be seen is possible through the chiaroscuro effect of a fable, and so by an inauguration of perception or thinking that initiates a habituation of self-instruction through a method, thus opening the thought of clarity that could produce the habit of thinking in terms of an intellect focused on clearly and distinctly perceived ideas that will in turn produce virtuous thoughts to a circle that can never be clearly and distinctly perceived as either virtuous or vicious. Husserl (1999) reaches a similar point in §34 of the *Cartesian Meditations* when he writes that "By the method of transcendental reduction each of us, as Cartesian meditator, was led back to his transcendental ego" (Husserl 1999, p. 69). Though the French translation replaces 'Cartesian' with 'transcendental', the point remains (see Husserl 1999, p. 69n. 2). Each of the intentional processes of perception, recollection, and so on has itself been "explicated and described in respect of its sort of intentional performance" (Husserl 1999, p. 70), which gives an "'empirical' significance" to those explications and descriptions. However, "from the very start we might have taken as our initial example a phantasying ourselves into a perceiving, with no relation to the rest of our de facto life," which risk shows "the pure '*eidos*' perception, whose '*ideal*' extension is made up of all ideally possible perceptions, as purely phantasiable processes" (Husserl 1999, p. 70). That each intentional process of the transcendental ego can be explicated and described as an *eidos* does not, however, expose the connection between the *eide* as such. Rather, the horizon of the connections "*itself becomes eidetic*," giving rise to an *eidos* ego

(Husserl 1999, p. 70). As a result, "a purely *eidetic phenomenology*" is necessary to take account of this *eidos* ego and thereby "explores the universal Apriori without which neither I nor any transcendental Ego whatever is 'imaginable'" (Husserl 1999, p. 72). The attempt to explore the horizon of the *eidos* ego in an eidetic phenomenology would seem to be an attempt to clarify the clarifications of perception and other intentional processes, to explicate and describe the processes by which processes are themselves explicated and described such that the processes of explication and description are themselves given empirical significance. It is an attempt, then, to perceive perception, to clarify clarification. For Husserl (1999), such an attempt would result in an absolute phenomenology, but it is somewhat unclear why explicating and describing explication and description as intentional processes to explicate and describe the intentional processes of perception, and so on, would not itself at least possibly be subject to yet another explication and description to give empirical significance to the process of explicating and describing the *eidos* ego of eidetic phenomenology, and so on *ad infinitum* if not *ad deo*. Descartes' recourse to fable in the face of such a possibility thus appears somewhat more straightforward, or at least not as consistently reductive to 'objectivity' in the fashion that Husserl (1999) lays out.

It is here that article 144 may be helpful, where Descartes claims that "the chief utility [*utilité*] of morality" is found in the "control [*regler*]" it exerts over "*Desires whose attainment depends only on us*" and that are produced by the passions of joy, love, sadness, and hatred. In that joy and love (and wonder) produce virtuous passions and habits while sadness and hatred (and wonder) produce vicious passions and habits, morality itself would appear to regulate the will to and of desire that produces virtue. Here, then, if morality regulates the distinction between what depends only on us and what is independent from us, even if only in terms of virtuous and vicious passions, it would appear to regulate the virtuous habit of thinking as clear and distinct perception, and thereby is productive of the sciences, the complete knowledge of which will lead to moral philosophy (CSM I, p. 379; AT XI, p. 436; arts. 144, 142, and 160). This is not merely to say that reason need not be fully developed to lead a good, honest, virtuous life, nor to say that the pursuit of the sciences is in itself a contribution to moral philosophy and inherently moral and virtuous. Rather, it is to claim that morality, in its very usefulness, is the regulation of what will regulate morality's clearly and distinctly perceived pursuits (i.e., reason or thinking), pursuits which will in turn be determined as

virtuous in terms of their pedagogical and/or practical utility as the application of the good use of the *puissance* of reason, to return to the *Discourse* (see CSM I, p. 112; AT VI, p. 3).

To see more clearly what is at stake here, I turn to Foucault (1994). When he identifies in the *Rules* a critique of resemblance as adequation and an offer of a relational comparison as the source of knowledge, he shows that knowledge becomes dependent on the comparative techniques of measure and order. In measure, the comparison operates through "the arithmetical relations of equality and inequality," while in order, it operates through "a simple act which enables us to pass from one term to another … by means of an 'absolutely uninterrupted' movement" (Foucault 1994, p. 53). But when we arrive at this relationship between reason and morality, the comparison seems more difficult because what would be compared would not be things to be measured and ordered but that which would itself order and measure. Insofar as it is unclear whether morality orders reason through regulation or whether reason gives the measure of morality through utility, the comparative techniques that would become the new Cartesian ground for knowledge are less useful than they at first appear. Again, it becomes a question of whether the condition for the possibility of intellectual perception can itself be seen: how to rationally assess the relationship between reason and morality, how to make a moral judgment of this relationship? If morality's utility is its regulative abilities over reason's desires, where does the determination of the utility of morality find its source, since the desire to make a moral judgment would be a rational one and this desire should itself be regulated by morality? What is the common measure between reason and morality except for utility, which is itself already at work in the ordering of their internal mechanisms as well as in their interrelationality, and therefore itself cannot be either "merely conventional or 'borrowed'," as Foucault (1994) describes the units of measuring (Foucault 1994, p. 53)? If this utility, as the ordering principle of both morality and reason, is the order by which such comparison could operate, insofar as utility is not "an exterior unit," then utility would appear to be the order of order, whether moral or rational, but then it would be all the more difficult to identify whether moral utility orders reason's desires or if rational utility regulates what would be considered moral (Foucault 1994, p. 53).

There appears to be yet another knot here, a complex and involved point of difficulty. This difficulty, in a fabular structure similar to the double supplementation of analysis and synthesis, self and god, and so

on, here operates through the questions of obedience, habituation, and imitation. Does reason imitate morality, or vice-versa? Does morality produce the habit of virtuous thinking? What element of the mind produces the rules obeyed, the rules that regulate the mind's thinking and the self's living, whether in the practical or hyperbolic realm? Is this element discernible, analyzable, without imitating, and therefore obeying, that which it would discern, analyze, or clarify? To further clarify these questions, which may in fact result in a further confusion or complication of them, a turn back to Parts Two and Three of the *Discourse*, which is a turn to the relationship between the epistemo-logical and the moral and thereby a turn to the relationship between the metaphysical and the political as well as the mind and the external world, appears necessary.

Eight Simple Rules

Descartes does not always appear to be comfortable in the realm of virtue, moral, ethical, political philosophy, and would prefer not to write on it if possible. He writes to Chanut in 1647 that his reticence is for two reasons: "One is that there is no other subject in which malicious people can so readily find pretexts for vilifying me; and the other is that I believe only sovereigns, or those authorized [*sont authorisez*] by them, have the right to concern themselves with regulating [*se meler de regler*] the morals of other people" (CSM-K, p. 326; AT V, p. 87). The second reason for his reticence will be addressed below. The first reason, however, is related to the general problem of the potential lack of regulation or clarification of the desire to lead a good, honest life by the intellect. That is, the desire to be good, to be thought good, to appear good, is a genuine desire on the part of many of Descartes' critics. However, in that it is not restrained or clarified by the intellect, this desire becomes a false virtue, leading to malicious slander of his positions as challenging Aristotelian-Church authority. In the structure of the *Passions*, this malice is the result of indignation, which is "observed much more in those who wish to appear [*paroistre*] virtuous than in those who really [*veritablement*] are virtuous" and results in becoming enraged over relatively trivial matters (CSM I, p. 398; AT XI, p. 476; art. 198). The relatively trivial matter that leads to slander thanks to the lack of clarification as to what is dependent and what independent of us on the part of Descartes' critics, then, is that nothing he writes challenges divine or Church authority, only Aristotelian. Thus he periodically feels compelled to address moral problems or issues so that the slanders can be addressed.

Parts Two and Three of the *Discourse* is one of the places where he feels compelled to address such moral problems. In the *Conversation with Burman* he says that he wrote what he did "because of people like the Schoolmen; otherwise, they would have said that he was a man without any religion or faith [*religione, fide*] and that he intended to use his method [*methodum*] to subvert them." However, this question, whether the Cartesian method subverts Catholicism or faith, turns them on their heads, is not the issue for me. The issue is rather, having questioned whether morality or reason produces the habit of thinking, in questioning and analyzing the fabular structure of the knot of obedience, habituation, and imitation, whether morality turns the method on its head, whether morality subverts the method (DCB, p. 49; AT V, p. 178).

In the *Discourse*, Descartes lays out eight rules, four epistemological and four moral, though not without a rule for these rules, a rule which itself is given a prelude in the telling of his *histoire* or fable. As he tells it, he was not immediately prepared to totally reject his inherited opinions until he had "first spent enough time in planning [*faire le proiet*] the work I was undertaking and in seeking the true method [*Methode*] of attaining the knowledge of everything within my mental capacities [*capable*]." Thus, as discussed above, he looks to logic, geometry, and algebra, discovering that syllogisms are useless and confuse (*meslez*) false and true precepts and that mathematics has been overly concerned with abstract problems. These problems lead him to try to find another method that will maintain the advantages of logic, geometry, and algebra while discarding their disadvantages. Doing so leads him to the proto- or pre-rule that will guide his rule-finding:

> a multiplicity of laws often provides an excuse for vices, so that a state is much better governed when it has but few laws which are strictly observed; in the same way [*ainsi*], I thought, in place of the large number of rules that make up logic, I would find the following four to be sufficient, provided that I made a strong and unswerving resolution never to fail to observe them.

Two interwoven issues must be noted concerning this proto- or pre-rule.[27] The first concerns the evidence for Descartes' conclusion for the proto- or pre-rule for his logical rules, which is political and concerns the maintenance of order. This evidence of political rule is the evidence from which he concludes that his self-rule, his self-instruction would best be grounded in simulation, imitation of political order. The second issue concerns the indication of this conclusion, the *ainsi*, the 'so', the 'thus'. With this

word, Descartes indicates that there is already a logic at work in the conclusion that leads to the proto- or pre-rule for the four epistemological rules, a logic that is in part an imitation, by way of imitation of the advantageous elements of traditional and inherited syllogistic logic. Thus, the imitation of the political, moral, ethical, and virtuous as found in the proto- or pre-rule for the four epistemological rules is also an imitation of what is advantageous from logic. So the rule for the rules of the logic of knowledge interweaves itself within the political and the logical, the sciences most explicitly concerned with order in and for itself. The rule for the rules of epistemology is itself neither logical nor political, though it imitates both in the appeal to order in and for itself as that which ought to be obeyed (CSM I, p. 119 and 120; AT VI, pp. 17 and 18).

From *The Passions*, the *Principles*, and some letters, it is shown that the reason for the appeal to order in and for itself is argued for on the grounds of clarifying desire for the will, but here there is none of that. The *Discourse* moves seamlessly, except for the *ainsi*, from maintaining the advantages of logic, geometry, and algebra to political order to imitation of political order. In a letter to Princess Elizabeth, dated September 15, 1645, however, Descartes perhaps clarifies this transition. There, he discusses three useful truths to acknowledge—god's goodness, the soul's immortality, and the universe's immensity—which leads him to a fourth such truth: the relationship between individual and community. In that each person's interest is distinct from that of all other things in the world, "one must [*doit*], all the same, think that one does not know how to subsist [*subsister*] alone." As a result of being parts of the whole of the universe, planet, state (*Estat*), society (*societé*), and family, each of us must calculate, measure, order our lives with this insubstantiality, if only physical, in mind. However, this calculation, measurement, or ordering is to be done "with measure [*mesure*] and discretion" because one should not rush into danger if it will not benefit family, state, community, and so on to a greater extent than the sacrifice. Descartes maintains that knowing and loving god will naturally lead to such measurement because such a person will abandon him- or herself to god's will (*volonté*) and will direct his or her passions toward god's pleasure (CED, pp. 112–113; AT IV, pp. 293–294).

If this letter can be applied to the *Discourse*, then it would appear that the appeal to political order as the proto- or pre-rule for his four epistemological rules is explained through the experience of measuring that is the individual's relationship to the state and community. Politico-ethical life is, it would appear, a persistent state of measurement and comparison.

Politico-ethical life, community life, moral life, the virtuous life is best, or at least most easily, measured by an individual against him- or herself if and when there are fewer laws. As with the simplification and reduction of the analytic method, the best-ordered state allows the individual to measure his or her interests against that of the state, which is easiest, simplest when there are as few rules as possible. The imitation of this experience, in concluding in proto-logical fashion, is Descartes' proto- or pre-rule which rules over the epistemological rules.

To turn to the four epistemological rules, then, also requires turning to the four moral rules. The epistemological rules that Descartes will follow are familiar: (1) not to accept anything as true without clear and distinct knowledge of its truth, (2) to divide what is difficult into as many parts as possible (*pourroit*), (3) to conduct (*conduire*) his thoughts (*pensées*) from simple to complex, and (4) to list or count off (*denombremens*) the discovered truths completely. The four moral rules are as follows, formed with his move to Holland in mind: (1) "to obey the laws and customs of my country [*païs*]" in terms of religious faith "and governing myself in all other matters according to … the opinions commonly accepted in practice [*pratique*] by the most sensible of those with whom I should have to live," (2) "to be as firm and decisive in my actions as I could, and to follow even the most doubtful opinions, once I had adopted them, with no less constancy than if they had been quite certain," (3) "to try always to master myself rather than fortune, and change my desires rather than the order of the world," and (4) "to review the various occupations which men have in this life, in order to try to choose the best" (CSM I, pp. 120 and 122–124; AT VI, pp. 18–19 and 22–27).

Though much of the Seventh Set of Objections with Replies centers on the apparent contradiction between epistemological rule 1 and moral rule 2, the apparent distinction between hyperbolic and practical doubt as Descartes understands it has already been discussed (see CSM II, pp. 302–383; AT VII, pp. 451–561). However, there is a more complex overlap between these two rules, stemming from the pre- or proto-rule, drawn from experience, to make as few laws as possible. If in fact the rule not to accept what is doubtful is drawn, insofar as it is the first rule of an intentionally short list, from a pre- or proto-rule which is clearly practical not to say political, then the epistemological claim that generates the extremes of hyperbolic doubt would seem to be drawn from a practical decision made on moral grounds that would appear to replicate, imitate, or even 'simply' be an application of moral rule 2, which itself is the second

in an intentionally short but separate list. If this point is true, then neither Bourdin's complaints nor Descartes' frustrated responses in the Seventh Set of Objections with Replies get to the heart of the difficulties here: Descartes is fabulating a world, a milieu, a culture of clear and distinct judgment, grounded on a handful of rules that themselves are determined in at least their paucity of number by a pre- or proto-rule grounded on the ethical, moral, political behavior of people in the world, but this handful of rules is split between the purely rational and the moral or practical, and claims that the difference between the two realms (epistemological and moral) should be clear and distinct insofar as the moral rules are geared toward Descartes leading a happy life, a claim of differentiation which itself is necessarily, on Descartes' reasoning, already epistemological, an epistemological claim which girds the moral claim that establishes the pre- or proto-rule that itself appears in reference to worldly travel and moral judgment made possible by the education the fabulator has had, such that he can tell his unique story in such a way that he can *faire voir* his readers to replicate, imitate this same story in their own way, with their own (limited) rules that determine yet are simultaneously determined by the rational, and so epistemological, judgment which makes them human. The fable of the *Discourse*, then, is a fable of rule-generation that tells itself its *histoire* of rule-obedience, and it is a rule-obedience that is an *histoire* of rule-generation.[28]

Thus, the relationship between the metaphysico-epistemologico-hyperbolic and the moral-practical seems to be an interweaving between them. It is persistently unclear to what extent the moral obeys rules generated by the epistemological or vice-versa. In that even the generation of the proto- or pre-rule that rules on the value, virtue, and utility of a small number of epistemological and moral rules seems to turn itself into a knot of the politico-moral and the logical, the unclear and indistinguishable relationship of rule-generation and rule-obedience that emerges between the four epistemological and moral laws is made all the more unclear and indistinguishable because the rule for the rules already itself appears to be imitating another rule—that is, the experience, the practice of order and rule itself.

In drawing the line for his "age of method" from Descartes to Hegel, Derrida (1983) notes that, in this age, "the path [*chemin*] of thought, the path-character of thought is restrictively determined as a technological process of modernity, in the reign [*regne*] of representation, of the subject-object relation, of the mastery and of the inspection [*arraisonnement*] of

nature" (Derrida 1983, p. 44; my trans.). He finds that, because 'process' is a foreign concept for the path, "method is a reign, an adjustment [*réglage*] which disrupts [*dérègle*] and disguises the path around the distinctive feature of the path [*le chemin vers le propre du chemin*], it disappropriates [*désapproprie*] the path in its essence" (Derrida 1983, p. 45; my trans.). It is perhaps by attending to the pre- or proto-rule and to the knot made from the paths of the epistemological and moral rules which follow from this rule, the way this pre- or proto-rule shows how the epistemological is interwoven with the moral and vice-versa, that we can see how Descartes himself recognizes the perversion of the path that method engages, but this perversion is not imposed on the path from outside the path. It is itself part of the path, insofar as what would pervert the path—that is, the technological and methodical application of rules, whether epistemological or moral—is placed on the path itself, the pre- or proto-rule for rule-generating, whether epistemological or moral. The path for the method perverts itself, disrupts and disguises itself in obeying what it would generate.

None of this, however, indicates that Descartes himself is taking up a sovereign role here in the fable or *histoire* of the *Discourse*. Cavaillé (1991) and Nancy (1977) believe the fable or *histoire* is exactly how Descartes gives himself, as a self, such a role.[29] For both, the anonymity of the presentation of the fable or *histoire* of the *Discourse* means that the author, as the authorizer of this *histoire*, is everywhere and nowhere in the text—nowhere specific, especially insofar as the *histoire* is a fable written anonymously, and everywhere because of the autobiographical nature of the text. However, both also operate from the assumption that the self who authors this fable or *histoire* is a fully formed self in the writing, before the writing, that the method is generated by a self which asserts itself in the autobiography. But if the pre- or proto-rule is any guide, the self is not sovereign insofar as it is not a rule-giving entity, at least not wholly. This anonymous self would not be sovereign so much as an exemplar, an example, a paradigm of the anonymous, modern, rationally democratic experience of the self, whether we want to take this example as an example proper (i.e., historical) or as a fable. Indeed, Nancy (1977) hints at this, though he still operates on the assumption that this self is always already itself before its fabulation of itself, when he explains that the self which is given as the method of certitude and the certitude of method "will later have to be extended by analyzing the special exemplariness set in play by the *fable* in Descartes" (Nancy 1977, p. 36n. 26). Yet, because the role of

the self is assumed as sovereign, an assumption grounded in the further assumption that the faculties of the mind are formed prior to the fables at hand, and thus that the imagination can only be a passive or at most have a biplanar structure, Nancy (1977) and Cavaillé (1991) both miss the more complicated relationship to sovereignty at hand in the self which authors itself into existence through the authority of the fable, a form which itself has less authority than *histoire* and which, in its pedagogical status, authorizes others to author themselves as equally sovereign as the fabularly paradigmatic or paradigmatically fabular self.

To return to the second reason for Descartes' reticence on morals, sovereigns alone have the right to "concern themselves with regulating the morals of other people." Sovereigns, nobles, rulers are able to do this because, as he writes in another letter to Chanut, dated November 1, 1646, "persons of high birth, whether men or women, do not need to be very old in order to be able [*pouuoir*] to go far beyond other people in learning and virtue." Descartes does not consider himself beyond others in learning or virtue except in having discovered, by fortune, a method that democratizes the power, the *potentia*, the *puissance* of good sense to everyone, which is precisely why he tells *his* fable or *histoire*, even to those who may be incapable of following its intricacies.[30] This point of his fable or *histoire* is the story of the generation of the rules that he obeys, rules generated in imitation of and obedience to a proto- or pre-rule that itself imitates and obeys an interwoven combination or relationship between the logical and the political. The moral of this fable is already its telling.[31] And this telling is the telling of the generation of rules to obey from out of obedience to and imitation of rules generated in the surrounding milieux, intellectual, political, social, or otherwise (CSM-K, p. 299; AT IV, p. 536).

Notes

1. For Cicero (2006), the character of invention always revolves around a *constitutio* (an issue), which can be of a conjectural, definitional, qualitative, or translative sort. The terms of a conjectural *constitutio* laid out by *inventa* concern facts (see Cicero 2006, 1.8.10). This would mean that the conjecture of the evil genius lays out not just the facts of the case concerning the existence of the self, but also the foundational fact of facts, the fact from which all other facts, all other arguments or *inventa*, can be made.
2. See also *The Port-Royal Logic* (1861), pp. 308–316.

3. As Marion (1977b) points out, then, there are some public displays of what would be considered Descartes' analytic reductive method that should condition the Cartesian assessment of ancient secrecy, displays that Descartes himself knew (Marion 1977b, p. 152). However, for Pappus (1986) analysis was not considered a general or perhaps generalizable approach to mathematics, but was "a special resource that was prepared … for those who want to acquire a power in geometry that is capable of solving problems set to them; and it is useful for this alone" (Pappus 1986, p. 82). Moreover, this publicity of analysis would not address the boredom of reading synthesis, nor synthesis' failure to demonstrate how it arrived at its definitions. Gilson (1947) observes, however, that Pappus and Diophantus "only codified the results" of analysis in its earliest stages of development, results which were "obscured" by their commentators (Gilson 1947, p. 188; my trans.).
4. That synthesis is boring and does not show how it makes its discoveries would lend credence to what Nancy (1978b) says about Cartesian mathematics: "beginning with the *Regulae*, the truth of Cartesian science is precisely such that it *requires* a covering [*vêtement*] (that of 'common mathematics') in order to show itself [*se montrer*]" (Nancy 1978b, p. 639; 1979, p. 102). Again, showing (*docere*) is distinct from teaching, so "There is no 'hidden instruction' here …. Here authority, truth as authority, *withdraws itself*. It is thus that *fabula docet*" (Nancy 1978b, p. 643; 1979, p. 108). The covering of mathematics that allows the truth of Cartesian science to show itself is then the showing of the withdrawal of authority, of the authority in the hidden truths of the hidden methods. In addition, to give the truth of Cartesian science the covering, veil, patina, or vestment of analytic mathematics for the common because it is not boring is to show to those who would not otherwise authorize themselves that they need no authority, that authority withdraws in the face of the vestments enrobing Cartesian truth, that they are hereby authorized to authorize themselves not to be bored, thanks to analysis.
5. To be clear, Mahoney (1980) seems to be conflating theorematic and problematic analysis, which at least Pappus (1986) distinguishes, even if not very clearly. For the distinction, see Pappus (1986, pp. 82–84), and Jones (1986, pp. 66–68).
6. However, in a certain way, it does appear as though Mahoney (1980) is discounting some of Descartes' fears of boring his readers. This fear often leads Descartes to leave certain portions of his texts or proofs incomplete, which is not something Mahoney (1980) notes about the Cartesian expression of analytic method in general. Descartes' pedagogical interest extended beyond a simplistic analytic rivalry with synthesis, it seems. He was concerned that even analysis could be boring, and wanted to allow even that

method to demonstrate its rigor precisely through not explaining every step or every problem of an analysis, so that these attentive students could take up the method on their own even in the very learning of his method.

7. Garber (2001) denies that the *Principles* is a synthetic approach to the same issues brought up analytically in the *Meditations*. Indeed, he finds that "the distinction between analysis and synthesis may be entirely *irrelevant* to understanding the true relations between the metaphysical arguments of the *Meditations* and the *Principles*" (Garber 2001, p. 62). He suggests that the differences between the two books might be reconciled by thinking of the metaphysics in the *Principles* as conceived as prefatory (see Garber 2001, p. 62n. 11), or that Descartes' interest in having the *Principles* used as a textbook might have driven him to write in a more typical fashion for that approach, or even that Descartes initially thought that what we have of the *Principles* would be a portion of a larger work (see Garber 2001, p. 63). However, it seems to me that accepting Garber's position on the matter and following his suggestions for what the metaphysical arguments of the *Principles* are only lends credence to my own claims about the fable-structure or -logic to the *Principles*, once the appeal to its novelistic status has been taken seriously. Let it be any of Garber's suggestions, and the *Principles*, especially its metaphysical arguments, can still be understood as operating on the theme of setting the reader's mind into motion, of unlearning what he or she has already learned in order to teach him- or herself. Whether that unlearning and learning begins in a prefatory, text-book, or partial manner would not affect the structure at hand.
8. Such an understanding of the relationship between Cartesian analysis and synthesis could very well go a long way to answering Garber's dilemma described in the previous note while still allowing for the fable-structure or -logic to operate and initiate motions as necessary, whether in the minds of francophone craftspeople or in those of university students.
9. From this perspective, at least elements of Aristotelian rhetoric seem to be at work within Descartes. Descartes of course was educated in the *Rhetoric*, as indicated by *The Jesuit Ratio Studiorum of 1599* (1970, pp. 72–79, esp. pp. 72–73), which was the official guideline at La Flèche. Indeed, perhaps this link with rhetoric could even be seen as a missing chapter of Le Bossu (1674).
10. This may very well be an explanation to a consequence Brann (1991) lays out of the "great baring of bones of reason" (Brann 1991, p. 69). She does not make a broad claim as to the modern move from a paring down of logic and metaphysics to "metaphysical systems every bit as abstruse and as deep as were the classical philosophical developments," but if the paring down of logic by Descartes is done in the interest of maintaining readers' interests, this would indicate that there is necessarily a link or an enmeshing

between logic and rhetoric which itself betrays the appeal to simplicity as a metaphysical and logical premise to begin with (Brann 1991, p. 69).

11. Husserl (1999) appears to assume that the Cartesian analytic reduction that operates through the algebraicization of logic is in fact the simple procedure that Descartes himself assumes it is, claiming that Descartes fell into an inconsistency concerning the claims of clear and distinct ideas as being anything "more than a characteristic of consciousness within me." As a result, Descartes "missed the genuine sense of his reduction to the indubitable" (Husserl 1999, p. 83). In its place, Husserl (1999) would substitute the transcendental reduction of the epoché that would come to terms with the fact that, even if what is external to the world of sense for the transcendental subject is nonsense, "even nonsense is always a mode of sense and has its nonsensicalness within the sphere of possible insight" such that the ego can explain itself as both self-constituting and "constitutes in himself something 'other'" (Husserl 1999, pp. 84 and 85). Fink (1988) continues this critique in the *Sixth Cartesian Meditation* when he criticizes possible misunderstandings of the epoché as having "a '*simple straightforward aim*,' namely, that it is nothing but a *method of confirmation*, an 'exaggerated methodism'" such that phenomenology would presume to operate from a position without presuppositions, "a fateful prejudice to demand for the beginning of philosophy—since Descartes" (Fink 1988, pp. 45 and 46). These objections are irrelevant because the epoché "puts into question what all 'existential' philosophies of this kind presuppose: *human being itself* (the natural attitude)" (Fink 1988, p. 46). Even more, because the phenomenological reduction "*interrogates* [the antecedent consciousness as well as man in the world and makes] them the theme of a *transcendental clarification*," without turning an apodeictic inner experience into "'absolute being'" (Fink 1988, pp. 47–48).

