Spinoza's Geometry of Power

Valtteri Viljanen

CAMBRIDGE

CAMBRIDGE

more information - www.cambridge.org/9781107007802

SPINOZA'S GEOMETRY OF POWER

This work examines the unique way in which Benedict de Spinoza (1632–77) combines two significant philosophical principles: that real existence requires causal power, and that geometrical objects display exceptionally clearly how things have properties in virtue of their essences. Valtteri Viljanen argues that underlying Spinoza's psychology and ethics is a compelling metaphysical theory, according to which each and every genuine thing is an entity of power endowed with an internal structure akin to that of geometrical objects. This allows Spinoza to offer a theory of existence and of action – human and non-human alike – as dynamic striving that takes place with the same kind of necessity and intelligibility that pertain to geometry. Viljanen's fresh and original study will interest a wide range of readers in Spinoza studies and in early modern philosophy more generally.

VALTTERI VILJANEN is a postdoctoral fellow at the University of Turku, Finland. He is co-editor (with Juhani Pietarinen) of the anthology *The World as Active Power: Studies in the History of European Reason* (2009), and the author of a number of journal articles on Spinoza's philosophy.

SPINOZA'S GEOMETRY OF POWER

VALTTERI VILJANEN

CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE UNIVERSITY PRESS
Cambridge, New York, Melbourne, Madrid, Cape Town,
Singapore, São Paulo, Delhi, Tokyo, Mexico City

Cambridge University Press
The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org
Information on this title: www.cambridge.org/9781107007802

First published 2011

Printed in the United Kingdom at the University Press, Cambridge

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication data
Viljanen, Valtteri.
Spinoza's Geometry of Power / Valtteri Viljanen.
p. cm.
Includes bibliographical references.
ISBN 978-1-107-00780-2
1. Spinoza, Benedictus de, 1632–1677. 2. Ontology. 3. Causation. 4. Power (Philosophy)
5. Geometry – Miscellanea. I. Title.
B3998.V55 2011
199′.492–dc22
2011007624

ISBN 978-1-107-00780-2 Hardback

Contents

Acknowledgements *page* vii
List of abbreviations x
List of other sources xii

Introduction 1

1 Spinoza on being 8
Early Spinoza on the being of essences 8
Eternity and temporality in the *Ethics* 21

2 Causation and geometry 33
The final, the material, and the efficient cause 34
Suárez on the formal cause and emanation 37
Spinoza and the formal cause in geometry 41
Spinoza and the essentialist model of causation 45

3 Power, existence, activity 54
Power in late scholastic and Cartesian metaphysics 54
Power rehabilitated by Spinoza 59
The powerful existence of substances, modes, and attributes 68
Power of acting 77

4 The derivation of the *conatus* doctrine 83
Striving in the philosophical tradition and in Spinoza's system 84
Some influential interpretations of the *conatus* argument 91
The impossibility of self-destruction 93
Power and expression 97
The argument reconstructed 100

5 The meaning of the *conatus* doctrine 105
The inertial reading 105
The teleological reading 112
Conatus as the principle of perfect essence realization 125

Human agency reconceived 132
Essentialism and teleology 139

6 Geometrical dynamics of individuality 145
Power and individuation 145
Geometry of the passions 149
Physical individuality and the field metaphysic 157
Conatus, thought, and reason 168

Conclusion 177

Bibliography 181
Index 191

Acknowledgements

This monograph is the main result of more than ten years of work. The journey really began in 1998, when Juhani Pietarinen gave a seminar lasting a full academic year on Spinoza's *