    However, because both Husserl (1999) and Fink (1988) ignore the fable-structure or -logic that is always at hand in Cartesian analytic reduction, especially insofar as that structure or logic, qua fabular, can be aligned with syllogism and synthesis, they would thereby seem to begin their critiques from what may itself be a misunderstanding of Cartesian logic and method. If analysis and synthesis are, in Descartes, in a strophe–antistrophe relationship thanks to the fable-structure or -logic which inaugurates the movement down the path of the method, such that it is difficult if not impossible to specify at which point the analysis ends and the synthesis begins, if the common notion that would serve as a 'premise'-maxim for the analytic method is established thanks to a fable, an invented example, a whole new potential world of sense, then the Cartesian relationship between analysis and synthesis would seem much closer to the relationship between passive and active synthesis that Husserl (1999) describes, without

the presupposition that activity "necessarily" makes concerning passivity (Husserl 1999, p. 78). And perhaps the fable-structure or -logic that sets this relationship to work is more fundamental, without being transcendental because not simply a condition for the possibility of the method but interwoven within it even while it grounds the method, than Fink's understanding of science as the synthetic unity of antithetic demonstrations which is the "working *within* the phenomenological concept of truth" (Fink 1988, p. 134).

12. The deconstructive sense of supplementation emerges from the dual meaning of the word 'supplement' as that which completes something which has a lack and that which is an unnecessary addition to what is already complete (see Derrida 1997, pp. 141–164). Here, I am claiming that Rule Six may appear as if it supplements Rule Five in that the former completes what is lacking in the latter, but simultaneously, Rule Six adds more onto Rule Five than would appear necessary in terms of the wholeness of Rule Five.
13. Cavaillé (1991) points out that "Simple corporeal natures form the a priori frame for sensible perception, not as things of the world, but inasmuch as they constitute the look that we bring to [*portons sur*] the world. The great book of the world is legible only because the mind furnishes its reading principles which allow for bringing its grammar and glossary to light" (Cavaillé 1991, p. 104; my trans.). For Cavaillé (1991), though, this situation, insofar as it turns the mind toward decoding the book of the world, which is a task the arbitrariness of which could only be mediated by "leaving it to the arbitration of the Author," which would seem to undermine the primacy of the decoding, thinking subject (Cavaillé 1991, p. 104; my trans.). What he does not emphasize here is the doubly supplemental relationship between the method of decoding and the relationality of simple and complex natures at hand in Rules Five and Six. That is, these simple corporeal natures may very well form an a priori frame for perception, but such corporeal natures are simple only to the extent that they are not complex natures to be decoded, and the complexity of complex natures remains such only in relation to the simplicity of the natures which will be brought to light in the decoding. In this way, the appeal to the great author of the great book of the world as an appeal to arbitrate the decoding of the book would seem to be an appeal to the grammar and glossary of reading itself, not necessarily to its author—by which we could refer to either the author of the book or the author of the grammar and glossary. The grammar and the glossary of the book of the world are coherent insofar as they expose and explain the frame for a comprehension of the book, but the book itself requires the frame of a glossary and grammar in order to be coherent and comprehensible. We are not discussing just any book, after all. We are discussing the book of the world, the world as something that can be comprehended and/or decoded, and the grammar and glossary of such a

book can never be fully external to the content therein because they are themselves already involved in that content. However, the impossibility of externality between the grammar and glossary and the content of the book of the world does not indicate that there is a wholeness to the 'bound' book at hand. Rather, this book's 'supplementary' material becomes, by turns, more central than the content, even while its content establishes the grammar and glossary itself.

Daniel (1985) may offer a response both to this issue in Cavaillé (1991), perhaps unwittingly, and to Nancy's claim that the truth of Cartesian science requires a vestment of mathematics. In describing Descartes' response to Baconian claims that "True invention … brings into our experience new objects, meanings, or ways of viewing the world in order to attain the truth by means of expanding our comprehension of the world," Daniel (1985) explains that Cartesian invention has "need of a prior criterion for determining true inventive insights" (Daniel 1985, pp. 160 and 161). Thus, according to him, "The value of mathematics does not lie in its use of figures to provide an imaginary covering (*integumentum*) of objects or truths inaccessible to sensible description. Its value lies in its procedures which accustom ingenium to distinguish valid arguments and truths known with certainty from those which are unsound, false or only probable" (Daniel 1985, p. 161). Daniel's claim that mathematics establishes the frame for decoding the book of the world is fair enough, and it could seem that this would give credence to Cavaillé's claim that this frame is a priori. However, Daniel (1985) goes on to explain that "the activity of ingenium is simply that of attending to ideas which are already formed in order to detect the correctness of their interconnectedness," which is why, "at the very outset of the description of his physics …, Descartes acknowledges in *The World* … that he is sensitive to the imaginative or poetic character of such a description" (Daniel 1985, pp. 161 and 162). The precedent interconnectedness of ideas is the frame or glossary and grammar of the book of the world, but, as Daniel (1985) points out here, that very interconnectedness is itself the result of an imaginative and/or poetic moment, a moment not established by the great author of the great book of the world, but by the reader of that book. In this way, the glossary and grammar and the content of the book, the interconnectedness of the ideas and the methodical description of that interconnectedness, are never separate from each other. Rule Five and Rule Six involve, complicate, and supplement each other. The rules are generated by what would follow them, and rule-obedience is the generation of the rules themselves.

14. It is here that at least an aspect of Marion's understanding of a Cartesian gray ontology can perhaps become clear. As Marion (1999) explains it, "Being known always conveys a way, exactly, of Being. The way of Being

that leads beings back to their status as pure beings is put forth in what Descartes inaugurated—Being in the mode of *objectum*" (Marion 1999, p. 91). As a result, Descartes can be distinguished from Aristotle in that "physics does not reach the *ens*" since beings are not defined through their relationship to physics, "but uniquely and sufficiently according to objectivity" such that the objects of mathematics, that is, the things of the world as these objects, are beings, have their ways of being in a mathematical, objectively known being which remains at a distance from the physics of the world of these things (Marion 1999, p. 92). Objects, then, are "led back" to their being as beings known in *mathesis*, which is why "The mind is known better than and before the body, the mathematical essence of material things … before these same things" (Marion 1999, p. 92). This leading back to the being of things as being known is what Marion (1999) calls Descartes' gray ontology, and it "would remain impossible without the intervention of another authority," that authority being that of the self, which knows beings as beings which have a way of being in being known (Marion 1999, p. 92). In terms of the self, the operation of this gray ontology shows that the *cogitatio* "comes back to itself. It comes down to coming back to itself, to the point of knowing itself first (… *me cogitare*), to the point of constituting itself as a being (*ego*), because, more originally, it bends back over itself" (Marion 1999, p. 93). In this bending or leading back to itself, the *cogitatio* makes itself an object which is insofar as it is known, and this "implies a reflecting appropriation, the ultimate implication of which is named—*ego*," making the operation of the *cogitatio* which leads objects back to their gray ontological status as known beings a "curve of thought" that can be called "the 'logic' in Cartesian thought" (Marion 1999, p. 94). This curve of thought of a gray ontology might also be called the fable-logic or -structure whereby a new world is imagined or a self establishes itself in a hyperbolic logic of doubt and self-deception.

Marion (1999) anticipates two objections to this position, the first that it is in contradiction with "the Cartesian way of thinking" whereby "analysis arrives at the existence of the *ego* without passing through doubt, or … admitting that a new operation of thought … is required for this effect," and the second that it "leads one to identify the being par excellence with the *ego*, thus with a finite being and not with God" (Marion 1999, pp. 95 and 96). Marion's response to the first point is that the analysis of the piece of wax "extracts the *ego* (*cogitans*) directly from the *cogitatum*, or rather from the interpretation of the *objectum* as a *cogitatum*," meaning that the analysis of the piece of wax involves a "reduction … to the actually operative *cogitatio*" just as much as the self's proving of its own existence to itself (Marion 1999, pp. 97 and 98). To the second point, he replies that "The *cogitatio sui* offers too little to be able to designate God. A finite *res cogitans*

is enough to accomplish the gaze focused on objectness" (Marion 1999, p. 102). I would contest only this last reply, and only to the extent that the *res cogitans* is precisely finite, but this contestation emerges from the question of what allows, in Marion's language, the *cogitatio* to lead itself back to itself as a known being known to itself called the *ego*, to begin this operation at all. Fabulation accomplishes this, and accomplishes it thanks to what I will call the transfinite status of the imagination as distinct from other faculties.

15. Rickless (2005) argues against the charge that Descartes committed the fallacy of circularity by focusing on what he calls the Natural Light Strategy (NL-Strategy). This strategy claims that "Descartes considered indubitable *ab initio* all and only those principles that he perceived clearly and distinctly (and non-demonstratively) by means of the natural light" (Rickless 2005, p. 330). The natural light being equated with the understanding, it is distinct from clear and distinct perception, with the result that, "although everything that is known by the natural light is clearly and distinctly perceived, not everything that is clearly and distinctly perceived is known by the natural light" (Rickless 2005, p. 310). As a result, to appeal to the natural light avoids the reasons for the hyperbolic doubt because the reasons for doubting come from perceptions, "whether clear or obscure, distinct or confused, that derive from the senses or from the imagination," and the senses, imagination, and understanding are distinct faculties with distinct perceptions (Rickless 2005, p. 310). Thus, "all that is required to validate these doubtful perceptions is an argument for the Truth Rule [i.e., the Fourth Meditation's claim that all clear and distinct perceptions are true] the validity and premises of which are distinctly perceived *by the understanding* (i.e., known by the natural light). Descartes takes himself to have provided exactly such an argument in the Third and Fourth Meditations" (Rickless 2005, p. 318). The advantage of the NL-Strategy is that it does not suffer from two critiques: (1) It does not relativize "the epistemic status of a principle (as doubtful or certain) to the particular reasons for doubt offered in the First Meditation" because "what the natural light (i.e., the understanding) perceives clearly and distinctly does not depend on the kinds of reasons offered for doubting the perceptions of the senses and the imagination" (Rickless 2005, p. 331). (2) It can explain "why Descartes grounds the indubitability of the 3 M–Premises [i.e., the Third Meditation's argument for god's existence and truthfulness] in the fact that they are perceived by means of a special faculty (to which he gives the name 'natural light')" (Rickless 2005, p. 331). I am, to an extent, sympathetic to this interpretation, if only because the charge of circularity is worth arguing against. However, it seems both suffer from flaws which perhaps find their source in an assumption that all circles are vicious ("It is one of the most devastating of philosophical criticisms to be told

that one has argued in a circle" [Rickless 2005, p. 331]), an assumption itself made possible by looking at the *Meditations* too late, by not attending to the structure that allows the text to emerge in the way it does. First, the NL-Strategy grounds its arguments in the belief that the faculties are established prior to the engagement with method. If this is an inappropriate belief, then what it takes as fundamental may be derived from something else. Second, this something else can perhaps be seen by focusing on the other name for the supposedly pre-established faculty of understanding: the natural light. If light, whether physical or mental, is the element that generates the rules which all elements obey and emerges from out of the *potentia* set into motion, then the natural light, and the methodological rules which it obeys are also generated by it from out of the *potentia* of even the densest minds. This relationship to rules, to method and to logic, on the part of the natural light might be circular, but such a circle is only vicious to the extent that one assumes that all circles are vicious. The NL-Strategy engages the *Meditations* too late in that it does not attend to the fabular structure that sets the potential method and logic for minds into motion. If that movement appears circular, it is not a vicious circularity for the very reasons that the NL-Strategy lays out. Indeed, the better geometric metaphor for the movement of the argument that the natural light generates and obeys its own rules is the one Descartes himself uses: hyperbole, the double arc that throws the line of doubt beyond itself.

16. Thus, here I mostly agree with Marion (2007a) that "the 'I' does not become worthy of being put into question until it pretends to attain or to posit [itself as] a foundation. … Yet in coming about, by the same gesture this pretension exposes the 'I,' which henceforth is inasmuch as it thinks, to two aporias—a scission and a closure" (Marion 2007a, p. 4). I am not entirely convinced, however, that the self ever closes even in the loose sense he seems to mean here, if only because I am not convinced that the self is ever transcendental, and this would be because I am not convinced the method that would allow the self to emerge can be considered the straightforward method that the transcendental closure of the self would require. For Marion (2007a), the scission occurs because, insofar as the self is the transcendental condition for the possibility of experience, it is excluded from experience in a strict sense only by objectifying itself. Thus, the scission is between "a first transcendental (hence abstract) 'I' and an empirical (real, but second) 'me.'" (Marion 2007a, p. 4). The closure occurs because the transcendental 'I' remains transcendental and treats all other egos as objects so that "the ego is hence closed in on itself, without door or window, in the aporia of solipsism" (Marion 2007a, p. 5). As a result of this movement between scission and solipsism, Marion (2007a) claims, correctly in my opinion, that "Transcendental idealism does nothing but simplify and ask this originary dialogical intrigue" (Marion

2007a, p. 27). He then asks if there might be "a figure of subjectivity other than the transcendental one" that could render the division between the scission and solipsism 'joined' such that there could be "a primacy instituted by the event itself of experiencing itself originarily thought," suggesting that "Descartes also—and throughout—[might] have anticipated without knowing it, or at least without having signified it explicitly to us, that which comes after the [transcendental] subject and which we have not ceased to sketch and to await" (Marion 2007a, pp. 28–29).

Marion (2007a) seems correct that Descartes anticipates without necessarily realizing it, something beyond or other than what the tradition has thought him to have claimed in that the Cartesian subject is never the atomized figure of solipsism it is frequently taken to be. However, where he slips is in the source of what he calls the originary dialogical intrigue that transcendental idealism simplifies. For him, the originary dialogue occurs when the ego qua transcendental emerges through "the interlocution whereby an other than itself establishes it prior to every self-positing," which occurs through, first, an omnipotent god and, second, through the confusion and anonymity of the evil genius (Marion 2007a, p. 26). Some originary otherness does occur in the interlocution with god. However, with god I am not convinced that it occurs in the way, along the methodology Marion (2007a) claims. For him, naming god as infinite establishes "an unconditional otherness that precedes the *ego* of the *cogito* first chronologically and finally right to the point where this *ego* reveals itself first as a *cogitatum*, persuaded, deceived, brought about" (Marion 2007a, p. 26). This reading assumes the chronology of the precedent infinite god over and above the logic that allows that chronology to present itself. This logic allows the self to present itself to the self, then supplements this self with the presentation of god, a presentation which repeats the presentation of the self in its logical form. The infinity of god can only be logically prior to the self if the logic of chronology were the primary logic of the *Meditations*, which it is not. The primary logic of the *Meditations* is fabular, which allows Descartes the freedom to analytically present himself to himself before presenting god, a logic that shows the self in excess of itself via its repetition of its proof of itself in the proof of god. Marion (2007a) seems to be working on the assumption that the primary method of the *Meditations* is a straight path, but this does not take the scission of the self seriously enough. The method is schismatic, especially so in the *Meditations*, and moves in more than one direction simultaneously, through an analysis that depends on synthesis, and vice-versa, through a whole method that is never fully whole, and through a presentational logic where what would appear to be chronologically second is presented first, and vice-versa. Marion's solipsistic transcendental ego can never fully close for the very reasons he gives for its closure: the interlocution between self and god.

17. For a history of uses of *ingenium* and its relation to the *Rules*, see Sepper (1996, pp. 87–97). For a connection between *ingenium* and Descartes' intellectual development in terms of the imagination and mathematics leading up to the *Rules*, see Daniel (1985, esp. pp. 160–161).
18. For the difficulty in translating *intueri*, see Marion (1977a, pp. 295–302), especially in comparison with CSM II, p. 13n. 1 and Ariew et al. (2003), s.v. "intuition."
19. It is in this faith that Cavaillé (1991) finds Descartes' argument against skepticism. However, Descartes also argues against Scholasticism because "he turns away from the problem of being in the service of the establishment of a truth which is no longer *adequatio rei et intellectus*" (Cavaillé 1991, p. 44; my trans.). Such turning away from truth as *adequatio* places "the problem of truth above that of being" and is thereby nihilistic for Cavaillé (1991), a nihilism confirmed by the bias or angle of Descartes' fable insofar as it "lays claim to the truth" (Cavaillé 1991, p. 44; my trans.). It is unclear to me exactly why Cavaillé (1991) would consider this turning from *adequatio* on Descartes' part to be nihilistic. Descartes' arguments against such understandings of truth are grounded in the idea that the methods of inquiry have skipped over the sciences themselves in favor of inquiry into being, to which things and the study of them must adequate themselves. It would certainly seem, from a Cartesian perspective, that *adequatio* is more nihilistic than he is because *adequatio* encourages a disregard for the world as such, the things of the world insofar as they are things. It does so because the methodology of its approach to the world sees the sciences not as interrelated, which in turn encourages moving 'past' the sciences to what unites or rules over them. The fable, in its bias or angle, would not be nihilistic from a Cartesian perspective, but would be restoring a respect for things that was lost in both Scholasticism and skepticism.
20. As Foucault (1994) lays it out, this is the fifth consequence of Descartes' shift of the fundamental categories of knowledge away from resemblance to measure and order, and follows from the fourth consequence, that the activity of the mind is no longer in synthesis, but "in *discriminating*, that is, in establishing their identities, then the inevitability of the connections with all the successive degrees of a series" (Foucault 1994, p. 55). History becomes an erudite awareness of authors' opinions that can "possess an indicative value, not so much because of the agreement it produces as because of the disagreement" because only a few will have grasped the truth in such cases (Foucault 1994 p. 56). However, "intuition and their serial connection [*enchaînement*]" can give us truth (Foucault 1994, p. 55; 1966, p. 70). The final result of all of this is, then, for Foucault, that "the written word ceases to be included among the signs and forms of truth"

(Foucault 1994, p. 56). At best, the written word translates the truth. Foucault does not mention here, however, the written words that allow for the shift from resemblance to measure and order in the first place.

21. This would seem to be at least implied in Ricoeur's point about Descartes, where he writes that there is a methodical forgetting through the doubt that rejects the pedagogy of memorization, or the *ars memoriae*. What follows from this strategic forgetting is "a methodical use of memory, but of a natural memory freed from mnemotechnics" (Ricoeur 2004, p. 68). If this forgetting and remembering is put into the language of method (and Ricoeur (2004) understands the age of method inaugurated by Bacon and Descartes to be that which closes the age of memory (see Ricoeur 2004, p. 65)), it would perhaps be as follows: Doubt allows for the analytic reduction to simples, to what cannot be denied, against what we have been told by and remember from our masters. Using memory from out of the analytic reduction thanks to doubt, using what cannot be denied, we can synthetically deduce other truths.
22. It is probably important to bear in mind that "from 1640 on there was a gradual substitution of the Cartesian and atomistic philosophies of nature for the traditional natural philosophy taught in the school" (Reif 1969, p. 18). However, "the textbook as we know it" started to become an important pedagogical tool in the sixteenth century (Reif 1969, p. 18). To whatever extent that the *Principles*, published in 1644, would have been considered a textbook in Descartes' time, the form it does take and its approach to history gives it the appearance of the textbook tradition that follows it. Following Kuhn (1996), modern (and contemporary) textbooks "begin by truncating the scientist's sense of his discipline's history and then proceed to supply a substitute for what they have eliminated" (Kuhn 1996, p. 137). That these textbooks "have to be rewritten after each scientific revolution" places them in a similar position as the *Principles*, though not precisely (Kuhn 1996, p. 138). The difference emerges in the gap between normal science and the scientific and conceptual revolution begun by Descartes in his text. That is, because Part One, article 1, begins with an appeal to doubting "*semel in vita*," the *histoire* of that life is incorporated into the structure of the text (AT VIII-A, p. 5). Even more, the experience of that life is understood as ruptured and rupturable because of the deceptions that lead to doubt. Such a pedagogical approach could not be much more different than the one that, following each rupture, seeks to make "science once again seem largely cumulative" (Kuhn 1996, p. 138). In other words, even while Descartes may have a disregard for history, he is attuned to its breakages, at least on the personal level, in a way that the more contemporary textbook tradition Kuhn (1996) describes is interested in covering over. The strangeness of reading an old textbook of the

contemporary sort is one of wondering how one's predecessors could have made so many of what are now considered errors, a strangeness that normalizes the contemporary engagement with the world. The strangeness of reading Descartes is the unsettling, possibly even *unheimlich* position of being criticized by an author for taking his text seriously simultaneous to recognizing that disruptions of the normal engagement with the world is the serious task which this same author wants to instill in the reader.

23. For Prendergast (1975), this makes modes different from Scholastic real qualities or accidents because, for Descartes, real qualities or accidents are contradictions since accidents and qualities have no reality or "cannot exist separately from substance even by the power of God" (Prendergast 1975, p. 460). However, that the distinction between substance and attribute is a conceptual one for Descartes indicates for Prendergast (1975) a Suárezian root to Descartes' thinking here (see Prendergast 1975, p. 461). On this last question, see Suárez (2007, pp. 18–21, 30–32, 36–37, 44–46, and 60–61).
24. In recognizing only real, modal, and conceptual distinctions, Descartes is similar to Suárez (2007), though the latter considers formal distinctions to be types of mental distinctions, and mental distinctions also distinguish between a substance and the attributes we consider to be of the substances qua ideas (see Suárez 2007, pp. 32–33 and 18). For more discussion of Descartes' relationship to Suárez on the question of substance, see Marion (2007b, pp. 80–99).
25. On the relationship between *mathesis* and mathematics, in particular the reduction of the former to the latter in neo-Platonism as regrettable for Aristotle, which informs Descartes' understanding of the question and its responses, see Marion (1977a, pp. 302–309).
26. Kennington (1987) finds the tree simile to be deceptive because the more overarching simile for Cartesian political and moral thinking is architecture. He implies, but does not explicitly state, that Descartes thus lays the groundwork for the technocratic ideal of an anti-political liberalism in a Schmittian sense, whereby discoveries could reform civil society without violence, all the more so in that, "By a scientific 'fable of the world,' or by what purported to be a scientific account of the genesis of the heavens and the earth, of the visible universe and all its phenomena, he established the belief that science is master of the whole" (Kennington 1987, p. 437).
27. For Cavaillé (1987), politics for Descartes is not foreign to morality, but "resists and becomes a problem" within morality (Cavaillé 1987, p. 120). This is because science seeks to "supplant politics" to the extent that politics is necessarily "destined … to an unmitigated indetermination, both ontological and epistemological" since it is embedded in the world of the inexact science of history and depends on an assessment of contingencies (Cavaillé 1987, pp. 123 and 126). Thus, for Cavaillé (1987), Descartes

does not try to change the world, but one's own desires, leading to "a moralization of politics" (Cavaillé 1987, p. 130). What Cavaillé (1987) does not notice, in his assessment of Descartes' refusal to try to change the world, is that the very changing of one's desires depends on the individual fabulation of what and how the world is, how the world is to be interpreted and taken up. Insofar as this fabulation accomplishes its task, the world is changed, it is a new and fabular world, one where morality can find itself displacing politics. However, insofar as the changing of the self and the world begins from out of a proto- or pre-rule imitative of political rule, the changing of one's own desires is a making of oneself a political agent or subject, even if only of oneself. Such a task is, of course, not merely moral any more than it is merely political, and it is a moralization of politics to the same extent that it is a politicization of morality. Such may be the technocratic utopia of an apolitical liberalism, but it does not supplant politics and it does not "subordinate [politics] to moral ends" (ibid., p. 138). It is a politics and an imitation of the political, the ordering of oneself as a political act. Hence, perhaps, the disavowal at work in Cavaillé's title, though this would seem to be a disavowal on the part of Cartesians more than on that of Descartes himself.

28. Bergoffen (1976) focuses on moral rule 2's delimiting quality on the "the scope of doubt" (Bergoffen 1976, p. 187). For her, reading Descartes as he would appear to prefer to be read, this moral rule indicates the difference between thought and action, the difference between metaphysical and moral certainty. In turn, the extravagance or madness of hyperbolic doubt places a limit on the philosophical freedom of the imagination, and further marks the difference between reflective and non-reflective imagination. However, she never again returns to the *Discourse* and, like Descartes, never seems to acknowledge the pre- or proto-rule of having few rules, least of all the moral certainty and politico-experiential source for this rule. This elision implies that Bergoffen (1976) believes Descartes fails in the pursuit of a philosophy that has not been founded on experience. But if the pre-or proto-rule that demands few rules is in fact a rule for lists of both metaphysical and moral rules, then there would seem to be an experiential background to these lists, especially insofar as the paucity of the number of rules within them coincides with the metaphysical background that would inform analytic reduction to simples. Here is a small number of simple rules by which to live in both epistemologically and morally, their simplicity and smallness being in agreement with the three of the epistemological rules themselves and also being grounded in a moral and/or political conclusion drawn from practical experience. The range of the reflective imagination's freedom in developing this pre- or proto-rule thus seems, at the least, more open to discussion than the question of its range in the operation of what follows from the epistemological rules.

29. For Cavaillé (1991), in the conclusion, subtitled "Le Je Souverain,"

> The autobiographical feint, like the feint of science, the fable of the *Discourse* like that of *The World* are hatched by an *I* which exceeds or rather precedes the diverse statuses—narrative, rhetorical, psychological, epistemological—successively assumed within the text as so many avatars: subject of the *récit* (fabulist of 'a new world,' portraitist of his 'life' and of his 'thoughts'); subject of the passions which, according to the author or despite him, appear within the text; subject finally of the science which comprehends all the others; audacious and chimerical hero of imaginary spaces, geometer and poet of the new world. (Cavaillé 1991, p. 304; my trans.)

For Nancy (1977), it is precisely the unusual anonymity of the *Discourse* that speaks to the sovereignty being exerted by Descartes. Whereas a normal anonymity hides or disguises its author, this anonymity

> proclaims that the dissimulated name is the *most proper* of proper names: the name of the one who alone gave himself the method of certitude, and hence of the one who gives *himself* out as the method of certitude and the certitude of method. But the identity of this subject is valid only on the condition that it be identity *itself*, stripped entirely of the accidental, the empirical (the name René Descartes, for example), and presented in its substance as subject. (Nancy 1977, p. 28)

30. It is in the democratization of the power of good sense that perhaps Schmitt (1996) is somewhat off when he claims that "The *protego ergo obligo* is the *cogito ergo sum* of the state" (Schmitt 1996, p. 52). He claims this because all order depends on protection and obedience. He may very well be correct that the *protego* and the *cogito* run parallel to each other, but this is as much to say that the moral-political runs parallel to the epistemologico-metaphysical. Such a parallel would certainly explain Descartes' specific political positions and consistent appeals to the authority of sovereigns to shape a moral and political order, as well as his praise for *De Cive* even while lambasting Hobbes' metaphysics (see CSM-K, pp. 230–231; AT IV, p. 67). Yet these parallels for Descartes operate on the order of the pre- or proto-rule of few rules, which is an ordering principle that does not precisely follow the logic of protection and obedience insofar as it is the order from out of which that logic would emerge on both the epistemologico-metaphysical and on the moral-political planes. Such a relationship between the pre- or proto-rule and the epistemological and moral rules does not, however, make the pre- or proto-rule sovereign over the ordering principles of those

eight simple rules for at least two reasons. One, the pre- or proto-rule is not separated from the eight simple rules but is formed by them in the difficult and knotty logic of comparative ordering at hand between the epistemological and the moral insofar as that comparison would operate through utility, which is also the justification of the pre- or proto-rule. Two, it is not sovereign even in the sense of a Hobbesian Leviathan born from the individuals formed qua individuals in the formulation of the Leviathan because there is no obligation on the part of the reader to become Descartes, let alone Cartesian. Descartes, because he does not teach, allows his readers to tell their own stories, without any forced obligation to repeat his own. The epistemological and moral rules, and even the pre- or proto-rule that opens up the possibility of formulating those rules, are part of Descartes' own, individual, even if anonymous, *histoire*. It is his experience which had contributed to the formulation of the pre- or proto-rule, and his experience alone. In the telling of his exemplary and paradigmatic story, he is showing what came from that *histoire*, but readers must tell their own stories to themselves, even if this book of the past itself becomes part of the story of the reader. It may be a persuasive story, but it is neither a sovereign demand nor a command, even if all the more persuasive for it.

31. Thus, again, this moral is unlike other morals for other fables. It is not separate from its story. When La Fontaine's fable is introduced by the nonliterary moral that proposes what the fable will show, it in fact demonstrates ahead of the demonstration (see La Fontaine 1997, p. 10). This is the logic of sovereignty, to attempt to show before the showing what will be shown, to speak in the future anterior such that what is is what will have been, and so on. None of that relationship between moral and fable is at hand in Descartes' fables and *histoires*. The fable follows the logic of light, the method of being the rule that obeys and generates itself, and therefore does not show ahead of the showing because it is the showing. Such a logic may be political, but it does not appear to be sovereign.

References

Apostle, Hippocrates G. 1981. Commentaries. In Aristotle, *Posterior Analytics*, translated by Hippocrates G. Apostle, 74–299. Grinnell, IA: The Peripatetic Press.

Ariew, Roger. 2005. "Descartes's Fable and Scientific Methodology." *Annales Internationales d'Histoire des Sciences* 55: 127–138. https://doi.org/10.1484/J.ARIHS.5.101701.

Ariew, Roger, et al. 2003. *Historical Dictionary of Descartes and Cartesian Philosophy*. Lanham, MD: The Scarecrow Press.

Aristotle. 1981. *Posterior Analytics*. Translated by Hippocrates G. Apostle. Grinnell, IA: The Peripatetic Press.

———. 1984. Rhetoric. Translated by W. Rhys Roberts. In Aristotle, *The Rhetoric and the Poetics of Aristotle*, translated by W. Rhys Roberts and Ingram Bywater, 3–218. New York: Random House, Inc.

Bergoffen, Debra B. 1976. "Cartesian Doubt as Methodology: Reflective Imagination and Philosophical Freedom." *Proceedings of the American Catholic Philosophical Association* 50: 186–195. https://doi.org/10.5840/acpaproc1976501.

Blizman, James. 1973. "Models, Analogies, and Degrees of Certainty in Descartes." *The Modern Schoolman* 50 (1): 183–208. https://doi.org/10.5840/schoolman19725012.

Brann, Eva T. H. 1991. *The World of the Imagination: Sum and Substance*. Lanham, MD: Rowman & Littlefield Publishers, Inc.

Cavaillé, Jean-Pierre. 1987. "Politics Disavowed: Remarks on the Status of Politics in the Philosophy of Descartes." Translated by R. Scott Walker. *Diogenes* 35 (138): 118–138. https://doi.org/10.1177/039219218703513807.

———. 1991. *Descartes: La Fable du Monde*. Paris: Librairie Philosophique J. Vrin.

Cicero. 2006. *De Inventione*. In *De Inventione, De Optimum Genere Oratorum, and Topica*, translated by H. M. Hubbell, 1–346. Cambridge, MA: Harvard University Press.

Daniel, Stephen H. 1985. "Descartes on Myth and Ingenuity/Ingenium." *The Southern Journal of Philosophy* 23 (2): 157–170. https://doi.org/10.1111/j.2041-6962.1985.tb00386.x.

Derrida, Jacques. 1983. "La langue et le discours de la method." In *Recherches sur la philosophie et le langage III, Cahiers du Groupe de recherches sur la philosophie et le langage*, 35–51. Grenoble and Paris: Groupe de recherches sur la philosophie et le langage and Librairie Philosophique J. Vrin.

———. 1997. *Of Grammatology*. Translated by Gayatri Chakravorty Spivak. Baltimore: The Johns Hopkins University Press.

Fink, Eugen. 1988. *Sixth Cartesian Meditation: The Idea of a Transcendental Theory of Method*. Translated by Ronald Bruzina. Bloomington: Indiana University Press.

Foucault, Michel. 1966. *Les mots et les choses: Une archéologie des sciences humaines*. Paris: Éditions Gallimard.

———. 1994. *The Order of Things: An Archeology of the Human Sciences*. New York: Vintage Books.

Garber, Daniel. 2001. "A Point of Order: Analysis, Synthesis, and Descartes' *Principles*." In *Descartes Embodied: Reading Cartesian Philosophy Through Cartesian Science*, 52–63. Cambridge: Cambridge University Press.

Gaukroger, Stephen. 1995. *Descartes: An Intellectual Biography*. Oxford: Clarendon Press.

Gilson, Étienne. 1947. Commentaire Historique. In René Descartes, *Discours de la Méthode: Texte et Commentaire par Étienne Gilson*, pp. 79–477. Paris: Librairie Philosophique J. Vrin.

Heidegger, Martin. 1992. *Parmenides.* Translated by André Schuwer and Richard Rojcewicz. Bloomington: Indiana University Press.

Husserl, Edmund. 1999. *Cartesian Meditations: An Introduction to Phenomenology.* Translated by Dorion Cairns. Boston: Kluwer Academic Publishers.

Jones, Alexander. 1986. Introduction. In Pappus of Alexandria, *Book 7 of the Collection, part 1*, edited and translated by Alexander Jones, 66–74. New York: Springer.

Kennington, Richard. 1987. "René Descartes." In *History of Political Philosophy*, edited by Leo Strauss and Joseph Cropsey, 3rd edn., 421–439. Chicago: The University of Chicago Press.

Kuhn, Thomas S. 1996. *The Structure of Scientific Revolutions.* 3rd edn. Chicago: The University of Chicago Press.

La Fontaine, Jean de. 1997. *Selected Fables/Fables Choisies: A Dual-Language Book.* Edited and translated by Stanley Applebaum. Mineola, NY: Dover Publications, Inc.

Le Bossu, René. 1674. *Parallele des Principes de la Physique d'Aristote et de celle de René Des Cartes.* Paris: Michel le Petit.

Mahoney, Michael S. 1980. "The Beginnings of Algebraic Thought in the Seventeenth Century." In *Descartes: Philosophy, Mathematics, and Physics*, edited by Stephen Gaukroger, 141–155. Totowa, NJ: Barnes & Noble Books.

Marion, Jean-Luc. 1977a. Annexe. In René Descartes, *Règles Utiles et Claires pour la Direction de l'Esprit en la Recherche de la Vérité*, translated by Jean-Luc Marion, conceptual notes by Jean-Luc Marion, and mathematical Notes by Pierre Costabel, 295–321. The Hague: Martinus Nijhoff.

———. 1977b. Annotations. In René Descartes, *Règles Utiles et Claires pour la Direction de l'Esprit en la Recherche de la Vérité*, translated by Jean-Luc Marion, conceptual notes by Jean-Luc Marion, and mathematical Notes by Pierre Costabel, 83–294. The Hague: Martinus Nijhoff.

———. 1999. *On Descartes' Metaphysical Prism: The Constitution and the Limits of Onto-theo-logy in Cartesian Thought.* Translated by Jeffrey L. Kosky. Chicago: The University of Chicago Press.

———. 2007a. "The Originary Otherness of the Ego: A Rereading of Descartes' Second Meditation." In *On the Ego and on God: Further Cartesian Questions*, translated by Christina M. Gschwandtner, 3–29. New York: Fordham University Press.

———. 2007b. "Substance and Subsistence: Suárez and the Treatise on *Substantia* in the *Principles of Philosophy* 1, §51–§54." In *On the Ego and on God: Further Cartesian Questions*, translated by Christina M. Gschwandtner, 80–99. New York: Fordham University Press.

Nancy, Jean-Luc. 1977. "Larvatus Pro Deo." Translated by Daniel A. Brewer. In *Glyph II: Johns Hopkins Textual Studies*, edited by Samuel Weber, 14–36. Baltimore: The Johns Hopkins University Press.

———. 1978a. "Dum Scribo." Translated by Ian McLeod. *Oxford Literary Review* 3 (2): 6–21. https://doi.org/10.3366/olr.1978.002.

———. 1978b. "Mundus Est Fabula." Translated by Daniel Brewer. *MLN* 93 (4): 635–653. https://doi.org/10.2307/2906598.

———. 1979. *Ego Sum*. Paris: Flammarion.

Page, Carl. 1996. "Symbolic Mathematics and the Intellect Militant." *Journal of the History of Ideas* 57 (2): 233–253. https://doi.org/10.1353/jhi.1996.0019.

Pappus of Alexandria. 1986. *Book 7 of the Collection, part 1*. Edited and translated by Alexander Jones. New York: Springer.

Prendergast, Thomas L. 1975. "Motion, Action, and Tendency in Descartes' Physics." *Journal of the History of Philosophy* 13 (4): 453–462. https://doi.org/10.1353/hph.2008.0516.

Reif, Sister Patricia. 1969. "The Textbook Tradition in Natural Philosophy, 1600–1650." *Journal of the History of Ideas* 30 (1): 17–32. https://doi.org/10.2307/2708242.

Rickless, Samuel C. 2005. "The Cartesian Fallacy Fallacy." *Noûs* 39 (2): 308–336. https://doi.org/10.1111/j.0029-4624.2005.00503.x.

Ricoeur, Paul. 2004. *Memory, History, Forgetting*. Translated by Kathleen Blamely and David Pellauer. Chicago: University of Chicago Press.

Schmitt, Carl. 1996. *The Concept of the Political*. Translated by George Schwab. Chicago: The University of Chicago Press.

Sepper, Dennis L. 1996. *Descartes's Imagination: Proportion, Images, and the Activity of Thinking*. Berkeley: University of California Press.

Suárez, Francisco. 2007. *On the Various Kinds of Distinction*. Translated by Cyril Vollert, S. J. Milwaukee: Marquette University Press.

The Jesuit Ratio Studiorum of 1599. 1970. Translated by Allan P. Farrell, S. J. Washington, DC: Conference of Major Superiors of Jesuits.

The Port-Royal Logic. 1861. Translated by Thomas Spencer Baynes. Edinburgh: James Gordon.

CHAPTER 5

Imagination

Following from the complication of the method that attending to the fable makes seen, the next concern is the faculty psychology of that self that generates and obeys the rules of the method. Attending to the fable also has an effect on this concept, not only on the concept of the faculty psychology of the self, but on the concept of a faculty psychology as it pertains to Descartes at all. Even though the self, as that which is constituted by a psychology, is the thing which applies a method, the effect of the fable on the method exposes something about this self and its psychology which attending to the fable's effects without having attended to its effects on the method would be unable to expose. In particular, because the fable affects the concept of the method such that it becomes self-supplemental, knotted, and interwoven with what it would exclude, the self that both applies and is discovered by the method now comes into question as to its psychological constitution.

The usual, most straightforward understanding of the Cartesian faculty psychology is that the mind is divided into the faculties of intellect, will, passions, sensation, memory, and imagination. The intellect perceives ideas and, combined with the will, determines whether said ideas are clearly and distinctly perceived. The will is an infinitely free faculty, the volitions of which are limited by intellectual perception and the body. The passions are reactions to experiences in the world. Sensation is the faculty to experience the world. Finally, memory and the imagination are the faculties that store and recombine ideas, volitions, passions, and sensations. Yet, if we

© The Author(s) 2018

J. Griffith, *Fable, Method, and Imagination in Descartes*,
https://doi.org/10.1007/978-3-319-70238-4_5

attend to the foundational quality of the fable in Descartes' work, this structure, especially the presumption that it is pre-formed, must be called into question. By the end of this chapter, I hope to have shown that there is no faculty psychology which is formed prior to the fabulation of the world for Descartes; that the imagination does not exist even in a biplanar, parallel fashion between mind and world, not even in the sense of imaginary space; and that the imagination's relationship to the infinite will and to the finite passion of wonder show that the imagination in fact exists as a transfinite faculty, moving across the border between the infinite and the finite, thereby showing how even its dependence on the intellect depends on this transfinitude.

Pedagogy and Imagination

There are different ways of understanding the concept of a faculty psychology. It can be understood as descriptive of a hard and fixed delineation of physical loci in the brain where specific mental activities occur, à la phrenology or, in a different fashion, cognitive science. It can also be understood as descriptive of different regions of the immaterial substance of mind where distinct mental activities do their respective jobs. It is difficult to consider Descartes in the former camp, even if he does consider the pineal gland to be the seat of the imagination. However, it is commonly understood that Descartes, like many of his contemporaries, "believed that the human mind has a fixed cognitive structure" (Hatfield 1997, p. 34). Hence, this common understanding goes, as Descartes develops his considerations of the intellect, the imagination, the will, and the passions, these regions of the immaterial substance of mind are to be understood as fixed in their roles and relationships to each other. As Sepper (1996) puts it, "As soon as one allows even a small degree of independence to a function, one has in fact taken the first step into a psychology of the faculties" (Sepper 1996, p. 13n. 1). Sepper (1996) perhaps takes this first step too far, leading him into an assumption of hard and fast delineations of the faculties which Descartes himself might not endorse, but he is hardly alone in his thinking that the Cartesian faculties have distinctions from each other which cannot be crossed by the others. That Sepper's is, to my knowledge, the only sustained investigation of the Cartesian imagination in English for about one hundred years, it frames much of my reference to a Cartesian faculty psychology, even if as one against which I will argue.

These claims begin from the observation that fables, novels, dialogs, and so on are imaginative works. Insofar as this is the case, attention to the faculty of the imagination will be the focus here, beginning from a work that may be early or late (*The Search*; see CSM II, p. 399), then turning to an early piece (the 1619–1621 notebook) before a later one (*Meditations*).

The Form of the Imagination

As he does so many times, Descartes begins *The Search* with what a "good man [*honneste homme*]" can or should do, with what is required of him. Here, one is not required to read what the schools would have one read, because such reading could in fact be a detriment to one's education. Instead, because of the exigencies of life, a good, honest man would do better to focus on performing "good actions [*bonnes actions*]." Such actions are those that one's reason would teach (*enseigner*) oneself were reason the only teacher one had. The problem is the combination of innate ignorance, trust in the senses, and the authority granted to one's teachers (*précepteurs*). Thus, reason is a more effective *enseignant* than academic *précepteurs*, but the ignorance with which we enter the world leads us to trust both the senses and our *précepteurs* over and above reason, which must be trained, given a method for practical application. Indeed, it may even be the case that *précepteurs* are neither teachers nor tutors at all, but rather something closer to the word's Latin root as one who takes or captures someone's reason before he or she has a chance to develop it in the fashion that would lead to an appropriate use (CSM II, p. 400; AT X, p. 495).

It would be for this reason that Descartes explains that these *précepteurs* are able to fill (*remplir*) the imagination "before reason could guide [*entreprendre*] his conduct." In that *remplir* means not only filling a container, but also fulfilling a capacity, academic teachers fill the empty vessel of the imagination such that the false thoughts that filled it guide one's conduct, preventing reason from doing so. To be able to do so, such academics must have had access to a pre-existing vessel that could be filled with thoughts as found in books. In addition, this pre-existing vessel must also be precisely a vessel, an empty container that takes in, enfolds within its contours and borders, whatever is poured into it. Such an imagination would, of course, benefit from books if it in fact was formed, even if empty, prior to contact with the thoughts, false or otherwise, that were poured into it. For Descartes, it is not merely the case that the thoughts that

would fill the imagination are false, but that their filling of the imagination de-forms the imagination, warps it and gives it a strange shape. The imagination is deformed in the filling, however, not because it is a pre-existing vessel that is warped, but because the imagination, the faculties themselves, the mind itself, is not a vessel at all. Like space as articulated in *The World*, the ignorant mind of a newborn is not something yet to be filled, but is closer to the pre-motive solid, where the forming of the faculties occurs in the procedures of motion (CSM II, p. 400; AT X, p. 496).

In that the experience of learning for most good and honest men is that of having their minds filled, Descartes is concerned that his readers will be intimidated by the plan he has for them in this dialog to search for truth. Such a concern is the mark of the difference between his approach to pedagogy and the Scholastic approach. He recognizes that it would take an extraordinary amount of talent or the luck to have an appropriate teacher (*sage*) to re-form or unmake (*defaire*) one's deformed imagination filled with the false thoughts of the *précepteurs*, but he will have to play this sage role, having himself an extraordinary nature. In playing this role, he will be "opening [*ouvrant*] to each of us the means whereby we can find within ourselves ... all the knowledge [*science*] we may need for the conduct of life, and the means of using it in order to acquire all the most abstruse items of knowledge [*connoissance*] that human reason is capable [*capable*] of possessing." Thus, he does not understand himself as a *pre*-ceptor, as a capturer of all knowledge ahead of the other's capturing, but as one who opens up, sets into motion the solid and ignorant mind to whatever it is that reason can capture by its own ability (CSM II, p. 400; AT X, p. 496).

But his concern about readers' intimidation is well founded in that he is concerned that the unmaking, the unlearning of what has been learned through the preceptive filling of the empty vessel of the imagination could overwhelm the reader. It could, as he puts it, "fill [*remplisse*] your minds with so much wonder [*estonnement*] as to leave no room [*place*] for belief" (CSM II, p. 400; AT X, p. 496). He is concerned that his readers will not believe they can learn after learning to unlearn, that their minds are so used to passively taking in thoughts that the thought of thinking, of learning on their own, overwhelms and intimidates them with the wonder of it all. In one way, this means that the mind has become synonymous with a passive imagination, while in another it means that wonder itself has been eradicated from the form of learning insofar as wonder, or at least astonishment, generates an incapacity for belief. Descartes' position on the

eradication of wonder can be seen in two moments that critique the syntheses of syllogistic formulae as well as the disputations and *quaestiones* of academic philosophy. First, in Rule Ten of the *Rules*,

> dialecticians are unable to formulate a syllogism with a true conclusion unless they are already in possession of the substance of the conclusion, i.e. unless they have previous knowledge of the very truth deduced in the syllogism. It is obvious therefore that they themselves can learn nothing new from such forms of reasoning .... It should therefore be transferred from philosophy to rhetoric. (CSM I, pp. 36–37; AT X, p. 406)

Second, in the Second Set of Replies, "I wrote 'Meditations' rather than 'Disputations'. ... In doing so I wanted to make it clear that I would have nothing to do with anyone who was not willing to join me in meditating and in giving the subject attentive consideration" (CSM II, p. 112; AT VII, p. 158). In these two places, the very form of argumentation as practiced in the academy precludes learning as such, learning in the sense of discovering new truths based not on preconceived or pre-existing formulae of truth but on reason's teaching. Reason's teaching is grounded in wonder, but if wonder has been eradicated because of preconceived or pre-existing formulae, the wonder to which one is exposed in unlearning or unmaking the imagination could be overwhelming for the mind as formed by a pedagogy that thinks it fills an empty vessel. The wonder from reforming, unmaking, or unlearning in order to learn how to teach oneself could fill an imagination already deformed by academic education with an incapacity for belief in the capabilities of the mind. However, to return to *The Search for Truth*, "what I am undertaking is not so difficult as one might imagine [*pourroit imaginer*]" (CSM II, p. 496; AT X, p. 496). The possibility, the *pouvoir* for the imagination has been, thanks to the filling of the mind by books, disputations, and syllogistic formulae, severely limited such that it is unaware of its potential, its *puissance*. The faculty of the imagination remains potential here not only because *facultas* is always associated in Descartes with *potentia*, but also because it was not merely deformed but malformed by the pedagogy which considers the imagination an empty vessel. This malformation of the imagination leaves it incapable of imagining and believing its own power, its possibility, which is why it must be reformed by unmaking, unlearning the forms of learning that malformed the faculties such that it can imagine this possibility, can become a faculty proper as opposed to the empty vessel filled and being filled with false thoughts.

To begin this search for truth, then, Descartes must begin with the reformation of the imagination as a faculty that can reform itself in reforming its possibilities, and not an imagination understood as an empty vessel, which is why he asks his readers to, along with him, "imagine [*suppose*] that Eudoxus, a man of moderate intellect [*esprit*] but possessing a judgement which is not corrupted [*perverti*] by false beliefs [*creance*] and a reason which retains all the purity of its nature, is visited in his country home by two friends." What is more, he will leave "to your imagination [*imaginer*] their other conversations as well as their surroundings (from which, however, I shall frequently have them take examples in order to make their thoughts clearer)." Descartes is not satisfied with asking his readers to imagine along with him the conversation that he will show them, but also asks them to imagine 'extraneous' content that may suit them. Even in taking examples from the imagined surroundings, he is telling his readers that he will show them ways in which the imagination can put itself to work. This approach is distinct from that of academics who would fill readers' minds with the appropriate information and instead sets the mind to work on its own. In setting itself to work on its own, the mind, the imagination forms itself, and shows itself how it can work. It is, then, establishing the rules that it will obey in its search for a truth that it does not already know thanks to the formulae it has been taught. The mind is forming itself, forming its rules for its search for itself and for truth, in the process of imagining what forms the surroundings of the conversation that it will witness. In doing so, in imagining in this way, the minds of the readers will reform their relationship with wonder such that it may be the passion that prompts learning while still leaving place for belief in the mind that wonders and imagines because, in the very wondering and imagining, that place is being formed (CSM II, p. 401; AT X, pp. 498 and 499).

The Force of the Imagination

Insofar as there is debate over the period when Descartes wrote *The Search*, it seems appropriate to turn to an early discussion of imagination, to see whether the conception of it in each piece fits with the other. What will be shown in doing so is not only that there is a consistency between the earlier and the possibly later works, but also that the content of these works relates to each other in such a way that the form of the imagination in *The Search* has a similar form as the force of the imagination in the early work.

This early discussion is found in what Cottingham calls the *Early Writings* and what Adams and Tannery call *Cogitationes privatae*, a notebook Descartes kept between 1619 and 1621. The specific note to which I want to draw attention is, to my knowledge, the earliest consideration by Descartes as to the function and status of the imagination.[1]

This note, which Cottingham places under the heading "Olympian matters," following a suggestion by Baillet, begins by making a claim as to the function of the imagination: It "employs figures in order to conceive of bodies [*vtitur figuris ad corpora concipienda*]." Here, then, the imagination is at work, utilizing figures, such that conception of bodies is possible. This conceiving of bodies also appears to be the work of the imagination, so it would seem that the imagination both utilizes and conceives. That figures are utilized in order that bodies be conceived indicates that figures precede bodies for the imagination, which is consistent with much of what Descartes will claim throughout his career, but what is most important here is that the imagination is at work in utilization and in conception. This imaginative work is favorably compared with the work of the intellect, which, "in order to frame ideas of spiritual things, makes use of certain bodies which are perceived through the senses, such as wind and light [*vtitur quibusdam corporibus sensibilibus ad spiritualia figuranda, vt vento, lumine*]." The intellect also performs two kinds of work, utilization and framing or figuring, in such a way that certain sensible bodies are utilized in order to figure spiritual things. That is, the intellect employs sensible bodies to give shape to what is otherwise without figure. The imagination thus has a function that involves utilizing figures and conceiving bodies, while the intellect's function involves utilizing bodies and figuring spiritual things. Through the utilizing and conceiving imagination and the utilizing and figuring intellect, Descartes believes we are able (*possumus*) to philosophize in a more sublime fashion (CSM I, p. 4; AT X, p. 217).

Presumably, the lack of a more sublime fashion of philosophizing leads to poets having serious judgments, over and above those of philosophers. The specific reason Descartes gives for this circumstance is that "the poets were driven to write by enthusiasm and the force of imagination [*poetae per enthusiasmum & vim imaginationis scripsere*]." That is, there is a strength or force in the imagination that forces poets to write at all. This force in the imagination would seem to be in its utilization of figures, its conceiving of bodies, or both. At any rate, there is a force at hand in the imagination that drives its function, a force with which poets appear to be more in touch than philosophers (CSM I, p. 4; AT X, p. 217).

There remain, however, the seeds (*semina*) of knowledge within everyone, poets as well as philosophers, and knowledge is as potential within the mind as sparks are within flint. The difference is found in the methods by which philosophers and poets come to know. Philosophers, according to Descartes, "extract them [i.e., the seeds of knowledge] through reason [*per rationem a philosophis educuntur*]." That is, the philosopher leads knowledge out thanks to reason. The philosophical education involved in developing reason draws or leads knowledge, or the seeds of it, out of its hidden place. Poets, however, "force them out through the sharp blows of the imagination [*per imaginationem a poetis excutiuntur magisque elucent*]." That is, the seeds or sparks of knowledge shine forth thanks to the force that the imagination sends forth, rather than the rational drawing out of those seeds or sparks by the philosophically educated and educating (CSM I, p. 4; AT X, p. 217).[2]

Perhaps there are two imaginations at work, one which operates through bodies and is of a lower order than the intellect, and a second which operates through the intellect such that spiritual things can be figured, in some imitation of the utilization of figures through which the first kind of imagination operates. This second imagination would then be figuring, giving shape to spiritual things, which would not seem to have matter of any sort. This imagination would thus be imagining that which has no image, would in fact be imagining what cannot be imagined, or figured. It makes what has no figure into *figura*.

This note is the basis for Sepper's understanding of the imagination as biplanar. He calls it "'the two imaginations note'" and sees in it a distinction between the intellectual and poetic imaginations (Sepper 1996, p. 47). By the time Descartes writes the *Rules*, "The philosopher or savant … learns to discipline the imaginative leaps that the poet makes; guided by the spark of truth poetic imagination reveals, the philosopher fills in, item by item, through step-by-step imaginative discursion, the logical space that the poet typically overleaps" (Sepper 1996, p. 118). Even the *Principles*, insofar as there a substance is only known through attributes, "retains the biplanarity characteristic of the early period" (Sepper 1996, p. 185n. 22). While I agree with Sepper (1996) that frequently "our impressions of the later Descartes mislead us," especially so when it comes to the function and status of the imagination throughout his work and am willing to extend this misleading beyond Descartes himself and claim that we sometimes confuse Descartes for a Cartesian, the structure of biplanarity seems problematic insofar as it assumes a kind of separation between

intellectual and poetic imagination (Sepper 1996, p. 184n. 20). Such a separation appears to be most clear in the *Passions*, an appearance which is enhanced and endorsed by Stoothoff's schema (see CSM I, p. 338n. 1), but it is unclear to me that that separation is appropriate as a full or even Sepperian mitigated separation, especially if Foucault's distinction between *mathesis* and *taxinomia* is to be taken seriously.

For Foucault (1994), the complex natures of *taxinomia* relate to the simple natures of *mathesis* insofar as the former must be analyzable to the latter. In addition, the orderings of *mathesis* operate as "a particular case of *taxinomia*," a *taxinomia* in miniature (Foucault 1994, p. 72). Finally, *taxinomia* serves as a bridge spanning the ordering of simple natures in *mathesis* and "the analysis of the constitution of orders on the basis of empirical series" called *genesis* because *taxinomia* allows "the hidden (and as it were confused) continuity of being [to be] reconstituted by means of the temporal connection provided by discontinuous representation" (Foucault 1994, p. 73). If we take these claims seriously, it seems to me that Sepper's biplanarity attempts to reduce the imagination to a dual yet still simple nature, a mathetic symbol of a system without development. However, it may be that the mind in Descartes is not a-developmental, and the imagination may be the place to bear witness to this possibility. Thus, it seems to me important to be open to Stoothoff's schema as a *taxinomia*, as displaying a continuity among seeming differences and distinctions by means of a discontinuous representation.

To be open to the imagination as continuous can show not only that the imagination remains active, and so is not an empty vessel, but that a faculty psychology has been established that does not involve a pre-formed structure insofar as the imagination would involve multiple roles, one on the level of bodies and the other moving within the realm of the intellect and spiritual things. It is no more radical to suggest that the faculty of the imagination does not remain in its place but moves into the faculty of the intellect than it is to suggest that there are two distinct faculties of imagination at work in this note. Indeed, if the faculty of the imagination in fact does not remain in its place in this note, this note would appear to have a similar approach to the faculties as the treatise-like preface to *The Search* because the faculties would be more complicated than a pre-formed structure would presumably give them. If it is no more radical to suggest, in terms of making sense of or in terms of figuring out this note, that the imagination does not remain in its place in a given faculty psychology than it is to suggest that there are two imaginations at work within the faculty

psychology which operate in a biplanar relationship with each other, then we find ourselves at the limit or bound of faculty psychology as an applicable concept. The independence of function necessary for even a minimal faculty psychology begins to look less strictly delineated by attending to the form and the force of the imagination.

Imagination in the Meditations

Thus far, much of what has been claimed about the imagination is in contrast with what Descartes claims in the Sixth Meditation. There, he writes that the imagination "is not a necessary constituent of my own existence, that is, of the essence of my mind" because it requires an "additional effort [*nova … contentio*]" of the mind and "depends on something distinct from myself" which is the body. As a result, it would seem as though the imagination is a passive faculty, one that depends on the appearance of bodies that can be sensed by the body so that it can do its work, because sense perception itself is "a passive faculty [*passiva … facultas*]." Thus, in the faculty psychology laid out over the course of the *Meditations*, it should be clear that the understanding is the active faculty which intellectually perceives itself and other objects on its own terms, perceiving their essences, while the imagination is passive, requiring passive sensory perception to report what it receives before it can do any work, and never able to properly discern between how an object appears and what its essence is, but merely operating on the level of reportage. The understanding engages the world as though it were other than it appears, but the imagination is incapable of such active engagement and so can only imagine a world, imagine the world as though its essence is reported in its appearance (CSM II, pp. 51 and 55; AT VII, pp. 73 and 79).

As already noted, self-deception is at the heart of the *Meditations*. However, self-deception in its relationship to the imagination is especially potent when Descartes is about to posit the evil genius. In the last two paragraphs of the First Meditation, he notes that he has become tired and that his customary opinions of accepting the world as it presents itself keep recurring, but he also notes that, because these customary opinions remain probable, "it is still much more reasonable [*rationi*] to believe than to deny" them. Thus, he must "turn [his] will in completely the opposite direction and deceive [himself], by pretending for a time that these former opinions are utterly false and imaginary [*voluntate plane in contrarium versa, me ipsum fallam, illasque aliquandiu omino falsas imaginariasque*

esse fingam].” The pretending here is a figuring of the former opinions as false and imaginary. As a figuring, it is a *fictio*, it is an imagining, but what is figured and imagined is opinions now figured as imaginary. If the opinions are imaginary, it is the imagination that tells him this, so the imagination is what forms both the opinions and the opinion that these opinions are imaginary (CSM II, p. 15; AT VII, p. 22).

To prevent the problems generated from his customary opinions, now imagined and figured as imaginary, he supposes the evil genius, a supposition he cannot maintain in the face of the exhaustion of maintaining the rigor of the doubts that this supposition entails. This exhaustion leads him back to the “imaginary freedom [*imaginaria libertate*]” of accepting the world as it presents itself. So what occurs in the moment of supposing the evil genius is that, despite the rationality of passively accepting the world as it presents itself, supposition and imagination is necessary to generate and maintain the belief, the will to believe, that the world is other than how it appears.[3] But, what is more, the pressure to believe that the world is as it presents itself leads one to a freedom only found in the imagination, an imaginary freedom like that of the dreamworld. Thus, the imagination is necessary to be able to maintain the recognition of the imagination’s flaws (CSM II, p. 15; AT VII, p. 23).

This structure, in a way, repeats itself in the Second Meditation, when Descartes investigates what it means to be a thinking thing. In fact, the question is not even quite framed as an elaboration of the meaning of thinking, at least not at first. After identifying himself as a thinking thing, he asks “What else am I [*Quid praeterea*]?” It is not until the next paragraph that he identifies the other elements of the self as modes of thinking. Thus, it seems as though, initially, the faculties are potentially distinct from thinking, and thus that the self might be composed of modes other than thinking. And yet, in asking after what else the self might be other than thinking, Descartes’ movement into this investigation is to “use my imagination [*Imaginabor*]” (CSM II, p. 18; AT VII, p. 27). In the French translation, he even goes so far as to say that he will use his imagination to see if this I is “more [*plus*]” than thinking (CSM II, p. 18n. 2; AT IX-A, p. 21). What he first imagines is what he is not: a body, even in the most vaporous form. Rather, the I, the known I, is independent of what the imagination can invent “for imagining is simply contemplating the shape or image [*figuram, seu imaginem*] of a corporeal thing” (CSM II, p. 19; AT VII, p. 28). Thus, using the imagination to further determine what the

self is will necessarily fail because knowledge is not gained through the imagination. This structure is a repetition of the evil genius structure in that Descartes uses the imagination to demonstrate the imagination's passivity and irrelevance for knowledge, whether of the self as a thinking thing or of the elaboration of thinking.

However, in another way, this structure is not a repetition of the evil genius structure. For one thing, the structure of the elaboration of thinking is dependent on the evil genius since it gives rise to the self that is elaborated in thinking. In this structure, the imagination's "fictitious invention [*fingerem*]" is exposed as irrelevant for knowledge. Yet, the move to the supposition of the evil genius is precisely such an invention, a work of the imagination, and the structure of the elaboration of thinking remains dependent on the evil genius. The evil genius is the product of turning the will away from what is reasonable such that a new custom, a new habit of doubt can be cultivated. In the proof of the self even in the face of the evil genius, Descartes explains that it is irrelevant whether the evil genius exists or is invented by him to prove the self because thinking survives the evil genius as truth or fictitious invention. However, the Third Meditation proves that god both exists and is no deceiver—exists because all the divine attributes necessitate existence and cannot come from the self, is no deceiver because it is beneath the dignity of a divine being to deceive. The Third Meditation thus eliminates the possibility that the idea of the evil genius is innate because the only possible innate ideas are those of the self and of god—of the self because it proves its existence in doubting, of god because sensory perception suggests no such being as god and because "I am plainly unable either to take away anything from it or to add anything to it." The idea of the evil genius is also not an idea that is suggested by sensory perception, and thus cannot be an adventitious idea, but Descartes can add something to it, namely, the perfection of non-deception. As a result, the only option remaining for the possibility of the evil genius is that it is a fictitious idea, an idea invented ("factae") by Descartes (CSM II, pp. 19, 31, and 35; AT VII, pp. 28, 45, 52, 51, and 38).

On this reading, it would seem that the evil genius is a "study model" in Blizman's categorization, "allowing us free variations at will to gain conceptual control by deliberately imagining not only limit situations but even unreal situations" (Blizman 1973, p. 201). However, in that the evil genius remains a model, it is not an analogy, and so is not at "the vanishing point of the image" (Blizman 1973, p. 183). Yet the evil genius, like god, would not be imaginable in this strict sense because it would be omniscient,

omnipotent, and so on. So what is imagined in this turning of the will toward the imagination? What is the image of the study model for god? Thus, what would be the image of god? Descartes of course claims that the will is that whereby "I understand myself to bear in some way the image and likeness of God [*imaginem quondam & similitudinem Dei*; *l'image & la ressemblance de Dieu*]" (CSM II, p. 40; AT VII, p. 57; AT IX-A, p. 45). But this will is turned toward imagining the unimaginable as a study model for conceptual control over the most unimaginable figure of god. Thus, that which bears the most resemblance to that which is most unimaginable is what brings forth the imagining of the unimaginable study model for the conception of what is most unimaginable. As Marion (1999) puts it, "the idea of God, to which the *imago Dei* amounts, is far from constituting the *ego* as its prior, immeasurable, and unrepresentable horizon; rather, the *imago Dei* is itself also constituted by the *cogitatio*, which, in 'cogito, sum,' reflexively secures its autarkic existence for itself. By a prodigious reversal, the *imago Dei* follows from the *ego*, far from transporting it outside itself into God" (Marion 1999, p. 137). And yet, in the reflexive securitization of the autarkic existence of the *cogitatio*, the self also exceeds itself, takes itself outside of itself insofar as it makes of itself an object for itself. Even if this does not transport the *ego* into god, it does transport it outside itself.

Thus, through the hyperbolic moment of imaginary, fictitious invention that is the evil genius, Descartes not only doubts the existence of the self, but also comes to prove that self as a self with a passive imagination, an imagination dependent on sense perceptions which themselves are passive receptors of the world. An imagination activated in order to demonstrate its passivity is an indication not only that the imagination cannot be considered purely passive, not only that it does not necessarily depend on sense perception and corporeal bodies to do its work (the evil genius is just like god, and thus needs no corporeality or figurality even while it can be imagined, at the same time that a chiliagon is decidedly figural but cannot be imagined), but also that a pre-formed structure of a faculty psychology, where the self's faculties are delineated ahead of their use, cannot be the case. The active imagination sets to work the movements that will establish the structure of the mind. The imagination sets thinking into motion, forms the self and its faculties.

This quality to the faculty of the imagination, where it generates the mental movements that will structure the rules of passivity that it must obey, is seen once again in the movement into the wax example. This example begins because Descartes continues to doubt his doubt, his customary

opinions return, and he begins to think once again that he knows corporeal things qua corporeal. This doubt of doubt occurs because "my mind enjoys wandering off [*aberrare*]," enjoys drifting into the realm of unrestrained belief, reasonable though it may be. Thus, Descartes decides "just this once [*semel*]" to relax the rigors of knowledge and take up the question of corporeal knowledge through the image of the wax. There, the unimaginably varied changeability of the wax shows him that it is not the image of the wax that gives him knowledge of its essence, but the judgment of it. Here, once again, the imagination is unleashed to show that the imagination does not do the work that it appears to do.[4] This is neither the first nor the second time he has unleashed the imagination to perform this action. The evil genius and elaboration of thinking also relied on an unleashing of the imagination. Indeed, the very conjecture of the evil genius forced the will to imagine what would otherwise be unimaginable. Even the will is subsumed under the imagination in the evil genius, and both the elaboration of thinking and the wax example depend on the 'self-destructive' movement of the imagination as found in the evil genius. What is more, this unrestrained will in the wax example, where the will to believe that the wax as it appears is in fact how the wax is known, thereby remains dependent on the imagination's subsumption of the will in the evil genius. That is, the will, by the point Descartes reaches the wax example, has already been conditioned and formed by the imagination's generation of the evil genius (CSM II, p. 20; AT VII, p. 29).

To the extent any of this can be taken as accurate, that the imagination inaugurates the movements of the mind such that the mind's faculties are generated in such a way that the imagination finds itself relegated to the realm of passivity and dependence on sense perception, it cannot be the case that the faculties are formed before the inauguration of mental motion that the imagination performs. The imagination, like the mind, is not an empty vessel to be filled for Descartes. Such an understanding of the imagination is a mark of non-Cartesian, Scholastic, academic faculty psychology. This academic understanding of the imagination as passive is what resulted in an approach to the world as though it presented itself as it is, rather than coming to grips with the fact that the senses can lead to "falsehoods." In other words, hyperbolic Cartesian doubt is neither simply a willing suspension of belief in the world as it appears, nor the willing suspension of disbelief about a fictional story that Descartes tells in order to set off in his readers a more rigorous habituation toward knowledge and clear and distinct ideas. It is, rather, an activation of the imagination

as such and in such a way that it can form, or reform, the malformed mind of academic training that itself treats the imagination, and the mind more generally, as passive. Mental space, the division of the faculties, is carved out by the imagination that inaugurates the motion necessary for this carving to occur. The academic and everyday approach to the world, to the images of the world, has been too passive. The imagination must set this right, through the actions of fictionalization and doubting (CSM II, p. 12; AT VII, p. 17).

Space and Fable

If the imagination is not part of a pre-formed faculty psychology, the question remains what it is, 'where' it is located. The what and the where are the same question not only because the imagination is locatable in the mind only to the extent that its function exposes its location, but also because, insofar as the imagination begins the mental movements that establish the faculties, its location is not to be understood as spatial even in the sense of an imaginary space. That is, the imagination's ability to inaugurate motion is what allows for mental and/or imaginary space to emerge qua space, qua ordered and orderly motion. Because of this ability, the imagination is distinct from the mental or imaginary space that it carves out in its inauguration of motion. To better understand what the imagination is and where it is located, a turn to the Cartesian understanding of external space is necessary, not because of a biplanarity between mental and external space, a parallel structure between mind and world, but because the structuring of space comes to be understood thanks to the inaugurating motion of the imagination. To that end, and especially to clarify how this position on the imagination in Descartes is not an example of the interpretive caviling that Descartes detests, a turn to the *Optics* is necessary, followed by a return to *The World* and a turn to the *Treatise of Man*, and finally a return to the *Rules.*

Space and Sensation

There are four moments to which one should pay attention in the *Optics* in order to understand Descartes' understanding of space, but also to understand the relationship of external and mental space. Much of its discussion repeats what he claims in *The World*, but the additional discussion of animal spirits is helpful here. The other three moments are the discussion of

the instantaneous transmission of motion, the discussion of the imagination's deployment in perceiving location and distance, and the role of the imagination in the whole of the essay. The order in which it is most helpful to investigate these discussions is the transmission of motion, animal spirits, the perception of location and distance, and the role of the imagination in the essay.

Descartes first addresses the instantaneity of motion early in the First Discourse, through his stick analogy. He introduces this analogy by explaining that, because his intended readers are craftspeople who have little formal education, he wants to be "intelligible to everyone, and to omit nothing, nor to assume [*supposer*] anything that might have been learned in the other sciences." His goal is simply to explain how vision works and how it can be supplemented, which is why he wants to begin with a description of light before discussing the eye and how light enters it. However, in the first sentence of the next paragraph, Descartes does explain that he will omit something: the "true nature [*vray quelle est sa nature*]" of light. Instead, having recourse to a few examples will "help to conceive [*conceuoir*]" light's properties. The first example is that of the stick. As an analogy, he reminds readers of possibly having found themselves at night in an unlit place and using a stick to guide themselves through the landscape because "the medium of this stick" gave a "confused and rather obscure" sensation that reported the existence of objects in their path. Where someone who has been blind from birth would be comparatively efficient in determining what objects appear to him or her via the stick, to the extent that "one might almost say that they see with their hands ... or that their stick is the organ of some sixth sense," sighted people caught in the countryside at night are less efficient, but still extend their senses through the stick. The analogy then moves into light because it "can extend its rays in an instant from the sun to us." Sensing light is like feeling one's surroundings with a stick because light, insofar as it is a ray like the stick, extends motion from one end to the other instantaneously (E, pp. 66 and 67; AT VI, pp. 83 and 84).

In the Fourth Discourse, Descartes explains why the analogy works: first, because the mind senses, not the body; second, because the mind proper is found in the common sense in the brain, not because the mind is found in the sensory organs; third, because the nerves serve as media through which sensation is transmitted to the mind. Thus, there is a commonality to all sensation in that the transmission from external world to sensory organ is identical in itself and only gains distinction in the mind.

What is more, this transmission, because always identical in itself, is always akin to the medium of the stick, even the internal transmission of motion via nerves from sensory organs to mind.[5] The nerves are composed of three things: enclosing membranes, the nerves proper (or, "their interior substance"), and animal spirits. Animal spirits are "like a very subtle wind or air" that are the source of muscular movement by "flowing through the nerves into the muscles" and hold open the membranes that enclose the nerves. The nerves proper operate like the stick or rays of light in that any movement in a nerve is instantaneously transmitted to the corresponding part of the brain where the nerve's other endpoint is found, "just as pulling one of the ends of a very taut cord makes the other end move at the same instant." Nervous transmission of sensation does not resemble the objects that initiate the sensation any more than words resemble what they signify, though if such transmissions or even the images they call forth in the mind do resemble the objects, "it is sufficient for them to resemble the objects in but a few ways."[6] Thus far, then, light's movements are instantaneously transmitted from one end of its rays to the other, on impact with sensory organs, and moves the nerves in those organs such that this nervous movement is instantaneously transmitted from organ to brain. Animal spirits in those same nerves move the muscles in reaction to the nervous transmission. The transmission from light to body need not resemble the object, though this description of light itself need not perfectly resemble the truth of the nature of light, not only because words do not resemble what they signify but also because the words qua description are presented only to transmit conception in the mind of the reader (E, pp. 87, 88, 89, and 90; AT VI, pp. 110, 111, and 113).[7]

In the Sixth Discourse, Descartes reduces the qualities of what is seen in vision to six principles: "light, color, location, distance, size, and shape [*figure*]." In that both size and figure are themselves reducible to distance and location respectively, the main concern here is with that pair. In discussing both location and distance, he once again turns to the stick analogy. As to location, seeing and touching are again considered as one in that no image is necessary to determine "the direction in which each part of the object lies with respect to our body" but is established so the mind knows how to move, via the animal spirits, the parts of the body and "so that it may transfer its attention from there to any of the locations contained in the straight lines that we can imagine [*imaginer*] to be drawn from the extremity of each of these parts, and prolonged to infinity." In other words, the imagination is able to imagine lines not unlike the stick

that a blind person would use to determine how far away an object is. That we have two eyes does not result in seeing two images for the same reason that a blind person touching the same object with two sticks or two hands does not think he or she is touching two objects: attention is drawn to one object only. It should not be forgotten, however, that the imagination is crucial for knowledge of location, even while images are not, insofar as the imagination 'draws' lines from one's body to infinity, finding other objects in the path of those lines. The figure of a body as much as its location, then, is determined by the imagination since figure is "judged by the knowledge, or opinion, that we have of the position of various parts of the objects" (E, pp. 101, 104, and 107; AT VI, pp. 130, 134–135, and 140).

As to distance, though it does not require any particular images either, the imagination is at the heart of its determination. The first way of determining distance relies on an observed change in distance such that the figure appears differently before and after the change. The second and third ways of determining distance are related to this. In the second way, distance is determined thanks to the 'drawing' of lines from the eyes that meet at the point that is the object in question, in a similar fashion to how the blind person knows the distance of an object thanks to the sticks in his or her hands. Drawing these lines from the distinct angles of each eye allows the "natural geometry" of triangulation to determine the distance of the object from the eyes, that is to say, from the body. Even having one eye only is no necessary impediment to this geometrization of distance because moving that eye from one location to another in immediate succession will still allow two distinct lines to be 'drawn' such that they "combine together in the imagination [*fantasie*]" in a way similar to the "reasoning [*raisonnement*]" of surveyors, though in this case it occurs not by the use of machines, but "by an action of thought ... although it is only a simple act of imagination [*par vne action de la pensée, qui, n'estant qu'vne imagination tout simple*]." The distinctness of the figure is a third way of determining distance, where the rays of light coming from an object at a given distance do not meet with the precision of the rays at another distance. The fourth way of determining distance, however, occurs "when ... we already imagine [*imaginons*] the size of an object, or its position, or the distinctness of its shape and of its colors, or merely the strength of the light which comes from it." It is through this pre-observational imagination that the distance of the object can also be imagined (*imaginer*). For instance, if a smaller ship is closer to an observer than a larger ship, they may appear to be the same size, but the observer can already imagine the

larger ship's size and thereby imagine its distance from the observer to be greater (E, pp. 106 and 107; AT VI, pp. 137 and 138).

The imagination plays a crucial role in the determination of location and shape, but also in that of distance and size. Location and shape are determined thanks to the imagination's drawing of lines from the body to the object, while distance and size can be determined by the imagination's combining of points of visual focus allowing for the mind's natural geometry to do its measuring work, but it can also have a precedent thought of what the size of a given object might be as compared to another and can thus imagine the true size of the object even when it appears equal in size to the other object. Nothing thus far in any way describes an imagination independent of operations of light, and thus images, coming into contact with the eye. In other words, none of this specifically and determinately speaks to an active imagination without passive sensory perception. Light must still press against the sensory organs, allowing for an immediate transmission of movement in the nerves, which in turn allows the imagination to do its work.

However, it should also be remembered that the point of the *Optics* is to teach lenscrafters how to "augment the power of sight" via telescopes in order to "[carry] our sight much farther than the imagination [*imagination*] of our fathers was used to going" (E, p. 65; AT VI, p. 81). What is being recognized in this moment is not only that our fathers' imaginations were limited, but also that their imaginations did some work. Following from the description of that work in the Sixth Discourse, this work of the imagination would be the natural geometry that can triangulate thanks to the lines that the imagination draws from the body to the object to determine location, figure, distance, and size. The imagination has always been at work in everyday vision, correcting appearances so that a truer judgment of the object is possible. Augmenting that everyday vision such that this natural geometry can measure and the lines of the imagination can be drawn with greater clarity and distinctness is the work of these lenscrafters, but it is an augmentation via the work of the imagination. Light operates like a stick in the same way that the lines of the imagination do, pushing instantaneous transmission of motion in the same way that natural geometry measures, that is, along straight lines. These operations are possible thanks to the plenum world that Descartes supposes, fabulates, imagines in *The World*. Indeed, the *Optics* was originally intended to be included in *The World*, but was published independently.[8] It is not simply the case that the imagination of our fathers was insufficiently conceived in that it was conceived as an

empty vessel, but that the activity of the imagination corrects appearances of location, figure, distance, and size. This imagination also operates in a plenum world that has itself been imagined insofar as it is born from a fable. The remaining question as to the status of the imagination, this imagination that corrects appearances such that geometric measurement is possible, hinges on a return to the fable, to the fable of the plenum world whose rules are generated and followed by light, the fable that itself generates and follows the interpretive rules to determine the operations of light, a light which does not need to be presented, at least in the *Optics*, as the truth that it is or in its true nature.[9]

Return to the Fable: The World *and the* Treatise of Man

Now that the transmission of motion from the external world to the body has been clarified, along with the role of the imagination in that transmission and the judgment of objects that impact the body, if only visually, it seems appropriate to turn to the motions within the body, as they continue the regularity of motion from the external world. In the *Description of the Human Body*, written around 1647 or 1648, Descartes explains that there are fluid and solid parts of the body, the fluid parts being "blood, the humours and the spirits" and the solid parts being "bones, flesh, nerves and skin" (CSM I, p. 319; AT XI, p. 247). The solid parts move more slowly than the fluid, just as with the three elements described in *The World*. In the *Treatise of Man*, the continuation of the fable of *The World*, he begins his description of the bodies of humans who would inhabit the fabular world of *The World* as being "an earthen machine [*machine de terre*] formed intentionally by God to be as much as possible like us" (TM, p. 2; AT XI, p. 120). The body is by and large a mixture of solid earth and fluid, or liquid, air. The question, however, is where flame or light would be within the body. Following *The World*, there are three elements for all matter in the world—light, air, and earth—and, though every piece of matter need not have all of them, the automotivity of animals would suggest that there is some light, some flame in these bodies to set them to motion. Otherwise, the body would operate as sheer reaction, without will of any kind.[10]

At first, it may appear that the heart is the locus of flame or light within the body since it "contains in its pores one of those fires without light [*feux sans lumiere*]" (TM, p. 9; AT XI, p. 123). However, turning back to the *Description*, the heart cannot be the source of this flame because, if it

cools, it expands, becomes composed of larger, more solid parts, and blood fails to rarefy. Indeed, "it is the rarefaction of the blood, and this alone, that is the cause of the heart's movement." Thus, blood causes the heart to move, to become smaller and more liquid, not the other way around (CSM I, pp. 317–318 and 319; AT XI, pp. 242–244).

The substance within the blood that is the fire without light is the "certain very subtle wind [*vent*], or rather a very lively and very pure flame [*flame*], which is called the 'animal spirits,'" which can reach into the smallest pores of the brain and muscles, even into the pineal gland, in the same way that light works its way into the deepest crevices of solid matter. While the larger substances of blood nourish the brain, the animal spirits enter the pineal gland and "cease to have the form of blood." From the pineal gland, the animal spirits enter the nerves and initiate muscular movement. The animal spirits can differ in number, size, shape, and intensity of motion, depending on the person's state of mind, surroundings, and so on. In addition, because they "never stop for a single moment in any one place," their distribution is extremely varied (TM, pp. 19, 21, 73–76, and 79; AT XI, pp. 129, 130, and 167–70).

However, animal spirits are not the equivalent of light, but are, as Descartes puts it in a letter to Vorstius on June 19, 1643, "intermediate between the two: their degree of agitation is taken to be greater than that of the particles in calm air, and less than those of flame" (CSM-K, p. 225; AT III, p. 687). Figures are imprinted on the sensory organs and can be "traced in spirits on the surface of [the pineal gland], *where the seat of imagination* [imagination] *and common sense is*," thereby becoming ideas. If an idea is the result of a present object, this idea can be attributed to the common sense, but if the idea is the result of another cause, it is attributed to the imagination. In addition, the force of animal spirits leaving the pineal gland can leave traces of themselves on the brain, which constitutes memory. Because the pineal gland is only attached to the rest of the brain by small arteries, it is moveable "so to dispose the spirits that leave and make their way toward certain regions of the brain rather than toward others." (TM, pp. 86 and 91; AT XI, pp. 176 and 179).

The pineal gland is moved in one of two ways: (1) from differences in the particles of animal spirits leaving the brain and (2) the action of present objects upon the senses. The second way of moving the pineal gland is the result of ideas attributable to the common sense insofar as ideas are produced in the pineal gland from traces of forms brought to the brain by animal spirits within the blood. These traces of forms are brought thanks

to the instantaneous transmission of motion from the external world upon the body that is instantaneously transmitted to the nerves. The first way of moving the pineal gland, however, is the result of ideas attributable to the imagination. The imagination appears able to cause movement of the pineal gland insofar as it can cause differences in the particles of animal spirits leaving the brain. The imagination can, then, inaugurate motion within the body, though it perhaps may still not be the equivalent of light if only because Descartes has not yet discussed the soul. In the *Treatise*, he only considers the body qua machine, not in terms of its capacity for setting motion to work. He writes that, after having created the body, "God will later join a rational soul [*Ame Raisonnable*] to this machine." And yet, despite not wanting to discuss the soul, despite not wanting to discuss the non-corporeal by and large, despite being adamant to show that treating the body as a machine subject to the regular laws of motion as much as any other physical object in the world, Descartes never loses track, never forgets that this treatment of the body as a machine is a work of the imagination, and that the people whose bodies he is describing "*imitate* [imitent] those of a real man," even while acknowledging that this machine "could have even more sorts of movements than I have *imagined* [imaginer]." That is, once again, the imagination is set to work in the inaugural moments of the text and throughout it. Even more than in *The World*, the reader must imagine along with Descartes because the discussion of the pineal gland and imagination is impossible to observe. One cannot see thinking, one can only imagine it, but one can imagine thinking if one is imagining the operations of the body from the beginning, if one only treats the description of the human body as a machine as if it were a fable, a hypothesis, and so on.[11] That is, we can see thinking via ideas generated by the imagination that push the pineal gland in a particular direction, a generation that would have to obey the rules of pineal and ideatic motion of this imagined motion.[12] This situation is not so much one where the imagination activates itself in order to show itself as passive, but rather that the imagination may be in a strange location, may have a strange function as compared to all other motions in the machine, from nerves to animal spirits to the pineal gland itself (TM, pp. 36, 113, and 4; AT XI, pp. 143, 202, and 120; my emphs.).

Since Descartes does not specifically answer the question that began this section, though he does explain that neither the heart nor the animal spirits can be considered the body's equivalent of light, we can surmise that the will is this equivalent, at least in the human body. A body can

move like a machine, reactive to the motions around it, without a soul, but the mark of the human could be that which drives the motions of chasing after knowledge, so long as we habituate ourselves properly (see CSM I, pp. 233–234 and 344; AT VIII-A, pp. 54–55; AT XI, p. 361; pt. 1, arts. 26 and 43).

And yet, this description does not fully contain the imagination on Descartes' own account. The imagination is the common denominator between the bookends of the fable that is *The World* and the *Treatise on Man*, the fable of the mechanistic motions of both the external world and our bodies. The imagination is able to fabulate a world and humans entirely different from, while simultaneously entirely similar to and descriptive of, our experience of them. The imagination is also able to receive light such that the things of the world are experienced as images. In the imagining of the fabulated world, Descartes imagines the rules which govern that same world, which are justified on their similarity to the universe we see in images impressed upon our eyes as well as the similarity to ourselves that the fabulated humans in that world present. In *The World*, matter extends "in whatever direction our imagination [*imagination*] can extend itself" such that it "no longer perceives any place that is empty [*vuide*]." We are expected to "suppose" or imagine that god creates the world as a plenum. The supposition that we imagine, imagining what we can suppose, linked through belief is, then, a return to the questions raised by doubt and imagination in the *Meditations*. In order to believe what Descartes asks us to imagine, we must suppose it to be the case. In order to believe what he asks us to suppose, we must imagine it for ourselves. Even if we are not in the realm of doubt and the suspension of belief when we are in this fable, we are in the realm of the imagination (W, p. 10; AT XI, p. 32).[13]

In the *Treatise*, which is the same world as *The World*, when discussing human bodies, we can imagine, can suppose that god could create a body-machine the movements of which exceed what we, or at least Descartes, can imagine. Because of this kind of reasoning, Nancy (1978) will write, in the context of the *Rules*, that "The sup-position will take its sub-stantial value once it lets us see" (Nancy 1978, p. 12). That is, because suppositions clarify so many things, they themselves become judged on their utility in the face of the façade that the suppositions support. Such a position could be grounds for dismissing the Cartesian supposition, but it also seems important to remember the content of the suppositions, in particular that god creates a plenum world and that

the human machine's movements exceed what can be imagined of them. In fact, all that is being acknowledged in these suppositions, in particular the latter, is a recognition of the excessive power of the imagination to render itself exceeded. Such is not a position like other faculties, and indeed the other faculties would appear to depend on this imaginative ability in order to find their own places. Thus, it would appear that, from this perspective, from this viewpoint, what the imagination makes visible via suppositions is the limit of the imaginable and, in doing so, it exceeds those very limits in showing them qua limits. The supposition that the human machine's movements exceed the imagination is such a showing of the limit by that which is limited, and it is not thereby grounds for dismissal as much as it is the ground for the possibility of knowing what will be dismissed.

What Descartes imagines, however, is a movement of animal spirits, which are not the equivalent of light within the human body, generated by the imagination. The imagination is the driving force for both fable and light, that which allows for experience and comprehension at all. The experience of light, the motion that generates and maintains motion in the world, is interpretable, and so the world itself is interpretable, only because the imagination can suppose the order of the world, of the body, to operate with a machine-like regularity, a regularity that the imagination perceives through the sensory organs. The fable is the inaugurating, regulated and regulating, motion of the mind that would imagine the world to have regularity. Since the fable is the mental equivalent of light and thus is not the equivalent of the pre-motive solid as described in the fable, the mind or the soul, prior to the motion inaugurated by the fable, is of this character. It is solid, pre-motive, even if cracks appear throughout it. The power, the *potentia*, the *puissance* of the imagination is more powerful than chaos or poetry, more powerful than light or fable, because it is the force by which even chaos can become writable (as poetry and as fable) and experiencable.[14] The location of the imagination is both inside and outside the world, both inside and outside the mind.[15] Its function is found in its location in that it functions as that which allows for the line to be drawn between what is experiencable and what is not, between what is writable and what is not. The power or the force of the imagination is to imagine the limits of the imagination. For Descartes, the imagination imagines the imaginable in imagining the unimaginable.

Return to Method: The Form of Reasoning and the Forming of Reason

It is a legitimate question to ask at this point whether all these claims about the Cartesian imagination are legitimate or a kind of rhetorical gamesmanship. To answer that, it seems appropriate to turn to the question of logic and rhetoric insofar as they can be understood in their deployment in analytic or synthetic methods. Insofar as the relationship between analysis and synthesis has been shown to be one of double supplementarity, where the simplicity of an analytic reduction relies on the duplicity of a rhetorical synthesis and vice-versa, then it could be that the answer is already known. However, a return to Rule Ten with attention paid to the possibility of the imagination existing as inside and outside the mind which interprets the world that presents itself in images to the imagination can perhaps more clearly address whether what is at hand here is in fact too focused on the rhetoric of fable.

What is at hand, then, is a question of the form of argumentation, its figure or shape. In the context of an argument that concerns the structure of the self, the self as structured from out of an imagination, the structure of that argument is already a question of the structure of the self, a question of the self that constructs itself in the argumentation of itself and its structure. In Rule Ten, Descartes critiques academic syllogistic synthesis because it "can nevertheless draw a conclusion which is certain simply in virtue of the form [*formae*]."[16] The result is that those who practice this "[form] of reasoning" can only come to a true conclusion if "they are already in possession of the substance of the conclusion." Thus, Descartes rejects this approach because it can teach nothing new, even if it is useful for explaining arguments already known to others. In rejecting it, he says that synthesis "should therefore be transferred from philosophy to rhetoric."[17] Beyond its pedagogical quality, Descartes' understanding of rhetoric is that the form of the argument is already given and the form itself gives rise to the content of the truth being concluded. The analytic method is preferable because it is solely concerned with the content of the matter at hand, reducing it to its simplest formulation, and is thus more logical, less rhetorical (CSM I, pp. 36–37; AT X, p. 406).

Again, Descartes' concern with academic approaches to pedagogy is that they rely on a faculty psychology that understands the imagination as an empty vessel to be filled. The shape, the form of the imagination is malformed by the approach because it limits the capacity for comprehension

on the part of those who have been shaped by this approach, who confuse passive acceptance of syllogistic formulae for education, for the leading out of knowledge. Instead, for Descartes the imagination must be deformed and reformed so that such extraction is possible. Like pre-motive solid matter, then, the mind cannot be taken as pre-formed, but is formed in the inauguration of its movements. The imagination is both part of and distinct from what is moved in the deformation and reformation of the faculties in that it is the faculty from which the faculties will come to form themselves, from which the mind's motions will form themselves into the regulated methods of investigation that Descartes sets out. Analysis is the method that the imagination will lead the mind to take up, in place of the synthesis that finds truth based solely on the form of reasoning.[18] The imagination is the faculty, distinct from and part of the other faculties, which sets the mind into motion such that the form of argumentation called analysis is seen to be preferable. Neither the imagination nor any other faculty could inaugurate such motion were it solely part of a pre-formed faculty psychology, any more than the force which initiates the motion of matter would itself be solely part of any of the three elements that emerge from out of the pre-motive solid. Even though the reader finds him- or herself already with a malformed imagination, whether through academic education or through everyday engagement with the world, the imagination necessarily remains, to some degree, distinct from the mind, which is why fables, *histoires*, dialogs, and so on can have the effect of deforming and reforming the mind at all. However, the distinction of the imagination from the mind cannot be thought of as occurring on one side of bounds that "presuppose a space existing outside a certain definite place and enclosing it" (Kant 2001, p. 86). The imagination does not exist outside of the space of the mind, even if it is distinct from it, insofar as it remains a mental faculty, nor is it a metaphysical faculty from a transcendental perspective because it is not on the bounds of a space that encloses the material of the mind since space for Descartes is a plenum and not enclosed.

This understanding of the imagination is not arrived at through a rhetorical synthesis that sees the form of reasoning as equivalent to content. Rather, it emerges from something closer to an analytic reduction of the phenomena of the relationship between mind and world as laid out in Descartes to a simple: the imagination. This simple emerges from out of an attention paid to fable as the repeated recourse Descartes has to begin his texts, in various contexts, to various readers. This analysis is not overly

attentive to the form of reasoning, as synthesis is, but finds that the imagination, the simple that stands outside and inside the realm of experience and interpretation, of world and mind, engages the forming of reason. Reason's movement may maintain the human mind qua incorporeal substance in its motion and thereby forming the faculties, but the imagination is the force that inaugurates that rational motion, that motion of the natural light, via the fable.[19] Thus, the belief that the world is as it presents itself that causes Descartes to suppose the evil genius at the end of the First Meditation is indeed a rational belief, a belief that is the result of the natural light's having already been set to work such that the faculties of doubt and imagination are malformed.[20] To correct that, the imagination needs to be set to work again, through the doubt that imagines and supposes the world to be other than as it presents itself. Reason cannot do this work because it is merely natural light, not the force that launches luminous motion. If this force, this power of imagination finds itself taking on a passive role in the wake of the deformation and reformation of the mind, it is not because the imagination takes on a biplanar structure—now active, now passive—but because the imagination, the power of the imagination is always *in potentia*, ready to correct too much reliance on the form of reasoning developed by the formation of the faculties. The imagination, when necessary, in its inaugural deformation and reformation of the faculties, also always inaugurates the forming of reason.

Will, Wonder, and Imagination

If the effect on the imagination of attending to the fable is that there is no pre-formed Cartesian faculty psychology and that the imagination is located both inside and outside the realm of the faculties as they develop from the imagination's inauguration of mental motion, then a few further issues remain. In particular, the question of the imagination's relationship to the will remains, if only because the imagination is beginning to appear similar if not identical to Descartes' descriptions of the will. Also, the question of the imagination's relationship to the passions also remains, especially to wonder. If the imagination is no longer simply active or passive, then the question of what happens to the passions, especially wonder as the passion that prompts learning, arises because the claim concerning the imagination is that it initiates a motion which sets the mind to work such that it unlearns what it has learned and learns how to learn. First, however, the distinction between the imagination and the will needs to be clarified.

Will and Imagination

In the Third Meditation, Descartes divides thoughts into ideas and thoughts that exceed the likeness of the thing. Ideas are subdivided into innate, adventitious, and invented. Thoughts that exceed the likeness of the thing are subdivided into judgments and "volitions or emotions [*voluntates, sive affectus*]." Given that *sive* predominantly functions disjunctively, it seems fair to consider its use here to indicate a tertiary distinction of thoughts that exceed the likeness of the thing under which volitions and emotions would be categorized. Volitions and emotions (or passions) are thus related, but separate. The will, being the faculty that oversees volitions, is the focus here. In particular, I will focus on how the will relates to the imagination in the *Principles,* where Descartes discusses the will most extensively (CSM II, p. 26; AT VII, p. 37).[21]

The will is the faculty that allows for hyperbolic doubt and withholding assent, an allowance that makes the freedom of the will self-evident. The freedom of the will indicates its scope, which is, "in a certain sense [*quodammodo*]," infinite because its scope extends as far as any other will can extend, even god's. Thus, enacting this freedom of the will is "*The supreme perfection of man*." However, in that judgment requires both intellect and the will and in that the intellect's scope is limited "only to the few objects presented to it," error results from the will enacting a volition beyond what the intellect perceives, beyond having a clear and distinct idea. The will is understood as self-evidently free and as the source of error despite the fact that god's power made everything preordained because "the mind is finite, while the power [*potentiam*] of God is infinite" (CSM I, pp. 204, 205, and 206; AT VIII-A, pp. 18 and 20; pt. 1, arts. 6, 39, 34–35, 37, and 40–42).

Nothing in what has been presented concerning the imagination suggests that the imagination is infinite, at least not in the same mode as the will, whether human or divine. If the mind in its pre-motive state is akin to the pre-motive solid, it is finite. That the imagination inaugurates the motion which itself brings the mind to carving out its appropriate faculties does not suggest that the imagination is precisely distinct from the mind since one of the faculties resulting from this motion is the imagination. The imagination is both within the finitude of the mind and outside it, simultaneously active and passive. It is not, however, the same as the fable that serves as the equivalent of light in the mind's motions, that generates and obeys the motions set to work by the imagination. Rather, as when

material motion settles into its motions regardless of the precise details of the inaugural motion, the imagination does not generate the rules of the mind's motions. This quality does not make the imagination infinite in the same mode as god, however, since it also always remains inside the realm of the faculties. In other words, it is insufficient to focus on the quality of the imagination whereby its capacity to imagine the unimaginable is always *in potentia*. The quality of the imagination whereby it is finite, limited, conditioned by the world that presents itself to the imagination must be kept in mind. The imagination is infinite, though in a different mode from the will or from god. It is infinite in that it can imagine the unimaginable, which requires the condition of the imaginable as what is to be negated.[22] Thus, the infinitude of the imagination is somewhere between infinity and the indefinition of "*the extension of the world, the division of the parts of matter, the number of stars, and so on*." Or rather, the imagination is transfinite, while the will could remain, especially insofar as it is linked with god, absolutely infinite. That the imagination can imagine the unimaginable does not make it infinite in the divine mode, but suggests a potential to exceed what contains it.[23] If the transfinite is a distinct mode of infinity, it is a mode distinct from the mode in which the will, both human and divine, participate.[24] The imagination as transfinite allows it to be active and passive, allows for it to be contained by the conditioned and limited qualities of the finite and indefinite world and finite faculties while also exceeding those conditions beyond the indefinition of the number of stars, and so on in actively imagining beyond what can be imagined in the passive sense, in imagining a whole other world, entirely different people from those experienced that also happen to match what has been experienced and interpreted in better and worse fashions. This would be why the method is schismatic, moving simultaneously between analysis and synthesis, requiring a history to tell an *histoire* of a different kind. The absolute infinity of god's will and *potentia* may condition the imagination and the possible interpretations of the finite world, but, with Descartes, with Descartes' imagination, we can imagine in excess of those conditions, which is why he so frequently has recourse to asking us to imagine, suppose, hypothesize that the world is not what we have been taught, what we have imagined. We are able to imagine along with Descartes, able to follow his fables in generating our own stories of rule-obedience, because of this transfinite quality to the imagination, because we can imagine the unimaginable (CSM I, p. 201; AT VIII-A, p. 14; pt. 1, art. 26).

Will, Imagination, and Passions

If the imagination is modally distinct from the will insofar as the latter is absolutely infinite while the former is transfinite, the next question is how the imagination is distinct from the passions. To answer this question, it is first necessary to distinguish the will from the passions as explained in *The Passions.*

In his most general definition of passions, Descartes gives credence to the complication of activity and passivity that has been laid out thus far. For him, "an action and passion must always be a single thing," depending on the perspective taken on the occurrence in question. Thus, the reactions of the body explained in the *Treatise of Man*, *Optics*, *Description*, and other works on anatomy and physics are passions, while the external world to which the body reacts is engaged in action. Since these bodily passions can cause the pineal gland to move in such a way as to direct animal spirits toward openings in the brain that lead to the nerves and muscles, so that they can themselves react to the action that caused the passion in the body, a distinction must be made between passions of the body and passions of the soul. The flushed cheeks of embarrassment are distinct from their associated passions by way of a distinction between soul (patient) and body (agent). By contrast, bodily actions that can be entirely attributed to physical rebound from the external world like the flushed cheeks of a fever are the equivalent of the external world's reactivity and so are only actions of the body. However, other bodily actions are attributed to the soul and its passions (CSM I, p. 328; AT XI, p. 328; arts. 1 and 2).

The two kinds of thoughts that exceed the likeness of the thing which are not judgments, that is, volitions and passions, are both within the soul. Volitions are the soul's actions, of which there are two: actions isolated to the soul, as in the will to love god, and actions that extend to the body, as in willing to walk. However, "the various perceptions or modes of knowledge present in us [*les sortes de perceptions ou connoissances qui se trouvent en nous*]" are the soul's passions "in a general sense." These perceptions are of two kinds as well: those caused by the soul and those caused by the body. Perceptions caused by the soul are "perceptions of our volitions and of all the imaginings [*imaginations*] or other thoughts which depend on them [i.e., volitions]." One cannot will something without being aware that one is willing it, so perceptions of a volition are ultimately the same as the volition itself. Thus, these perceptions are normally considered actions. Imaginings and other thoughts involve imagining "something

non-existent" or considering "something that is purely intelligible and not imaginable [*non point imaginable*]." Their dependence on the will makes the soul aware of the perceptions, placing them in the category of actions as well. Perceptions caused by the body primarily depend on the nerves. These are of three types: those referring to the external world, to the body (appetites), and to the soul (passions proper). Perceptions caused by the body independent of the nerves and formed independent of the will are also considered "'imaginings' [*imaginations*]." These imaginings, like dreams and daydreams, are caused by animal spirits coming through certain openings in the brain as opposed to others. While generally less lively than perceptions dependent on the nerves, these imaginings can "mislead [*trompé*] us regarding the perceptions which refer to objects outside us, or even those which refer to certain parts of our body." Such deception cannot occur with passions proper because "they are so close and so internal to our soul that it cannot possibly [*il est impossible*] feel them unless they are truly as it feels them to be." In other words, we cannot deceive ourselves that we feel anger, joy, or sadness. We clearly and distinctly feel these passions when we feel them (CSM I, pp. 335, 336, and 338; AT XI, pp. 342, 343, 344, and 348; arts. 17–26).

So the imagination, whether as perceptions that depend on the will or as imaginings caused by animal spirits, is distinct from the passions proper insofar as the latter are independent of the will, depend on the nerves, are non-deceptive, are caused by the body, and refer to the soul. The imagination as perceptions that depend on the will is caused by the soul. It may be a passion in the general sense, but is not a passion in the sense proper to *The Passions*. As perceptions caused by animal spirits, the imagination is independent of the nerves and can be deceptive.

However, objects presented to the senses can excite passions insofar as these objects "may harm or benefit us, or in general have importance for us." The passions "dispose our soul to want [*vouloir*] the things which nature deems useful for us, and to persist in this volition [*volonté*]." When stirred by these objects, the passions are transmitted into bodily movement to obtain what is useful, avoid what is harmful. In this way, the passions inaugurate a volition, direct the will in a given direction. However, there is also the question of language and habit to consider. We can learn to join certain movements of the pineal gland, certain thoughts, to other thoughts "through habit." Even "the weakest souls," can control their passions, especially but not exclusively through reason. Thus, the passions can direct or dispose the will in a given direction, but we can habituate the

passions in other directions, thereby redirecting or redisposing the will toward obtaining or avoiding other objects (CSM I, pp. 349 and 348; AT XI, pp. 372, 369, and 370; arts. 52 and 50).

The will is an action of the soul that can be isolated to the soul or extend to the body. The passions proper are perceptions caused by the body that depend on the nerves, refer to the soul alone, and do not deceive. They can direct the will to perform its action in accord with the apparent utility of objects that come into contact with the nerves in some way, but can be habituated in ways not limited to reason such that the will's actions are changed. The imagination can take one of two forms: as a perception caused by the soul dependent on the will, which is a passion only in the general sense since its dependence on the will makes it an action, or as a perception caused by the animal spirits independent of the nerves, which can be deceptive. Habitual control over the passions would appear to also control the form of the imagination that depends on the will such that its imaginings, whether of something non-existent or of something purely intelligible and unimaginable, can be controlled through the control over the passions. The form of the imagination which is independent of the nerves and of the will would also appear to be independent of the passions as well as control over them. However, in that the passions direct and dispose the will in the release of animal spirits and in that the second form of the imagination is caused by animal spirits returning to the brain through certain paths as opposed to others, there may be a way in which control over the passions through habituation can also lead to a control over this second form of the imagination, though such control would be even more indirect than the control over the first form of the imagination.

Such a structure could suggest giving credence to the concept that the imagination is biplanar. There are, after all, two forms of the imagination which appear to be distinct from each other, only and tenuously linked through the will, animal spirits, and passions. If there is legitimacy to the concept that the imagination has something more like a transfinite structure, exceeding its indefinite limitations while remaining distinct from absolute infinity, more needs to be argued. The source of that argumentation will come from focusing on one passion in particular, wonder, in its relation to habituation and learning.

Wonder and Imagination

Wonder is the first passion and is without any contrary. Most of the six primitive passions (wonder, love, hatred, desire, joy, and sadness) have some opposing passion which, depending on the object presented being considered useful or not, generates esteem or contempt, joy or sadness, and so on, in the soul. Only wonder and desire have no contraries. However, desire's motion is already infused with the consideration of the utility or good, the harmfulness or evil of the object in question.[25] With wonder or astonishment (*admiration* or *étonnement*), all that occurs is surprise, such that the object encountered is considered novel (*nouveau*) or different "from what we supposed [*supposions*] it ought to be." There is no awareness of utility or lack thereof in terms of the object's relationship to ourselves, so there is no contrary passion. Without surprise, there is no wonder, and therefore no passionate relationship to the object. There are two causes of wonder (*admiration*):

> first, an impression in the brain, which represents the object as something unusual and consequently worthy of special consideration; and secondly, a movement of the spirits, which the impression disposes both to flow with great force to the place in the brain where it is located so as to strengthen and preserve it there, and also to pass into the muscles which serve to keep the sense organs fixed in the same orientation ....

Wonder, then, is caused by the body and is dependent on the nerves, disposing the will to continue the body's attention to the wondrous object. It is different from astonishment (*étonnement*), "an excess [*exces*] of wonder" which results in the body being immobilized by the surprise, preventing knowledge from being acquired because the object in its sheer presentational qualities alone is what is considered, not a further investigation (CSM I, pp. 350, 353, and 354; AT XI, pp. 373, 380–381, and 383; arts. 53, 70, and 73).

Wonder's utility is found in the way that "it makes us learn and retain [*elle fait que apprenons & retenons*] in our memory things of which we were previously ignorant." Its harmfulness is found in astonishment, in the way the excess of wonder can generate attention to what does not deserve it, thus removing or perverting (*ôter* or *pervertir*) reason. The remedy for this is the acquisition of knowledge such that memory serves as a bulwark against excessive wonder. Astonishment can itself become a habit in that the lack of further investigation by reason and intellect disposes the soul to treat

every appearance of every object as novel, regardless of their importance. The bad habits that other passions might instill can be corrected through "experience and reason" by attending to the "true value [*juste valeur*]" in terms of their good and evil. However, it appears that reason is not necessarily able to correct astonishment since it removes or perverts reason. Only experience, memory, knowledge can correct the bad habit of astonishment back to the good habit of wonder (CSM I, pp. 354 and 377; AT XI, pp. 384 and 431; arts. 74–76, 78, and 138).

The steps of the general remedy against the passions give credence to this position on astonishment. The first step is to "take heed, and recollect [*averti, & se souvenir*]" the deceptions that objects can generate in our imagination. If the passion urges action that will take time, "we must refrain from making any immediate judgement about them" until we have calmed down. If it urges immediate action, "the will must devote itself mainly to considering and following reasons which are opposed to those presented by the passion, even if they appear less strong." Exerting control in this way will make manageable the bad habits to which the passions can give rise (CSM I, p. 403; AT XI, pp. 487 and 488; art. 211).

However, correcting astonishment would appear to be possible only in the first step: recollection or memory. All other elements of the general remedy involve reason, which astonishment removes or perverts. What can be done to correct astonishment and habituate ourselves toward wonder, then, requires attending to recollection, memory, our own personal *histoires*. How we do this, how Descartes does this, is to tell a story, a fable that tells the story of the wondrousness of the objects of a world that is other than how it presents itself. Such a fable is the story of a world made wondrous, made uninterpreted (or thus far inappropriately, unreasonably interpreted). This fable is possible only if the imagination can imagine beyond its conditions, can imagine what is otherwise unimaginable.[26]

The imagination can do this both insofar as it is dependent on the will and insofar as it can daydream and deceive itself into imagining not only another world entirely but one which perfectly matches the one which has presented itself to us. In imagining that world, the imagination is working, within itself, to exceed the limitation that it would otherwise appear to have. The imagination instills wonder, inaugurates it through the telling of the fable of the world as comprehensible yet other than as it presents itself. This fabular world matches the one we have experienced while remaining other than our experience yet perfectly comprehensible and interpretable thanks to the rules generated in the telling of the fable, rules

that the fable itself obeys in the story told. It thereby establishes a regulation to wonder such that astonishment does not remove or pervert reason. Rather, it cultivates, habituates reason as the regulator of wonder to prevent astonishment because the story as it is told and in its telling lays out that to which it is important to attend insofar as the story is a story of the initiation of a motion that results in three elements which themselves are the motion of the world.[27] In its telling, in the imagination required to follow the story's inauguration of light, the imagination imagines what is otherwise unimaginable and sets reason, wonder, and the imagination itself into the motion required to attend to what deserves attention. Without the imagination, and without the imagination inaugurating a mental motion that sets the mind into the motion to deform and reform its faculties' functions (including the imagination's), reason, wonder, will, and so on remain malformed and unable to attend to what should be attended to. Without the transfinitude of the imagination, then, without the imagination imagining what is truly, justly wondrous, reason is nonexistent and the absolute infinity of the will impotent.

The Work of the Imagination

The imagination can be taken as infinite in a different mode from the infinity of the will, a mode whereby a connection to the finitude of perception and indefinition is maintained, yet is not a transcendent faculty. Instead, it transcends the limit it sets for itself in setting the mind's potentials to work. It moves between the infinite and the finite. For that reason, I have called this faculty transfinite. Its transfinitude makes sense of the two forms of imagining—one dependent on the will and so active, the other caused by the body and so passive—without reducing its biplanarity and the mind to a pre-formation prior to Descartes' fabular imaginings. Indeed, these imaginings are what allow us to take up the world without the stupefactions of astonishment. Doing so habituates the mind to wonder at a world that is fabular and entirely like our own, cultivates the habit of reasoning about the wonders of the world, especially insofar as the world takes us by surprise and fails to appear as we expect it to. With that in mind, it is time to see the imagination at work, in its cultivation of a hyperbolic doubt that helps habituate wonder to cultivate reason's corrections of bad habits.

According to the Fifth Meditation, the proofs of mathematics are true and therefore exist distinct from the mind and god because the intellect

clearly and distinctly perceives them, because they are not themselves god, and because god is no deceiver. In the Sixth Meditation, then, it is possible for things to exist because they would be objects of mathematics. In addition, the imagination suggests that things exist because of the sheer fact of the images that the mind has of material things.[28] However, although the mind can clearly and distinctly imagine relatively simple images like a triangle or a pentagon, it cannot clearly and distinctly imagine more multiple-sided images like a chiliagon or a myriagon, while the intellect can clearly and distinctly perceive the mathematical properties of the chiliagon or myriagon independent of any image of it. Thus, Descartes concludes, the imagination "requires a peculiar effort [*peculiari ... contentione*]," an "additional effort [*nova ... contentio*]" that the intellect does not require. Thus, the strengths (*vires*) of the imagination and the intellect are distinct, that of the imagination being inessential to the mind and that of the intellect being essential, since the mind, which has not yet been shown as attached to a body, could exist as it does with merely itself, god, and purely mathematical objects. Thus, if things exist, the imagination depends on bodies, turns the mind toward bodies, and "looks at something in the body which conforms to an idea understood by the mind or perceived by the senses." Things may not exist, however, and so the imagination's dependence on them is no proof of their existence (CSM II, p. 51; AT VII, pp. 72–73).

What is more daunting is that the imagination is accustomed (*solere*) to imagining more about things than (*multa quae*) is reducible to them as objects of mathematics: sight, sound, taste, touch, and smell. It imagines these qualities of things either in sense perception or in memory. The ideas of things, dependent on sense perception and memory, are adventitious, and invented or remembered ideas are less vivid than those from sense perception, even those ideas invented in meditation. Because of this vividness, Descartes had thought that sense perception, and the extra work of the imagination tied to it, was the source of his ideas. However, "many experiences [*multa ... experimenta*]" showed him that judgments based on both internal and external senses were frequently mistaken, leading him to doubt them. From these experiences, from these sense perceptions that failed to meet expected sense perceptions, doubt of the imagination and its judgments entered his mind to such a degree that he began to doubt hyperbolically, specifically by noticing the difficulty of discerning between dreamworld and experience proper and by "at least pretending not to [*vel saltem ignorare me fingerem*]" know whether god was no deceiver or an evil genius (CSM II, p. 53; AT VII, pp. 76 and 77).

The hyperbolic doubt generated from out of the failure of experience to match expected experience, the failure of perception's images to match the imagination's judgments, is resolved from two things. First, it is possible for god to create things in such a way as to correspond with the intellect's clear and distinct perceptions, which it has with the intellect's perception of itself as a thinking thing, and there is also a distinct idea of body, distinct from the mind, distinctly distinct from the mind insofar as the body is inessential for the self as thinking thing. Second, "I find [*invenio*] in myself certain special modes [*modi*] of thinking, namely imagination and sensory perception," which depend on the intellect while the intellect is independent of them. These *inventa* depend on the intellect "because there is an intellectual act included in their essential definition" insofar as imagining and perceiving are modes of thinking. Sense perception in particular is passive as "a faculty for receiving and recognizing the ideas of sensible objects," which would be useless without an active faculty that generated the ideas. This faculty cannot be in the mind because it requires no intellectual act and cannot be in god because generating ideas of non-existing things is deceptive and god is no deceiver, so it must be in the things. Thus, things exist and sensory perception of them is more or less accurate and correctable by the intellect insofar as they are objects of mathematics. Non-mathematical sensory input (sight, sound, taste, touch, smell) is trustworthy insofar as god is no deceiver and insofar as responses to this input drive one toward or away from these objects, according to the pleasure or pain they may give, regardless whether that input resembles something in the object proper or whether the lack of such input indicates that there is no body in a given place (i.e., whether heat as felt is in the fire). As a result, this non-mathematical input is trustworthy as to the body that it is reasonable to believe one has, to the extent that the body does not deceive (CSM II, pp. 54 and 55; AT VII, pp. 78 and 79).

The failure of experience to match expectations is a result of an overly dependent relationship to sensory input, and thus to the work of the imagination. It is this dependence that sets Descartes to work to figure out the simple source of knowledge such that expectations can match experience. He discovers that the intellect allows him to prove the existence first of himself, then of god, then of mathematics as that which takes the material world as its object. However, from the beginning, it is not the intellect that has begun this investigation, but the imagination, insofar as its work appears to fail. In this way, the whole project begins not from the intellect, but from the imagination.

Everything depends on the imagination, including the imagination's dependence on the intellect. The failure of the imagination's expectations, the wonder of that failure of expectation, sets off an imagining of the world as other than as it presents itself, leading to self-deception and making oneself believe in the deceptive god of the evil genius, an invention of the imagination the invented quality of which leads to the conclusion that the thinking thing necessarily exists even within the potential for self-deception and in turn leads to imagining what other modes of thinking there are, including imagining as dependent on the *inventa* of the imagination. This self-deception, this fiction is understood as deceptive in its very telling, a deception of which all readers are aware, especially if they read the letter to the faculty of the Sorbonne and even more if they read the *Objections and Replies.* The hyperbolic doubt, in its hyperbolicity, is an imaginary doubt, both in the sense that it is not a real or practical doubt and in the sense that it requires the imagination to occur at all. This imaginary, hyperbolic doubt is set off because of the limitations of the imagination to accurately expect the operations of the world, and so the imagination exceeds its own limitations, is transfinite, such that it is able to initiate the mental motions that will expose it as limited. The imagination, the work of the imagination, is always more and less than is imagined—more than is imagined in that it imagines the unimaginable (a world that is other than as it presents itself, a god that is no god in that it is deceptive), less in that it is dependent on the other faculties of the mind. To doubt, one must imagine, and this doubt leads to the rational conclusion that the imagination is limited, but it does so through hyperbolicity, by which the imagination throws the mind beyond itself, beyond the images it remembers and remembers as unexpected, beyond the world and its rules, such that the world can be reimagined, fabulated anew, given a new *histoire* as rule-obedient according to rules generated in the telling of a story, a fiction, a work of the imagination.

Notes

1. There is some use of it in the treatises he wrote for Beekman in 1618, the *Physico-mathematica* and the *Compendium musicae*, but Descartes there by and large limits himself to noting what is imaginable and in asking Beekman to imagine certain physical activities.
2. In commenting on this same passage, Fóti (1986) points out the connection to another note in the *Early Writings*, on Lambert Schenkel's *De*

memoria. There, Descartes writes that the "good-for-nothing" Schenkel "does not depend on the right order … [, which is] that images be determined by mutual dependence" (AT X, p. 230; my trans.). As she describes it, Descartes wants to replace Schenkel's art with "the institution of intellectual order among series of memory images" (Fóti 1986, p. 632). As a result, the intellect still depends here on the imagination. For her, however, this early relationship between the imagination and the intellect is later dropped because Descartes worries about the unruliness of the imagination and its capacity to generate illusions, which is why he eventually "relegate[s] it to the body" (Fóti 1986, p. 641).

3. For Bergoffen (1976), this moment represents "the ultimate hypothesis of the reflective imagination" (Bergoffen 1976, p. 193). As such, again, it does not give a ground for positive philosophical thinking, but it does mark the distinction, in its methodological aspect, between reflective and non-reflective imagination. It still seems worth pointing out, against this tacitly biplanar understanding of the imagination that Bergoffen (1976) presents, that this limit to reflective imagination is not rational, is a kind of madness, and so the distinction between what Descartes calls the imaginary freedom, which remains rational, of accepting the world as it presents itself and what Bergoffen (1976) calls "The rational limit of imaginative freedom" in the evil genius becomes blurrier (Bergoffen 1976, p. 194).
4. For Rosen (1969), wax is actually a bad example because it is not "a fair and sufficient basis for the conclusion which Descartes draws" (Rosen 1969, p. 26). He explains that many other physical objects—apples, trees, and cats are his examples—would not be recognizable given the same experiments. He writes, "we need merely *ask* ourselves …," but here he seems to be missing a crucial point (Rosen 1969, p. 26; my emph.). Descartes, in asking us to ask ourselves what would happen given these experiments with wax, is asking us to imagine for ourselves. It is for this reason that Rosen (1969) finds the dilemma of intuitions to be that they are dependent on either the imagination or on god and that, "If the former, then intuition is always of bodies," while, "If the latter, then, since God is primarily free will, natural order … is an arbitrary divine creation, subject to equally arbitrary change" (Rosen 1969, pp. 26–27). However, it only needs to be the case that the intuition would always be of bodies insofar as it depends on the will if the imagination itself is limited to the body, which it is not. Following Cavaillé (1991, p. 216), the imagination exceeds the limits imposed upon it, as the imagining of the evil genius attests.
5. Daniel (1976) and Prendergast (1975) try to take account of the instantaneity of motion in different, though related ways. The former argues for a wave-particle theory of motion in Descartes to account for his different analogies and to make sense of the different speeds of light while it remains

instantaneous (see Daniel 1976, pp. 324–326). For the latter, the tendency of bodies to move rectilinearly is only modally distinct from those bodies, which means light as an action is distinct from bodily motion, thus allowing transmission of motion from sensory organs to mind to happen instantly qua the transmission of a mode of the tendency to move (Prendergast 1975, pp. 454–461). However, both seem to forget that light is itself an element, and thereby a body. Light is action, light is a medium, light is matter. Thus, it is not merely both action and tendency, but also one of the things that acts and tends to move. In a certain way, this does not disqualify Prendergast's thesis completely, no more than it disqualifies Daniel's, though it does complicate both. Insofar as light is a body, it would be a mode of itself to the extent that, when motion is transmitted from light to light, it transfers its own tendency and modality to itself instantaneously. To whatever degree, this situation would appear to make light's action more than a mode, even if not quite an attribute, of light.

6. These few ways are the simple natures, in this context shape, but also "'form, extent, movement, and other such things'" that Foucault (1994) identifies as the mark of Descartes' moving away from resemblance in favor of comparison (Foucault 1994, p. 52). The order which will emerge from comparison, specifically in the guise of algebraic symbols, establishes knowledge as "based on identity and difference" which in turn ruptures the Renaissance system of resemblance and interpretation: "On the one hand, the general theory of signs, divisions, and classifications; on the other, the problem of immediate resemblances, of the spontaneous movement of the imagination, of nature's repetitions. And between the two, the new forms of knowledge that occupy the area opened by this new split" (Foucault 1994, pp. 57–58). In particular, because algebraic symbols are no longer "bound to what [they mark] by the solid and secret bonds of resemblance," "resemblance … can be manifested only by virtue of the imagination, and imagination, in turn, can be exercised only with the aid of resemblance" (Foucault 1994, pp. 58 and 68). The result is an analytic of imagination and an analytic of nature emerging from this relationship between imagination and resemblance. The analytic of imagination and the analytic of nature are united in a negative and positive fashion. The negative fashion claims that "if [the imagination] is able to restore order solely by duplicating representation, it is able to do so only in so far as it would prevent us from perceiving directly, and in their analytic truth, the identities and differences of things. The power [*pouvoir*] of the imagination is only the inverse, the other side, of its defect" (Foucault 1994, p. 70; 1966, p. 84). The positive fashion claims that "It is the disorder of nature due to its own history, to its catastrophes, or perhaps merely to its jumbled plurality, which is no longer capable of providing representation with anything

but things that resemble one another. So that representing, perpetually bound to contents so very close to one another, repeats itself, recalls itself, duplicates itself quite naturally, causes almost identical impressions to arise again and again, and engenders imagination" (Foucault 1994, p. 70). According to Foucault (1994), Descartes considers the imagination in the negative fashion, such that it takes on "the stigma of finitude, whether as the sign of a fall outside the area of intelligibility or as the mark of a limited nature" (Foucault 1994, p. 70). He may be assuming more than he realizes when he identifies the power of the imagination as a *pouvoir*. Indeed, if the imagination were a *pouvoir*, it would be easily considered simply the stigma of finitude both as what is outside intelligibility and as a mark of a limited nature, but since it is not clear that the imagination's power is a *pouvoir*, that stigma of finitude could take on a meaning distinct from the one Foucault (1994) lays at Descartes' feet. If the imagination's power is rather a *puissance*, a *potentia*, then the stigma of finitude may not be quite a stigma nor perhaps limited by the finitude that stigmatizes it. What Foucault (1994) seems to miss, in short, is that the algebraic symbolization which ruptures resemblance and establishes knowledge as comparative for identity and difference is itself the result of an imaginative moment, or at least is possibly comprehended by readers in the wake of an imaginative moment, in particular that moment in the *Discourse* where Descartes begins discussing the discovery of the method according to which the algebraic truths of the *Geometry*, *Optics*, and *Meteorology* will be revealed, that is, the moment where Descartes presents his *histoire* or fable. In other words, this positive fashion to unite the analytic of the imagination and the analytic of nature, which Foucault (1994) does not identify with Descartes, is already at work within the negative fashion of uniting these analytics, which he does identify with Descartes. The stigma of finitude, the outside of intelligibility and the mark of a limited nature, which Foucault's Descartes considers the unity of the analytic of imagination and the analytic of nature may perhaps not be so stigmatic and the finitude marked out here may not be simply finite. That the imagination, even negatively, is outside intelligibility is a sign of this potentiality.

7. This minimized resemblance indicates for Sepper (1996) a new concept of the imagination, where the imagination "takes on figures chiefly in two ways, through sensation and through the act of imagining" (Sepper 1996, p. 244). This new concept of the imagination for Descartes in turn gives rise, from the *Meditations* on, to a new concept, a new idea of idea, which "refers to the look of things in consciousness, to the form of thoughts" and which is distinct from corporeal forms (Sepper 1996, p. 245). However, for Sepper (1996), the new concept of ideas, insofar as it is analogous to corporeal forms (and corporeal ideas), "the workings of pure intellect are

understood as analogous to those of imagination, although those workings in the most proper sense exclude the imagination" (Sepper 1996, p. 146).

8. Descartes writes to Mersenne, in June or July 1635, "As for the eyepieces, I must say that after Galileo's condemnation I revised and completed the treatise I had begun some time ago. I have detached it completely from *The World*, and am planning on having it published on its own before long" (CSM-K, p. 49; AT I, p. 322). Murdoch indicates that "the treatise" refers to the *Optics* (see CSM-K, p. 49n. 4).
9. Merleau-Ponty (1968) critiques Descartes for the search for what is always a homunculus, even if it is ultimately reduced to "a metaphysical point," which perhaps could be a critique of this search for the status of the Cartesian imagination (Merleau-Ponty 1968, p. 210). He claims instead, somewhat contra Husserl (1999), that being will disclose itself "before a transcendence, and not before an intentionality" since this disclosure will be in the return of "engulfed brute being" to itself and the sensible's hollowing itself out (Merleau-Ponty 1968, p. 210). He distinguishes a hollow from a void insofar as the former is "not absolute non-being with respect to a Being that would be plenitude and hard core," but rather in relation to the "vault" which forms the hollow (Merleau-Ponty 1968, pp. 233–232). This is why "the soul is the hollow of the body" and why it is not a homunculus but the hollow of the mutual sensibility of bodies articulating each other (Merleau-Ponty 1968, p. 233). Such an understanding of the soul is at least a step toward "returning to the perceptual faith" which will help overcome Cartesian psycho-physiology where soul and physics are distinct from each other and which will help ruin "every distinction between the true and the false, between methodic knowledge and phantasms, between science and imagination" (Merleau-Ponty 1968, p. 26). On this last note, I believe this focus on the status of the Cartesian imagination, especially as it shows itself not to be the passive faculty of a pre-formed psychology, a showing which results from attending to the fable and the fable-structure or -logic of the Cartesian method, can contribute to the ruining of the psycho-physiology that is associated with Descartes but may in fact be more the result of Cartesians, or at least those who merely take Descartes at his word, as though he were incapable of deceit, even to himself.
10. To be more careful with Cartesian language, animals do not have a will, at least in the human sense, because they do not have understanding. As Garber (1992) points out, the two ways reason displays itself externally in humans are language and "our ability to respond appropriately in an infinite variety of circumstances," as opposed to animals' machine-like reactions (Garber 1992, p. 113). Even the automotivity of animals is really just evidence of, in the *Discourse*, "the disposition of their organs" (CSM I, p. 141; AT VI, p. 59). However, Descartes does claim, in *The Passions*, that

"all the movements of the spirits and of the gland which produce passions in us are nevertheless present in [animals] too, though in them they serve to maintain and strengthen only the movements of the nerves and the muscles which usually accompany the passions and not, as in us, the passions themselves" (CSM I, p. 348; AT XI, pp. 369–370; pt. 1, art. 50). Thus, a well-trained dog can resist the impulse to chase after a partridge or to run away from the sound of a gun firing. This distinction in the movement of the spirits and the pineal gland between humans and animals leads Garber (1992) to conclude that animals "lack all feelings and passions in the sense in which we have them, strictly speaking" (Garber 1992, p. 114). It is difficult to disagree with this position on Descartes, strictly speaking, but what is important about this moment in *The Passions* for me is that Descartes recognizes, if not volition and will in animals, a passion-like movement of the pineal gland which cannot be purely accounted for as passive, if passions in the soul can be understood as actions in the body. Thus, to be more precise, it may not be will that animals have, but it also seems impossible to consider them absolutely machines in this context if habituation has anything to do with pedagogy. For more on this issue, Derrida (2008, esp. pp. 75–76 and 82–83, and 2009, pp. 56–57), may be helpful.

11. Kirkeboen (1998) makes an intriguing argument that twentieth-century cognitive science "can be seen as a rediscovery of Descartes' psychology" insofar as "Descartes never studies mind in its essence, as pure thought," but as an embodied consciousness (Kirkeboen 1998, pp. 171–172). He is here making a strong distinction between Descartes and Malebranche's "decisive step backwards" in his adaptation of Cartesian optics (Kirkeboen 1998, p. 172). This embodied mind "legitimates his [i.e., Descartes'] combined logical (functionalistic) and physical (mechanistic) approach to all kinds of psychological phenomena," which is perfectly in line with cognitive science's approach to an "information processing psychology" (Kirkeboen 1998, p. 174).

    If Cartesian psychology is not incompatible with cognitive science, then, and if the way to 'see' thinking is to imagine it embodied in the fable of a mechanistic body, a further question would be what to make of the advances in cognitive science since 1982 or 1998. Here is where Noë (2009) is important. As he explains brain scans, the most localized they get, at least currently, still encompasses "regions in which there are hundreds of thousands of cells" (Noë 2009, p. 23). One aspect of this issue is that, just as Descartes "realizes that his limited knowledge of the nervous system does not allow him to give explanations of phenomena he predicts will be explained in the future" (Kirkeboen 1998, p. 171), the possible "specialization or differentiation among these cells, won't show up in the picture" (Noë 2009, p. 23). In addition, there is a necessary delay between

the phenomenon of neural-hematic activity and its reportage via PET and fMRI scans (even assuming that neural activity and blood flow are equivalent). More to the point here, however, is the methodological approach cognitive scientists have taken to making sense of the scans, which already are not detailed enough nor enough in 'real time' to explicitly claim clear and distinct ideas of brain phenomena. In particular, "Typically, data from different subjects is averaged," and this average is then projected "onto an *idealized*, stock brain" (Noë 2009, p. 23). Such a brain does not exist. It is an ideal, an *eidos*, or even a fabular brain. In this way, it could appear as though contemporary cognitive science not only rediscovers Cartesian psychology, but, to whatever extent it forgets or covers over the ideality of the averaged brain, is even engaging in a Malebranchian corruption of that psychology, a psychology that can only project from out of a hypothesized ideal, from out of a fable, what thinking 'looks like'. Attending to these technical, temporal, but especially the methodological limitations on the possibility of cognitive science, then, would suggest a kind of fabularity to this science's scientificity.

12. On this reading, the imagination in Descartes begins to appear significantly closer to the *eidos* in Husserl (1999) than an idea would be: "The eidos itself is a beheld or beholdable universal, one that is pure, 'unconditioned' … It is *prior to all 'concepts'*" (Husserl 1999, p. 71). That is, since ideas are concepts or at least conceptual ideas of things, and since ideas are the condition for the possibility of seeing thinking, the imagination is beginning to appear as though it is what brings about the conditioning that ideas perform. This activity on the imagination's part is not, however, fully unconditioned in the Husserlian sense insofar as the imagination is not precisely pure or unconditioned. It is in a state of flux between being unconditioned and conditioned, which is what prevents it from operating as a transcendental. It is clear that the imagination, even if it does bring forth the ideas which are the condition for the possibility of seeing thinking, is not itself unconditioned because, following Ariew and Grene (1995), the Cartesian idea is (possibly) influenced by Goclenius' account of the distinction between formal and objective concepts and dianoetic species, distinguished "perhaps because the 'species,' the form without the matter, is what is taken up in perception and lingers as an image in the mind" (Ariew and Grene 1995, p. 101).
13. See also Brewer (1983) where, in the context of *The Search*, he writes that, "To say that Descartes sub-poses fiction, placing it beneath the discourse of truth, suggests that it is upon the discursive act of producing a fiction that the Cartesian discourse of truth rests. Such a supposition implies that in Descartes, the stating of truth (*le vrai*) is inextricably bound up with the staging of an imaginary scene (*le vraisemblable*)" (Brewer 1983, p. 1237).

14. Garber (2001a) makes a similar claim when he argues that experiments are always regulated affairs for Descartes. As he points out, however, "neither do experimental phenomena have a role assigned to them in standard hypothetico-deductive conceptions of scientific method, as the touchstone of theory, the a-theoretical facts to which we can appeal to adjudicate between alternative theories" (Garber 2001a, p. 110). This non-standard role would appear to exist because of the importance of the imagination in allowing for the hypothetico-deductive methodology to develop in the first place. For Garber (2001a), "His [i.e., Descartes'] genius was in seeing how experience and experiment might play a role in acquiring knowledge without undermining the commitment to a picture of knowledge" (Garber 2001a, p. 110), but what he seems to elide in this context is the role the imagination has in developing that picture.
15. In this way, Cavaillé (1991) is exactly correct when he argues that "Space is neither conceived nor conceivable in itself, but as the 'essence' of 'material substance'. *The notion of space, first notion of the imagination, is inseparable from material exteriority, from the matter of which the real world is composed.* … Representation is an autoreferential presentation of the imagination only within the measurement where it simultaneously returns, as representation of a material space, to what is beyond and to that beyond itself, to the exteriority of which it is always also the image" (Cavaillé 1991, p. 223; my trans. and emph.). Cavaillé (1991) is of course emphasizing matter and its enfolded relationship to the imagination, whereas I am emphasizing the imagination in its self-excessive relationship to the external world.
16. Thus, "Descartes does not reject the syllogism for reasons of logic, but only for decisions on Being and beings" (Marion 1977, p. 218; my trans.).
17. Marion (1977) finds Descartes' position here "strange" because it appears that he fails to understand "the importance of the laws of conversion of syllogisms, and so on, which precisely assure to an isolated, vague, and insignificant piece of information its rational coherence within a theoretical set" (Marion 1977, pp. 217 and 218; my trans.). He concludes that Descartes does so because "the formally determinant element … coincides with the ontically determinant term …; the form and the genre thus play the formal role of the middle term" (Marion 1977, p. 218; my trans.).
18. As Sepper describes it, ancient analysis is distinct from the Cartesian version. While ancient analysis was complex, involved multiple simultaneous considerations, and demanded "a sophisticated geometrical insight," Cartesian analysis simplified the method "to a progressive linear sequence requiring attention to no more than two things at once," thereby making it more accessible to all human *ingenium* (Sepper 1996, p. 190). For Sepper (1996), this leads to a state, even in the early work of the *Rules*, where the imagination is active in a way it does not appear to be later,

"imagination is a necessary and sufficient cognitive tool when a quite restricted, local analysis is needed," but in more general analyses, the intellect is the necessary faculty because the imagination cannot take up the original synthesis, the simples of which must be found through analytic reduction (Sepper 1996, p. 228). As a result, he will claim that "the intellect is serving not just as a cognitive power but also as a lawgiver or, better, a rule giver" (Sepper 1996, p. 229). However, it is not clear that the imagination is precisely limited to local analyses, even if the intellect is required to take up the character and necessity of synthesis as such, or even if the intellect is a rule giver. If the givens of the world are synthetic, and if the imagination can analyze their syntheses on a local level, it would appear the initial foray into analysis is possible because of the imagination, whether passive or otherwise. The givens appear as *syn*thetic, as having parts. The world does not appear undifferentiated—that would be the pre-motive solid of *The World*. Thus, the possibility of engaging in a more 'global' analysis or in synthesis as such, the work of the intellect, finds its origin in the imagination, even in its most passive state. That the intellect, in generating the rules for analysis and synthesis, lays out the limitations of the imagination does not mean that the imagination does not exceed those limitations. Indeed, this excess or exceeding is precisely what occurs, for instance, in the *Meditations*, when the fiction of 'six days, six meditations' establishes the grounds on which the analysis will play out—an analysis that sets precise limits to the imagination. It is also what occurs in *The World*, where the synthesis of the given world, the world as it appears, is re-synthesized in the fabular creation story that begins with a pre-motive, undifferentiated, solid world, a re-synthesis that is itself an imaginary and global analysis of synthetic givens back to their original (even pre-original) state. In both cases, it would seem that the imagination is exceeding the limits that the intellect would set for it in such a way that the very possibility of the intellect giving rules for the imagination to obey has been made by the imagination. Sepper's contrast of "realities" and "fictions made up by cogitation" (Sepper 1996, p. 252) does not precisely apply here because the context is one aspect of essences and/or corporeal reality, while the imaginative moments to which I am appealing are more foundational to the method as such, to the methodology of the method (analytic or synthetic). Thus, it would seem as though Sepper's appeal to the biplanar quality of the imagination, while clearly true to a certain extent, still enters the question of the imagination too late in the Cartesian corpus because it assumes a pre-formed faculty psychology where, though the imagination may exist in two different realms, those realms are separated and static and because it assumes that the analysis and synthesis are applied without context, save the context of a given synthesis of the world. To attend to the fundamental

status of fabular moments should not only call into question the assumption that the method can be so simply understood as a global analysis, but also undermine the notion of a pre-formed faculty psychology.

19. On this point, I agree with Rickless (2005) that "not everything that is clearly and distinctly perceived is known by the natural light" insofar as the natural light would be separate from the faculty of the understanding (Rickless 2005, p. 310). However, his appeal to the NL-Strategy as a way of coming to terms with how the natural light can avoid doubt as applying only to "perceptions, whether clear or obscure, that derive from the senses or from the imagination" appears to me an over-hasty understanding of the imagination as necessarily and always passive, all the more so considering his appeal at this moment in the essay is to the First Meditation, where the passivity of the imagination is not at all a clear and distinct position on Descartes' part (Rickless 2005, p. 310).
20. In this way, there could be a reconciliation between two sentences that could appear contradictory in Garber (2001b). He writes that the story he gives of divine motion "will not be complete until we see how the way in which Descartes' immutable God causes motion leads him to the concept of motion (and its associated forces and laws) which underlies his program in natural philosophy" (Garber 2001b, p. 202). However, he also distinguishes Descartes' motion from followers such as Louis de la Forge on the ground that divine causation does not exclude the possibility of finite causation, if only because we are the model for understanding all non-divine causation as finite, such that "Mind, indeed, can remain as direct a cause of motion for Descartes as God Himself" (Garber 2001b, p. 202). Garber (2001b), and perhaps Descartes himself, would most likely reconcile these two statements by claiming that the divine causation still leads to the concept of motion in such a way that mind cannot because, at the moment of the divine initiation of motion, no finite cause was available to do so. However, if the natural light would have already been malformed by witnessing finite causes and motions and if mind can cause motion, then the reconciliation between the statements may not necessarily be found in divine infinitude, but in something else, something neither finite nor infinite, or moving between them.
21. For Sepper (1996), Descartes develops a new concept of the imagination from the *Meditations* on, one that relates to a new concept of 'idea' as articulated in the *Objections and Replies* and that "refers to the look of things in consciousness, to the forms of thought," as opposed to the image of a corporeal thing (Sepper 1996, p. 245). In particular in reference to the Third Set of Objections with Replies, to Hobbes, he finds this new concept of 'idea' to indicate that "the workings of pure intellect are understood as analogical to those of the imagination, although those workings in the

most proper sense exclude the imagination" (Sepper 1996, p. 246). This analogy to the imagination whereby the imagination is excluded indicates a transcendent power to the intellect, which is why "The proper objects of intellect are the things that it can perceive even in sensibles and imaginables that do not belong per se to those sensibles and imaginables: the ideas of the essences of things (like the waxness of the wax)" (Sepper 1996, p. 248). He is able to build on this claim to show a biplanarity to the imagination, but it seems odd that he would 'reduce' the imagination to biplanarity while giving the intellect the ability to transcend, especially given his claim that the *Meditations* is dependent on the imagination (see Sepper 1996, p. 255). If the *Meditations* is dependent on the imagination, especially in its imagining a madman's thought processes, as Sepper (1996) claims, then why is the imagination not transcending itself, or its own limitations such that the intellect can take up its proper role, function in its proper fashion as a faculty?

22. There is, then, something similar to the Husserlian horizon structure of intentional analysis in the Cartesian imagination. As Husserl (1999) explains it, the horizon structure "prescribes for phenomenological analysis and description *methods of a totally new kind*, which come into action wherever consciousness and object, wherever intending and sense, real and ideal actuality, possibility, necessity, illusion, truth, and, on the other hand, experience, judgment, evidence, and so forth, present themselves as names for transcendental problems, to be taken in hand as genuine problems concerning 'subjective origins'" (Husserl 1999, pp. 48–49). For Husserl (1999), such horizons make possible a phenomenological engagement with the world. We have already seen how the fable opens onto the need for a new method in Descartes, but the fable is also only in service to the imagination's imagining the unimaginable. It is that by which Descartes' readers can begin, along with him, to imagine a whole new world or other people. The imagination, then, sets out the horizon structure within which the motions that the fable will inaugurate are made possible. Now, Husserl (1999) also claims that "Only an uncovering of the horizon of experience clarifies the 'actuality' and the 'transcendency' of the world, at the same time showing the world to be inseparable from transcendental subjectivity" and that the horizon of experience opens onto a world, which "*is an infinite idea, related to infinities of harmoniously combinable experiences—an idea that is the correlate of a perfect experiential evidence,* a complete synthesis of possible experiences" (Husserl 1999, p. 62). Descartes would probably disagree with at least the latter claim by Husserl (1999) insofar as there is a difference between infinitude and indefinition.
23. In this way, the imagination can be understood as opposed to Foucault's description of the beginning of madness where the movement in the passions

set off by a strong emotion can set off madness such that “the movement can be checked by its own excess, bringing a form of immobility that sometimes goes as far as death. It is as though in the mechanics of madness rest is not the same thing as an absence of movement, but can also be a brutal rupture within the self” (Foucault 2009, p. 229). Where this understanding of madness brings about immobility and a rupture within the self, the imagination’s excesses inaugurate the motion that will generate the self. Thus, while “‘Madness is no more than a disordering of the imagination’” insofar as the unity of body and soul is uncoupled and “the rationality of the mechanical” is undercut by the movements in the soul that passionate madness or mad passions set off, the imagination which is disordered in this case is of a late sort, of that ‘purely’ passive faculty to the imagination which emerges after the self has carved itself into faculties (Foucault 2009, p. 231). The madness that disorders the imagination here would be related to the madness which Descartes wants to instill in his readers, at least in the *Meditations*, insofar as it would involve a disruption of what had appeared unified, but it is not an immobilizing movement as this description of madness entails.

24. Marion (1999) claims that the infinite precedes the finite not merely as a matter of logic but also insofar as “it marks the priority of an *a priori*,” and so “as a transcendental condition for the possibility of the finite” (Marion 1999, p. 229). In being a transcendental condition for the finite, independence is an immediately deducible attribute of the infinite because “the idea of God implies independence as necessarily as it does noncreation and substantiality par excellence,” which means that independence determines “all that is not God as dependent” (Marion 1999, pp. 232 and 233). The human will and mathematical truths, then, remain dependent even though infinite, eternal, and/or immutable because, as Descartes puts it in the Fifth Set of Replies, “God willed and decreed that they should be so” (CSM II, p. 261; AT VII, p. 380). The mode of infinity that is the human will could be explained, then, following Marion, in that the will “experiences the infinite within the perspective of power [*puissance*]” (Marion 1999, p. 250n. 67; see also CSM-K, p. 25; AT I, p. 150). At the very least, there is nothing in the context of Descartes that Marion (1999) cites to suggest that the modes of infinity need to be isolated to the divine and human wills and mathematical truths, and if the transfinitude of the imagination is a mode of infinity distinct from the human and divine wills, it is no less distinct from mathematical truths.
25. The non-contrariness of wonder and desire are different from the non-contrariness, or lack thereof, of the Greek logos mentioned by Foucault (2009), the mention of which is discussed by Derrida (1978). For Foucault (2009), logos contained both reason and unreason, the latter of which was silenced in the Freudian moment (see Foucault 2009, pp. xxix

and 547). For Derrida (1978), this circumstance would demand that the history of Western philosophy "had already fallen outside and been exiled from this Greek logos that had no contrary," and the attempt to write a history of such an originary exile or division between the non-contrary logos and Western philosophy "runs the risk of construing the division as an event or a structure subsequent to the unity of an original presence" (Derrida 1978, p. 40). Wonder and desire have no contrary in a manner distinct from this supposition on and/or discussion of the Greek logos because neither are originary. This non-originarity is meant in at least two ways. First, even if wonder is the first passion, it remains thereby passive as a reaction to the wonders of the world. Second, insofar as both wonder and desire are two among a list of six primitive passions, neither could be originary of the other four. Neither wonder nor desire produce love, hatred, joy, or sadness because these passions emerge of their own accord.

26. Here I am contesting to some degree Ricoeur's argument concerning the Cartesian cogito as opposed to the Lockean self. He claims that Locke's self is the true invention of the modern subject insofar as "it is truly an invention," while "the grammatical subject of the Cartesian *cogito* is not a *self*, but an exemplary *ego* whose gesture the reader is invited to repeat" (Ricoeur 2004, pp. 102 and 103). The Cartesian ego does not invent consciousness in the way that Locke's self does since "Always thinking does not imply remembering having thought," while Locke's conscious self lays out "the diversity of the places and moments by means of which the Lockean self maintains its personal identity" (Ricoeur 2004, p. 103). One way to critique Ricoeur's position is to say that his reading of Locke's self disregards the fact that the "empty cabinet" of the mind precedes the memories that would give the self the consciousness Ricoeur (2004) desires, suggesting that the supposed construction of consciousness is established prior to experience, and thus prior to memory (Locke 1996, p. 23). Thus, the self is hardly invented here, but is a result of pulling memories from their appropriate drawers in the psyche. Another, related way to critique Ricoeur's position is to ask him what he understands as happening in the course of the analytic reduction to the cogito. His claim that there is no memory in the cogito assumes that the "lightning flash of an instant" in which the cogito is discovered can only be understood within the flash, within some parameters of the event of discovery (Ricoeur 2004, p. 103). This claim fails to account for *how* the cogito is discovered, the habituating procedure of hyperbolic doubt which is always in necessary reference to the experience of having been both deceived and wrong. This is a critique that can be developed from Deleuze's reading of Hume (see Deleuze 1991, esp. pp. 126–127). The Cartesian cogito is at least as much the result of memory as the Lockean self, it would seem, and may even be

more inventive than Locke's self if, borrowing from Deleuze (1991) on Hume, "the mind … transcends itself" when it deploys itself in the discovery of itself from out of the deceptions it has experienced through a deception of its own making (Deleuze 1991, p. 127).

27. In this regulation of wonder against the risk of astonishment, some credence would appear to be given to Reiss' claim that the *Passions* is connected to Descartes' earliest work on music because both engage in a "search to balance rule against experience, to explain the effects of art, to understand how aesthetic pleasure operated, and what it was that one might call the beautiful, the good, or the true" (Reiss 1997, p. 196). The rules generated in the telling of the fable are interpretable then, qua rules, as rules that will habituate reason such that it seeks out the rules by which it will come to understand experience. Were experience astonishing and not wondrous, reason would not be cultivated, rules would remain undiscovered, aesthetic pleasure operative but merely dumbfounding, and therefore not cultivating the intellectual joy found in the habits of reason, all set to motion by the fable.
28. For Sepper (1996), "The Sixth Meditation does not intend to investigate imagination for its own sake but tries to determine whether imagination as a faculty of mind is sufficient to establish the existence of something corporeal" (Sepper 1996, p. 248). His answer to the question how a chiliagon can be understood without an image is that "extension is imagined as such in this custom of cogitation [whereby I can represent a confused image to myself of what I could call a chiliagon or a myriagon], only it is not carefully articulated by the mind's distinct attention to its parts" (Sepper 1996, p. 250). Extension as such already implies images and imagination for Sepper (1996), and so even the unimaginable chiliagon or myriagon must be imagined as existing 'in' space. This does not make the imagination sufficient to establish corporeal things, but it does allow for it to strongly suggest them.

References

Ariew, Roger, and Marjorie Grene. 1995. "Ideas, in and Before Descartes." *Journal of the History of Ideas* 56 (1): 87–106. https://doi.org/10.2307/2710008.

Bergoffen, Debra B. 1976. "Cartesian Doubt as Methodology: Reflective Imagination and Philosophical Freedom." *Proceedings of the American Catholic Philosophical Association* 50: 186–195. https://doi.org/10.5840/acpaproc1976501.

Blizman, James. 1973. "Models, Analogies, and Degrees of Certainty in Descartes." *The Modern Schoolman* 50 (1): 183–208. https://doi.org/10.5840/schoolman19725012.

Brewer, Daniel. 1983. “The Philosophical Dialogue and the Forcing of Truth.” *MLN* 98 (5): 1234–1247. https://doi.org/10.2307/2906069.
Cavaillé, Jean-Pierre. 1991. *Descartes: La Fable du Monde*. Paris: Librairie Philosophique J. Vrin.
Daniel, Stephen H. 1976. “The Nature of Light in Descartes’ Physics.” *The Philosophical Forum: A Quarterly* 7 (3–4): 323–344.
Deleuze, Gilles. 1991. *Empiricism and Subjectivity: An Essay on Hume’s Theory of Human Nature*. Translated by Constantin V. Boundas. New York: Columbia University Press.
Derrida, Jacques. 1978. “Cogito and the History of Madness.” In *Writing and Difference*, translated by Alan Bass, 36–63. Chicago: The University of Chicago Press.
———. 2008. *The Animal That Therefore I Am*. Edited by Marie-Louise Mallet and translated by David Wills. New York: Fordham University Press.
———. 2009. *The Beast and the Sovereign, Volume I*. Edited by Michel Lisse, Marie-Louise Mallet, and Ginette Michaud and translated by Geoffrey Bennington. Chicago: The University of Chicago Press.
Fóti, Véronqiue M. 1986. “The Cartesian Imagination.” *Philosophy and Phenomenological Research* 46 (4): 631–642. https://doi.org/10.2307/2107673.
Foucault, Michel. 1966. *Les mots et les choses: Une archéologie des sciences humaines*. Paris: Éditions Gallimard.
———. 1994. *The Order of Things: An Archeology of the Human Sciences*. New York: Vintage Books.
———. 2009. *History of Madness*. Edited by Jean Khalfa and translated by Jonathan Murphy and Jean Khalfa. New York: Routledge.
Garber, Daniel. 1992. *Descartes’ Metaphysical Physics*. Chicago: The University of Chicago Press.
———. 2001a. “Descartes and Experiment in the *Discourse* and *Essays*.” In *Descartes Embodied: Reading Descartes Through Cartesian Science*, 85–110. Cambridge: Cambridge University Press.
———. 2001b. “How God Causes Motion: Descartes, Divine Sustenance, and Occasionalism.” In *Descartes Embodied: Reading Descartes Through Cartesian Science*, 189–202. Cambridge: Cambridge University Press.
Hatfield, Gary. 1997. “The Workings of the Intellect: Mind and Psychology.” In *Logic and the Workings of the Mind: The Logic of Ideas and Faculty Psychology in Early Modern Philosophy*, edited by Patricia A. Easton, *North American Kant Society Studies in Philosophy* 5, 21–45. Atascadero, CA: Ridgeview Publishing Co.
Husserl, Edmund. 1999. *Cartesian Meditations: An Introduction to Phenomenology*. Translated by Dorion Cairns. Boston: Kluwer Academic Publishers.
Kant, Immanuel. 2001. *Prolegomena to Any Future Metaphysics and the Letter to Marcus Herz, February 1772*. 2nd edn. Translated by James W. Ellington. Indianapolis: Hackett Publishing Co., Inc.

Kirkeboen, Geir. 1998. “Descartes’ Psychology of Vision and Cognitive Science: The ‘Optics’ (1637) in the Light of Marr’s (1982) ‘Vision’.” *Philosophical Psychology* 11 (2): 161–182. https://doi.org/10.1080/09515089808573254.

Locke, John. 1996. *An Essay Concerning Human Understanding*. Edited and abridged by John W. Yolton. London: J. M. Dent.

Marion, Jean-Luc. 1977. Annotations. In René Descartes, *Règles Utiles et Claires pour la Direction de l’Esprit en la Recherche de la Vérité*, translated Jean-Luc Marion, conceptual notes by Jean-Luc Marion, and mathematical notes by Pierre Costabel, 83–294. The Hague: Martinus Nijhoff.

———. 1999. *On Descartes’ Metaphysical Prism: The Constitution and the Limits of Onto-theo-logy in Cartesian Thought*. Translated by Jeffrey L. Kosky. Chicago: The University of Chicago Press.

Merleau-Ponty, Maurice. 1968. *The Visible and the Invisible: Followed by Working Notes*. Translated by Alphonso Lingis. Evanston, IL: Northwestern University Press.

Nancy, Jean-Luc. 1978. “Dum Scribo.” Translated by Ian McLeod. *Oxford Literary Review* 3 (2): 6–21. https://doi.org/10.3366/olr.1978.002.

Noë, Alva. 2009. *Out of Our Heads: Why You Are Not Your Brain, and Other Lessons from the Biology of Consciousness*. New York: Hill and Wang.

Prendergast, Thomas L. 1975. “Motion, Action, and Tendency in Descartes’ Physics in Descartes’ Physics.” *Journal of the History of Philosophy* 13 (4): 453–462. https://doi.org/10.1353/hph.2008.0516.

Reiss, Timothy J. 1997. *Knowledge, Discovery, and Imagination in Early Modern Europe: The Rise of Aesthetic Rationalism*. Cambridge: Cambridge University Press.

Rickless, Samuel C. 2005. “The Cartesian Fallacy Fallacy.” *Noûs* 39 (2): 308–336. https://doi.org/10.1111/j.0029-4624.2005.00503.x.

Ricoeur, Paul. 2004. *Memory, History, Forgetting*. Translated by Kathleen Blamely and David Pellauer. Chicago: University of Chicago Press.

Rosen, Stanley. 1969. “A Central Ambiguity in Descartes.” In *Cartesian Essays: A Collection of Critical Studies*, edited by Bernd Magnus and James B. Wilbur, 17–35. The Hague: Martinus Nijhoff.

Sepper, Dennis L. 1996. *Descartes’s Imagination: Proportion, Images, and the Activity of Thinking*. Berkeley: University of California Press.

CHAPTER 6

Conclusion

This work has considered the effect that attending to Descartes' use and mention of the fable has on conceptualizations of Cartesian method and imagination. Attending to the fable, especially insofar as establishing a fable-structure or -logic, needed to occur first. Only once it has become clear that the fable is a rhetorical device at work throughout the Cartesian corpus, one which runs to the inaugural points of Cartesian philosophy proper, can the method become understood as interwoven with the synthetic and syllogistic elements which Descartes otherwise disdains. That these synthetic and syllogistic elements operate in the service of a fable which allows for the imagining of a new world, new human beings, and the possibility of learning as such shows that the imagination's role is more complicated than even Descartes would seem to have himself believed. The fable-structure or -logic at the heart of Descartes' work and the attending to which exposes the method as more complicated than it appears is possible only because the imagination is able to exceed the bounds which it sets for itself. This exceeding is what makes the imagination neither a metaphysical nor a transcendental faculty. It is not metaphysical because there is always an element of the finite in it—it is not infinite in the way the will is. It is not transcendental because it does not establish the conditions for the possibility of experience for the other faculties. The imagination, as excessive of itself, moves, shifts, transitions between the finite and the infinite. This is what is meant by calling it a transfinite faculty. It accomplishes this transfinite movement by means of a

© The Author(s) 2018

J. Griffith, *Fable, Method, and Imagination in Descartes*,
https://doi.org/10.1007/978-3-319-70238-4_6

fable, and especially those fables that imagine new worlds and new humans that coincide with how they have been experienced. Yet, to make sense of this understanding of the imagination, it was necessary to affect, to cause a change in the understanding of the method such that an analytic reduction is never taken for a reduction to simples in the way that Descartes, or at least Cartesians, assumed. Seeing that the method is never precisely methodological, but is always split in at least two directions, is always schismatic—whether in reference to readers, to history, or to oneself—is most clearly and distinctly achieved through attending to the language and meaning of the concept of the fable for Descartes.

In the beginning and end of Descartes' career, as well as throughout it, there are consistent references to works of the imagination, in particular fables, though these references exceed the religio-political demands of his time, especially for men. In the earliest Cartesian fable, *The World*, the fable is associated with light insofar as both are rule-generative and rule-obedient as concerns the mind and the elements, respectively, but is dissociated from poetry insofar as poetry is associated with the chaos immediately following the inaugural movement that leads to the emergence of the world's elements, one of which is light. In the *Discourse*, the fable is associated with *histoire*, taken in both its possible translations, which associates it with an inauguration of a new form of pedagogy, whereby one learns to unlearn what one has learned and, simultaneously, to instruct oneself. This association with *histoire* opens onto a structural understanding of what the Cartesian fable would be and how it would operate, thus allowing it to be linked with the treatise, the dialog, hypothesis, and the novel, which is how Descartes characterizes various of his works, though they all begin with the concern for how to begin to unlearn and learn. Thanks to this understanding, it is possible to make sense of the deception and self-deception involved in hyperbolic doubt as a methodologization of the fable, making the fable a logic or structure at the heart of the Cartesian project. As a result of attending to how the fable structures or gives logic to the Cartesian project, the method can no longer appear as a straightforward analytic reduction to the simples of the self, god, or geometric essences, but is constantly interwoven with the synthesis Descartes would seemingly reject. This complex relationship between analysis and synthesis then knots the inexactness of history and etymology up with the seemingly exact sciences that would presume to strictly follow the assumptions of Cartesian analysis because there is consistent reference to the literary and politico-religious history involved with

the descriptions of the development of the method. This relationship between the exact and inexact sciences then exposes a supplementarity between justifications for the ordering of the life of the metaphysician and that of practical life, which in turn exposes a similar supplementarity between rule-generation and rule-obedience, which is what the fable exposed as early as *The World*. The complexity, interwovenness, and supplementarity at hand in the method, shown as an effect of attending to the fable, then gives way to an understanding of the Cartesian mind as precisely not pre-formed into distinct and discrete faculties, which is why the fable and the method can operate with the complicated relationship between rule-obedience and rule-generation that they do. To be clear about this, it was necessary to show how Descartes' conception of physical space as plenum then necessarily applies to the imaginary space wherein the fable of *The World* is told, meaning that the imagination does not precisely exist in a biplanar fashion. Rather, the imagination is able to move between the infinity of the will and the finitude of intellectual perception, which an examination of the passion of wonder exposes, thereby making the imagination a transfinite faculty that exceeds the limitations it places upon itself, leaving the intellect dependent on the imagination to imagine what would seem to be unimaginable in order for the intellect and will to have the capacity for judging.

With that, I would like to end approximately where I began, with the Weenix portrait, made so near Descartes' end. It is in many ways typical of the Dutch Golden Age: Descartes is shown from the waist up, in black clothing save a white collar, against a plain background. However, in some ways it breaks from that style. The background is significantly lighter, gray or even brown, and so does not achieve the full chiaroscuro vision of the Renaissance or some other Dutch Masters. In addition, Descartes the scientist and mathematician is not shown with the instruments of his fame. Instead, he holds a book in his hands—they do not appear to be gloved, are nearly gray themselves—with the words "Mundus EST fabula" visible on the verso page. Descartes' head is cocked to the side, his eyes gazing at us, his thin hair flowing, and the beginnings of jowls forming. He looks serious, or perhaps deadpan, with the slightest hint of a smile creeping in the right corner of his mouth.

Mundus est fabula. The world is a fable. What is said, signified in these words, what story told? The copula lets subject and predicate complement each other in something of an equation of nominatives. The world is a story, it signifies something, tells the story of itself. The world is its own

moral, generates its own narrative rules. This sentence, this moral for the world that is a fable, signifies that the rules of the world remain that: rules, which can be generated as well as obeyed, and both in the same gesture. This makes the fable, then, equal to the world. *Fabula est mundus.* The fable is a world. Here is the ultimate result of all Descartes' analytic reduction, to find, at the end, that the world is a fable and the fable is a world, a world unto itself, a world of the imagination. It is thanks to the imaginative fable that the world becomes as such, that it comes to be the world, a world whose rules can be discovered. The story of the world, the story that is the world, remains words in a book, held in the hands of a man who was soon to be dead. These words, this equation, "Mundus EST fabula," need not resemble what they or it signify, the world or the fable, and they do not insofar as they remain the moral of the fable that is the Cartesian world. And yet they do resemble what they signify insofar as they, as words, are things, and things that signify words themselves, the words of stories and fables. So here, in this final statement, this final fable, Descartes (or perhaps Weenix, who would then be the greatest Cartesian of all) signifies the words that are the world and the world of words as fabular, words signifying themselves and, in so doing, are in fact the world itself. *Mundus est fabula*, *fabula est mundus.*

Index[1]

A
Air, 11–16, 19, 161, 164, 165
Algebra, 1, 13, 15, 23, 49, 87, 90–94, 105, 121, 122, 129n11, 184–185n6
Analysis, 1, 6, 12, 31, 77n7, 88–96, 98, 102, 106, 111–113, 119, 127n3, 127n4, 127n5, 127–128n6, 128n7, 128n8, 129n11, 132n14, 135n16, 153, 169, 170, 173, 189–191n18, 192n22, 200
Animal spirits, 159–161, 165, 166, 168, 174–176
Antistrophe, 93, 129n11
Arguments, 26, 39n8, 43n17, 64, 67, 72, 73, 76n6, 79–80n11, 81n13, 89, 104, 112, 126n1, 128n7, 131n13, 133–134n15, 136n19, 169, 187n11, 194n26
Ariew, Roger, 113, 114, 136n18, 188n12
Aristotelianism, 17–20, 22–24, 51, 90–92, 94, 120, 128n9
Aristotle, 2, 7n1, 16, 17, 36n4, 90, 91, 93, 94, 132n14, 138n25
Arnauld, Antoine, 64
Astonishment, 148, 177–179, 195n27
Attribute, 17, 38n8, 40n13, 81n14, 109, 110, 138n23, 152, 156, 165, 174, 184n5, 193n24
Author, 21, 25, 27, 33, 34, 38n7, 52, 54, 61, 64, 66, 73, 75n2, 78n7, 125, 126, 130–131n13, 138n22, 140n29
Authority, 8n3, 34, 40n10, 50–52, 69, 75n2, 78n8, 107, 120, 126, 127n4, 132n14, 140n30, 147

B
Baillet, Adrien, 8n3, 40n12, 151
Becker, Marvin, 51, 52
Bellarmine, Cardinal Robert, 5, 58

[1]Note: Page numbers followed by "n" refers to note.

© The Author(s) 2018

J. Griffith, *Fable, Method, and Imagination in Descartes*,
https://doi.org/10.1007/978-3-319-70238-4

Bergoffen, Debra B., 139n28, 183n3
Biplanar, 22, 126, 146, 152–154, 159, 171, 176, 179, 183n3, 190n18, 192n21, 201
Blanchot, Maurice, 78n7
Blizman, James, 100, 101, 156
Blood, 164, 165, 188n11
Body, 13–15, 20, 26, 37n6, 65, 109, 132n14, 145, 154, 155, 160–164, 166–168, 174–177, 179–181, 183n2, 183n4, 184n5, 186n9, 187n10, 187n11, 193n23
Bok, Sissela, 79n10
Books, 7, 30–32, 43n17, 43n18, 57, 60, 62, 104, 105, 111, 112, 128n7, 147, 149
Bounds, 170, 199
Bourdin, Father Pierre, 29, 92, 124
Brain, 146, 160, 161, 165, 166, 174–177, 187–188n11
Brann, Eva T. H., 82–83n15, 128n10, 129n10
Brewer, Daniel, 56, 57, 188n13

C

Cartesian, 3, 6, 19, 23, 24, 27, 35n2, 36n3, 37n6, 37–38n7, 39n8, 43n18, 51, 52, 55, 58, 62, 68, 70, 75n2, 79n9, 80n11, 80n12, 87–90, 93, 94, 98, 111–113, 117, 119, 121, 127n3, 127n4, 127n6, 128n8, 129n11, 131n13, 131–132n14, 135n16, 136n19, 137n22, 138n26, 139n27, 141n30, 145, 146, 152, 158, 159, 167, 169, 171, 186n9, 186n10, 187–188n11, 188n12, 188n13, 189–190n18, 192n22, 194n26, 199–202
Catholic, 48, 50
Catholicism, 50, 121
Cavaillé, Jean-Pierre, 18–20, 37–38n7, 65, 125, 126, 130–131n13, 136n19, 138–139n27, 140n29, 183n4, 189n15
Cavendish, Margaret, 4, 5, 7n2
Certainty, 68–71, 73, 100, 104, 106, 113, 114, 116, 117, 131n13, 139n28
Chanut, Hector-Pierre, 114, 120, 126
Chaos, 12–16, 18, 19, 21, 22, 27, 35n2, 47, 168, 200
Chiaroscuro, 65, 89, 117, 201
Chivalry, 51
Church, 106, 107, 114, 120
Cicero, 89, 126n1
Clavius, Christoph, 91
Cognition, 71, 104
Comments on a Certain Broadsheet, 5
Complex, 6, 12, 30, 40n10, 87, 88, 95–98, 112, 113, 119, 123, 130n13, 153, 189n18, 200
Complexity, 87–89, 95, 98, 130n13, 201
Conceptions, 17, 18, 21–23, 51, 92, 109, 150, 151, 157, 161, 189n14, 201
Conclusion, 2, 27, 89–91, 93, 94, 110, 121, 122, 139n28, 140n29, 149, 169, 182, 183n4, 199–202
Concurrence, 27
Conditions, 69, 74n1, 100, 101, 107, 115–117, 119, 127n3, 130n11, 134n16, 140n29, 158, 173, 178, 188n12, 193n24, 199
Conjecture, 70, 71, 73, 99, 102, 104, 126n1, 158
Conversation with Burman, 121
Cottingham, John, 1, 8n3, 76n5, 81n13, 151
Courcelles, Étienne de, 28, 40n12
Creation, 4, 15, 16, 38n8, 40n9, 54, 183n4, 190n18

Curiosity, 61, 77–78n7
Custom, 50, 52, 53, 71, 103, 109, 112, 123, 156, 195n28

D
D'Albert, Louis-Charles, 8n3
Daniel, Stephen H., 131n13, 136n17, 183n5, 184n5
Danube, 48
De Salluste du Bartas, Guillaume, 18, 19
Deception, 19, 22, 47, 51, 53, 62–74, 80–81n12, 87–89, 97, 99, 101, 102, 105, 107, 111, 137n22, 175, 178, 182, 195n26, 200
Deconstruction, 37n6
Deduction, 53, 92, 96, 106, 111
Deformation, 170, 171
Deleuze, Gilles, 39n9, 194–195n26
Democratization, 21, 29, 30, 52, 140n30
Demonstration, 6, 27–30, 38n7, 59, 71, 73, 75n2, 76n6, 89, 91, 94, 99, 127n3, 128n6, 130n11, 141n31, 156, 157
Derrida, Jacques, 37n6, 42n16, 78–79n9
Description of the Human Body, 164
Desires, 2, 4, 63, 77n7, 92, 95, 107, 115, 116, 118–120, 122, 123, 139n27, 177, 193n25, 194n26
Dialogue, 6, 23, 38n7, 47, 54–57, 59, 62, 83n16, 135n16, 147, 148, 170, 200
Diophantus of Alexandria, 89
Discourse on Method, 2, 6, 31, 42n16, 43n17
Disputations, 76n3, 105, 149
Distance, 2, 15, 27, 81n12, 109, 132n14, 160–164
Distinction, 1, 15–17, 19, 20, 26, 39n9, 41n15, 42n16, 65, 67, 80n11, 108–111, 118, 123, 127n5, 128n7, 138n23, 146, 152, 153, 160, 170–172, 174, 183n3, 186n9, 187n10, 187n11, 188n12
Doubt, 2, 6, 26, 31, 58, 64, 66, 67, 88, 155, 200
Dunn, Kevin, 38n7
Duplicity, 95, 169
Dutch Golden Age, 201
Dutch Masters, 201

E
Early Writings, 151, 182n2
Earth, 11–16, 19, 58, 59, 138n26, 164
Education, 2, 31–34, 43n17, 48–50, 104, 105, 124, 147, 149, 152, 160, 170
Elements, 12–16, 18, 27, 32, 49, 62, 90, 122, 128n9, 134n15, 155, 164, 170, 178, 179, 199, 200
Elizabeth, Princess of Bohemia, 6, 60, 65, 115, 122
England, 52
Epistemology, 12, 23, 122
Errors, 2, 31, 95, 102, 106–112, 115, 138n22, 172
Ethics, 31, 76n3, 114
Etymology, 77n7, 88, 108–113, 200
Evil genius, 6, 52, 68–74, 81n13, 82n14, 83n16, 98, 99, 101, 126n1, 135n16, 154–158, 171, 180, 182, 183n3, 183n4
Example, 12, 25, 49, 91, 94, 98, 99, 117, 125, 129n11, 140n29, 150, 157–160, 183n4

Experiences, 13, 19–23, 30, 32–34, 49, 55, 63, 66, 95–97, 108, 111, 112, 122–125, 129n11, 131n13, 134n16, 137n22, 139n28, 141n30, 145, 148, 167, 168, 171, 173, 178, 180, 181, 189n14, 192n22, 193n24, 194–195n26, 195n27, 199, 200

F

Fable, 1, 11–34, 47–74, 87, 145, 199
Facultas, 24, 27, 28, 40n11, 149, 154
Faculty, 1, 3, 4, 6, 24–27, 29, 39n8, 40n11, 64, 66, 133–134n15, 145–147, 149, 150, 153, 154, 157–159, 169–172, 179, 181, 182, 186n9, 190–191n18, 191n19, 192n21, 193n23, 195n28, 199, 201
Faire voir, 29, 30, 41n15, 42n16, 56, 57, 124
Faith, 75n2, 79n10, 104–107, 110, 111, 121, 123, 136n19, 186n9
Ferdinand II, Holy Roman Emperor, 48
Fictions, 4, 7, 8n3, 35n2, 38n7, 40n9, 57, 64, 71, 82n14, 182, 188n13, 190n18
Figures, 38n7, 70, 81n13, 90, 131n13, 135n16, 151, 152, 155, 157, 161–165, 169, 181, 185n7
Finite, 3, 4, 20, 132–133n14, 146, 172, 173, 179, 185n6, 191n20, 193n24, 199
Fink, Eugen, 129n11, 130n11
Flynn, Bernard Charles, 50, 51
Fonseca, Pedro, 90
Forms, 6, 11, 12, 14, 16, 17, 19, 29, 41n15, 47–62, 66, 74, 74n1, 75n2, 76n3, 79–80n11, 88, 91, 93, 94, 99, 101, 103, 109–112, 114, 116, 126, 130n13, 135n16, 136n20, 137n22, 147–150, 154, 155, 157, 159, 165, 169–171, 176, 179, 184n6, 185n7, 186n9, 188n12, 189n17, 191n21, 193n23, 200
Fóti, Véronique, 182n2, 183n2
Foucault, Michel, 74–75n2, 119, 136–137n20, 153, 184–185n6, 192n23
France, 48, 52
French, 8n3, 21, 28, 29, 51–53, 60–62, 64, 66, 77–78n7, 79n9, 114, 117, 155
Future, 38–39n8, 63, 141n31, 187n11

G

Galilei, Galileo, 5, 58, 59, 186n8
Garber, Daniel, 20, 36n3, 58, 76n3, 76–77n6, 128n7, 128n8, 186–187n10, 189n14, 191n20
Gassendi, Pierre, 67–69
Gaukroger, Stephen, 64, 90, 91
Generation, 23, 27, 38n7, 43n18, 59, 76n4, 124, 126, 131n13, 158, 166
Generosity, 51, 52, 116
Genre, 3, 7, 22, 42n16, 189n17
Geometry, 1, 6, 13, 23, 24, 33, 49, 88, 91–93, 105, 110, 121, 122, 127n3, 162, 163, 185n6
Germany, 48, 51
Gilson, Étienne, 25, 26, 40n11, 127n3
Goclenius, Rudolph, 188n12
God, 7, 21, 53, 63, 69, 98, 113, 156, 172, 180, 200
Good sense, 27, 30, 31, 34, 40n11, 42n16, 47, 48, 51–55, 60, 62, 66, 68, 78n7, 103, 126, 140n30
Grene, Marjorie, 69, 188n12

H
Habit, 7, 25, 71, 73, 112–120, 175, 177–179, 195n27
Hatfield, Gary, 146
Heidegger, Martin, 77n7, 82n14, 88
Histoire, 30–34, 41n15, 43n17, 43n18, 48, 53–55, 57–60, 66, 73, 75n2, 77n7, 78–79n9, 108, 111, 113, 170, 173, 178, 182, 185n6, 200
History, 6, 22, 23, 30, 33, 41n15, 47–55, 63, 66, 74, 74n1, 74–75n2, 79n9, 87, 88, 105, 106, 108, 113, 136n17, 136n20, 137n22, 138n27, 173, 194n25, 200
Hobbes, Thomas, 140n30, 191n21
Honesty, 52
Hume, David, 194n26, 195n26
Humility, 51
Husserl, Edmund, 117, 118, 129–130n11, 186n9, 188n12, 192n22
Huygens, Constantijn, 60
Hyperbole, 6, 67–70, 88, 134n15
Hypothesis, 5, 7, 47, 57–62, 66, 69, 76n4, 80n12, 166, 183n3, 200

I
Idea, 2, 3, 7, 24, 25, 37n7, 53, 72, 87, 89, 99, 100, 109–111, 115–117, 129n11, 131n13, 136n19, 145, 151, 156–158, 165, 166, 172, 180, 181, 185n7, 188n11, 188n12, 191–192n21, 193n24
Image, 71, 100–102, 155–158, 180, 188n12, 189n15, 191n21, 195n28
Imaginary space, 20, 21, 24, 25, 34, 54, 80n11, 140n29, 146, 159, 201
Imagination, 6, 13, 53, 102, 166
Imitation, 1, 6, 33, 88, 113, 121–123, 126, 139n27, 152
Inauguration, 6, 11, 66, 74, 104, 108, 117, 158, 159, 170, 171, 179, 200
Indefinite, 173, 176
Infinite, 3–5, 78n7, 135n16, 146, 172–174, 179, 186n10, 191n20, 193n24, 199
Ingenium, 102–104, 106, 131n13, 136n17, 189n18
Intellect, 43n17, 87, 90, 99, 104, 107, 114, 115, 117, 119, 120, 126, 136n17, 145, 146, 150–154, 172, 177, 179–182, 183n2, 185n7, 190n18, 191–192n21, 195n27, 201
Interpretation, 22, 23, 34, 50, 55, 62, 75n2, 76n4, 108, 112, 132n14, 133n15, 171, 173, 184n6
Interweaving, 70, 88, 101, 102, 111, 112, 124
Intuition, 95, 96, 136n18, 136n20, 183n4
Inventa, 89, 126n1, 181, 182

J
Jones, Alexander, 2
Joughin, Martin, 39n9
Judgment, 28, 30, 33, 34, 50–52, 54, 62, 99, 103, 105, 107, 119, 124, 151, 158, 163, 164, 172, 174, 180, 181, 192n22

K
Kant, Immanuel, 170
Kennington, Richard, 138n26
Kirkeboen, Geir, 187n11
Knot, 88, 102, 112, 119, 121, 124, 125

Knowledge, 2, 31, 32, 42n16, 53, 55, 56, 65, 68, 72, 74n1, 74n2, 77n7, 83n15, 99, 103–105, 107, 109, 111, 112, 114, 115, 118, 119, 121–123, 136n20, 146, 148, 149, 151, 152, 156, 158, 162, 167, 170, 174, 177, 178, 181, 184–185n6, 186n9, 187n11, 189n14
Knowns, 93, 94, 96
Kuhn, Thomas S., 137n22

L
La Flèche, 76n3, 90, 128n9
La Fontaine, Jean de, 37n6, 141n31
Language, 12, 17, 18, 22, 23, 31, 42n16, 60, 62, 64, 69, 78n9, 110, 117, 133n14, 137n21, 175, 186n10, 200
Latin, 8n3, 28, 29, 40n12, 40n13, 58, 60–62, 68, 76n5, 79n9, 110, 147
Laws, 12–14, 17, 18, 21, 27, 36n3, 50, 76n6, 121, 123, 124, 166, 189n17, 191n20
Le Bossu, René, 128n9
Light, 3, 5, 6, 12, 13, 16, 18–25, 34, 35n2, 37n6, 41n15, 43n18, 52, 54–56, 61, 63, 65, 68, 74, 77–78n7, 96, 104, 110, 130n13, 133–134n15, 141n31, 151, 160–168, 171, 172, 179, 183–184n5, 191n19, 200
Limitations, 88, 111, 176, 182, 188n11, 190n18, 192n21, 201
Liquid, 12, 65, 164, 165
Literary, 3, 11, 22, 43n18, 49, 51, 52, 54, 55, 57, 66, 73, 74, 87, 88, 200
Location, 48, 159–164, 166, 168
Locke, John, 194n26, 195n26
Logic, 2, 47, 74, 126, 169, 200

M
Madness, 139n28, 183n3, 192–193n23
Mahoney, Michael S., 91, 92, 127n5, 127n6
Malformation, 149
Marion, Jean-Luc, 40n10, 103, 127n3, 136n18, 138n25, 189n16, 189n17
Mathematics, 1, 2, 31, 69, 90–93, 110, 117, 121, 127n3, 127n4, 131n13, 132n14, 136n17, 138n25, 179–181
Mathesis, 110, 111, 132n14, 138n25, 153
Matter, 11–20, 24, 27, 35n2, 36n3, 49, 50, 66, 105, 117, 120, 123, 128n7, 151, 152, 164, 165, 167, 169, 170, 173, 184n5, 188n12, 189n15, 193n24
Maurice of Orange, 50
Maximilian I, Duke of Bavaria, 48
Meditation, 3, 6, 8n3, 26, 38n7, 49, 50, 52, 53, 63–67, 69–71, 79n10, 79–80n11, 80n12, 81n13, 82n14, 83n16, 93, 94, 98, 99, 106, 128n7, 133–134n15, 135n16, 147, 149, 154–159, 167, 171, 172, 179, 180, 185n7, 190n18, 191n19, 191–192n21, 193n23
Meditations on First Philosophy, 2, 66
Memory, 29, 38n8, 96, 106, 108–110, 112, 137n21, 145, 165, 177, 178, 180, 183n2, 194n26
Merleau-Ponty, Maurice, 80n12, 186n9
Mersenne, Marin, 26, 37–38n7, 58, 66–68, 78n9, 186n8
Mesland, Denis, 7, 57, 58

Metaphysics, 1, 6, 11, 65, 67, 69, 76n3, 114, 115, 128n7, 140n30
Method, 1, 22, 47, 88, 145, 199
Methodology, 11, 105, 135n16, 136n19, 189n14, 190n18
Mind, 1, 13, 49, 88, 145, 200
Mode, 15, 38–39n8, 58, 73, 74–76n2, 78n9, 101, 109, 110, 115, 129n11, 132n14, 172, 173, 179, 184n5, 193n24
Model, 35n2, 72, 99–102, 156, 157, 191n20
Moral, 23, 33, 34, 37n6, 55, 57, 113–116, 118–126, 138n26, 139n27, 139n28, 140–141n30, 141n31, 202
Morin, Marie-Eve, 35n2
Motion, 5, 12, 47, 88, 148

N

Naissance de la Paix, La, 12
Nancy, Jean-Luc, 35n2, 43n18, 75n2, 97, 125, 126, 127n4, 131n13, 140n29, 167
Natural light, 55, 56, 96, 104, 133–134n15, 171, 191n19, 191n20
Newton, Sir Isaac, 14, 36n3
Noë, Alva, 187n11
Novels, 6, 7, 23, 47, 57, 62, 66, 77n7, 114, 147, 177, 178, 200
Nuremberg, 48

O

Obedience, 23, 48, 113, 140n30
Objections and Replies, 6, 66, 69, 106, 182, 191n21
Objective, 188n12
Objects, 2, 13, 16, 25, 36n3, 39n8, 41n15, 49, 50, 65, 68, 77–78n7, 82n14, 87, 95, 99, 100, 104, 107, 109, 116, 131n13, 132n14, 134n16, 154, 157, 160–166, 172, 175–178, 180, 181, 183n4, 192n21, 192n22
Ontology, 35n2, 131–132n14
Optics, 159, 163, 164, 174, 186n8
Order, 2, 6, 11, 12, 16–19, 21, 23, 24, 27, 30, 31, 38n7, 38n8, 39–40n9, 51, 53, 55, 58, 68–71, 74, 74n1, 76n4, 77n7, 78n9, 79n10, 88, 91, 95–97, 99–101, 104, 105, 107, 109, 110, 113–115, 119, 121–124, 126, 127n4, 128n7, 130–131n13, 136–137n20, 139n27, 140n30, 148–153, 157–160, 163, 166–168, 183n2, 183n4, 184n6, 201

P

Page, Carl, 116
Pappus of Alexandria, 89
Passions, 52, 115, 116, 118, 120, 122, 140n29, 145, 146, 150, 153, 171, 172, 174–178, 186–187n10, 192–193n23, 194n25, 195n27, 201
Passions of the Soul, The, 6, 51, 77n7, 174
Past, 30–32, 38n8, 43n17, 43n18, 49, 56, 63, 73, 104, 108, 111, 112, 136n19, 141n30
Path, 11, 18–20, 28–34, 42n16, 48, 55, 56, 65, 87, 88, 96, 98, 103, 108, 112, 114, 124, 125, 129n11, 135n16, 160, 162, 176
Paul V, Pope, 5
Pedagogy, 3, 12, 23–34, 92, 94, 137n21, 146–159, 169, 187n10, 200

Perception, 3, 6, 79n10, 99, 107, 117–119, 130n13, 133n15, 145, 154, 156–158, 160, 163, 174–176, 179–181, 188n12, 191n19, 201
Persuasion, 23, 52, 59, 94
Philosophy, 1, 4–6, 11, 12, 20, 41n14, 43n17, 47, 51, 55–57, 60, 61, 66, 67, 69, 73, 74, 76n3, 79–80n11, 83n15, 95, 108, 114, 115, 117, 118, 120, 129n11, 137n22, 139n28, 149, 169, 191n20, 194n25, 199
Physics, 12, 16, 18–20, 65, 76n3, 95, 114, 115, 131n13, 132n14, 174, 186n9
Picot, Abbé Claude, 60
Pineal gland, 146, 165, 166, 174, 175, 187n10
Plenum, 12, 13, 17, 20, 24, 25, 163, 164, 167, 170, 201
Poêle, 30, 48–54, 74n1
Poetry, 7, 11–23, 31, 35n2, 47, 49, 56, 168, 200
Politics, 29, 138–139n27
Possibilitas, 26
Possibility, 11, 20, 26, 38–39n8, 39–40n9, 51, 57, 59, 74n1, 76n4, 81n13, 112, 116–119, 130n11, 134n16, 141n30, 149, 153, 156, 168, 169, 188n11, 188n12, 190n18, 191n20, 192n22, 193n24, 199
Potentia, 16, 17, 24–28, 38–39n8, 39n9, 40n11, 53, 62, 66, 78n7, 126, 134n15, 149, 168, 171, 173, 185n6
Potential, 11, 15, 22–26, 28–32, 34, 39n9, 52, 54–56, 66, 72, 77n7, 103, 120, 129n11, 134n15, 149, 152, 154, 173, 182
Pouvoir, 26, 39n8, 39n9, 149, 184–185n6
Power, 4, 26, 28, 31, 38–39n8, 39n9, 53, 62, 72, 96, 115, 126, 127n3, 138n23, 140n30, 149, 163, 168, 171, 172, 184–185n6, 190n18, 192n21, 193n24
Practical, 67–70, 88, 95, 106, 113, 114, 119, 120, 123, 124, 139n28, 147, 182, 201
Premise, 2, 33, 34, 65, 90, 91, 94, 129n10, 129n11, 133n15
Prendergast, Thomas L., 14, 15, 138n23, 183–184n5
Present, 5, 8n3, 12, 33, 38n8, 42n16, 43n17, 63, 64, 66, 71, 76n4, 80n12, 87, 105, 112, 135n16, 154, 155, 165, 167, 169, 171, 173, 174, 178, 182, 183n3, 185n6, 187n10, 192n22
Preservation, 15, 16, 21, 25, 38n7, 100, 114, 177
Presupposition, 62, 74n1, 90, 129–130n11
Principles of Philosophy, 2, 6, 7
Proof, 2, 48, 58, 60, 66, 72, 89, 90, 92, 95, 98–102, 106, 116, 117, 127n6, 135n16, 156, 179, 180
Protestant, 48–50
Protestantism, 50
Psychology, 145, 146, 153, 154, 157–159, 169–171, 186n9, 187–188n11, 190–191n18
Puissance, 17, 24, 27–30, 34, 39n8, 39n9, 40n11, 40n13, 47, 62, 66, 115, 119, 126, 149, 168, 185n6, 193n24

Q

Quaestiones, 29, 56, 66, 92, 95, 104, 105, 149

R

Ramus, Petrus, 91
Reader, 3–6, 8n3, 20–23, 27–30, 32–34, 37n6, 38n7, 41n15, 43n18, 47–62, 64–66, 68–70, 73, 74, 75n2, 77–78n7, 79n9, 79n10, 80n12, 88–90, 92, 94, 108, 112–114, 124, 127n6, 128n7, 128n10, 131n13, 138n22, 141n30, 148, 150, 158, 160, 161, 166, 170, 182, 185n6, 192n22, 193n23, 194n26, 200
Real, 13, 24, 36n3, 70, 101, 109, 113, 134n16, 138n23, 166, 182, 188n11, 192n22
Reason, 2, 4, 17, 21, 22, 28–31, 33, 34, 37n6, 38n7, 40n12, 42n16, 43n17, 48, 52–54, 56, 59, 60, 62, 66, 68, 69, 72, 76n5, 92, 101, 104, 107, 108, 112, 115–122, 124, 126, 128n10, 133–134n15, 135n16, 141n30, 147–152, 162, 167, 169, 175–179, 183n4, 186n10, 189n16, 193n25, 195n27
Reduction, 1, 2, 87, 89, 90, 92, 93, 96, 106, 111, 117, 123, 129n11, 132n14, 137n21, 138n25, 139n28, 169, 170, 190n18, 194n26, 200, 202
Reformation, 3, 4, 150, 170, 171
Reif, Sister Patricia, 76n3, 137n22
Reiss, Timothy J., 195n27
Religion, 55, 121
Renaissance, 74n2, 184n6, 201
Resemblance, 16, 25, 119, 136–137n20, 157, 184–185n6, 185n7
Rhetoric, 12, 23, 29, 38n7, 43n17, 43n18, 48, 65, 68, 69, 74, 76–77n6, 88, 89, 93–95, 98, 111, 112, 128n9, 129n10, 149, 169
Rickless, Samuel C., 133n15, 134n15, 191n19
Ricoeur, Paul, 74n1, 137n21, 194n26
Rosen, Stanley, 183n4
Roy, Henri de, 24, 27
Rules, 6, 7, 12–14, 16–18, 21–24, 35n2, 48, 53, 55, 58, 62, 67, 71, 81n14, 90–93, 95–99, 102–104, 106, 108–111, 113, 130n12, 130–131n13, 133–134n15, 136n17, 136n19, 139n27, 139n28, 140–141n30, 141n31, 145, 149, 150, 152, 157, 159, 164, 166, 167, 169, 173, 178, 182, 189–190n18, 195n27, 202
Rules for the Direction of the Mind, 6

S

Schmitt, Carl, 140n30
Scholasticism, 7, 39n8, 56, 57, 69, 80n11, 136n19
Sciences, 6, 30, 64, 88, 92, 102–106, 109, 112, 114–116, 118, 122, 127n4, 130n11, 131n13, 136n19, 137n22, 138n26, 138n27, 140n29, 146, 148, 160, 186n9, 187–188n11, 200, 201
Scotland, 52
Search for Truth by Means of the Natural Light, The, 6
Self, 35n2, 38n7, 47, 51, 63, 69–73, 75n2, 78n8, 79n10, 81–82n14, 83n15, 83n16, 87, 88, 98–102, 112, 116, 119, 125, 126, 126n1, 132n14, 134–135n16, 139n27, 145, 155–157, 169, 181, 193n23, 194–195n26, 200
Self-deception, 22, 47, 63, 69–73, 79n10, 80n12, 82n14, 87, 98, 99, 102, 132n14, 154, 182, 200

Self-instruction, 3, 30, 32, 34, 41n15, 42n16, 47, 48, 63, 90, 92, 102, 104, 117, 121
Sensation, 2, 13, 16, 107, 108, 111, 145, 159, 185n7
Sepper, Dennis L., 136n17, 146, 152, 153, 185–186n7, 189–190n18, 191–192n21, 195n28
Seriousness, 54, 62, 66, 67, 80n12
Shape, 17, 31, 33, 65, 74, 140n30, 148, 151, 152, 155, 161–163, 165, 169, 170, 184n6
Sign, 22, 136n20, 184–185n6
Signified, 16–23, 25, 37n6, 78n9, 110, 135n16, 161, 188n12, 201, 202
Simple, 1, 41n15, 43n16, 50, 87, 90, 92, 94–98, 102, 105, 106, 111, 112, 116, 119–126, 129n11, 130n13, 137n21, 139n28, 141n30, 153, 162, 169–171, 180, 181, 184n6, 190n18, 200
Simplification, 1, 89–91, 93, 123
Size, 12, 15, 17, 161–165
Solipsism, 73, 134–135n16
Sorbonne, 29, 64, 66, 182
Soul, 6, 25, 26, 51, 53, 56, 63, 65, 66, 77n7, 109, 116, 122, 166–168, 174–177, 186n9, 187n10, 193n23
Sovereign, 5, 27, 37–38n7, 120, 125, 126, 140n29, 140–141n30, 141n31
Space, 12–14, 17, 20–22, 24, 25, 34, 54, 80n11, 140n29, 146, 148, 152, 159–171, 189n15, 195n28, 201
Specimina Philosophiae, 28
Spinola Doria, Don Ambrogio, 48
Spinoza, Benedictus, 39n9, 40n9
Stewart, William McC., 12
Strophe, 93
Structure, 1, 6, 11, 35n2, 37n6, 47, 87, 88, 91, 94, 98, 100–102, 111–113, 116, 119–121, 126, 128n7, 128n8, 129–130n11, 132n14, 134n15, 137n22, 146, 152, 153, 155–157, 159, 169, 171, 176, 186n9, 192n22, 194n25, 199, 200
Suárez, Francisco, 138n23
Substance, 27, 70, 71, 73, 81–82n14, 99–102, 109, 110, 138n23, 140n29, 146, 149, 152, 161, 165, 169, 171, 189n15
Supplement, 5, 6, 37n6, 53, 54, 70, 71, 81–82n14, 87, 88, 95–98, 101, 102, 112, 119, 130n12, 131n13, 135n16, 160, 169, 201
Supplementation, 113
Supposition, 59, 73, 155, 156, 167, 168, 188n13, 194n25
Suspicion, 52, 58, 75n2
Sweden, 6
Syllogism, 2, 29, 56, 67, 90–94, 99, 104, 121, 129n11, 149, 189n16, 189n17
Syllogisms, 92
Symbols, 49, 91, 92, 100, 153, 184–185n6
Synthesis, 2, 6, 89, 96, 98, 102, 106, 108, 111, 112, 119, 127n3, 127n4, 127n6, 128n7, 128n8, 129n11, 135n16, 136n20, 169–171, 173, 190n18, 192n22, 200

T

Teacher, 29, 43n17, 56, 147, 148
Teaching, 2, 29, 30, 32, 43n17, 55, 58, 127n4, 149
Textbooks, 58, 76n3, 77–78n7, 91, 92, 114, 128n7, 137n22

Theology, 18, 20, 31, 103
Things, 1, 2, 16–18, 23–25, 28, 39n9, 43n18, 57, 58, 62, 66, 69, 70, 74–75n2, 79n10, 81–82n14, 87, 88, 90, 91, 93, 95–97, 107–113, 119, 122, 130n13, 132n14, 136n19, 151–153, 158, 161, 167, 175, 177, 180, 181, 184n5, 184–185n6, 185n7, 188n12, 189n18, 191–192n21, 195n28, 202
Thinking, 2–4, 6, 11, 19–21, 25–27, 29, 35n2, 39n8, 50, 55, 66, 71, 73, 74, 79n10, 88, 91, 99, 107, 110, 113, 116–118, 120, 121, 128n7, 130n13, 132n14, 138n23, 138n26, 146, 148, 155–158, 166, 181, 182, 183n3, 187–188n11, 188n12, 194n26
Thirty Years' War, 48, 50
Toledo, Francisco, 90
Transcendental, 25, 35n2, 117, 118, 129–130n11, 134–135n16, 170, 188n12, 192n22, 193n24, 199
Transfinite, 4, 6, 133n14, 146, 173, 174, 176, 179, 182, 199, 201
Treatise, 6, 13, 20, 23, 47, 53–58, 60–62, 65, 66, 91, 166, 167, 182n1, 186n8, 200
Treatise of Man, 6, 53, 159, 164–168, 174
Truth, 2, 53, 87, 148, 192n22

U

Unconditioned, 101, 107, 188n12
Unimaginable, 81n13, 157, 158, 168, 173, 176, 178, 179, 182, 192n22, 195n28, 201
Universe, 13, 27, 32, 58, 122, 138n26, 167
Unknowns, 90–94, 96
Unlearning, 34, 55–57, 60, 70, 78n8, 108, 111, 112, 128n7, 148, 149
Unreason, 70, 178, 193n25
Utility, 2, 3, 28–31, 33, 34, 48, 53, 54, 62, 67, 68, 70, 71, 90, 96, 98, 111, 118, 119, 124, 141n30, 167, 176, 177

V

Vacuum, 1, 20
Verene, Donald Phillip, 43n17, 79n11, 80n11
Vermeulen, Corinna Lucia, 40n12, 40–41n13, 41n14
Vidricaire, André, 41n15
Vieta, François, 92
Virtues, 115–117
Vis, 26, 28, 40n13
Volitions, 145, 172, 174, 175
Vorstius, Conrad, 165

W

Wax, 87, 132n14, 157, 158, 183n4, 192n21
Weenix, Jan Baptist, 6, 7, 201, 202
Will, 1, 11, 48, 71, 87, 145, 182
Wonder, 35n2, 118, 138n22, 146, 148–150, 171–182, 193–194n25, 195n27, 201
Words, 6, 8n3, 14, 16–25, 32, 38n7, 41n13, 56, 69, 75n2, 90, 101, 107–112, 137n22, 158, 161, 163, 173, 175, 201, 202
World, 2, 11, 34, 49, 70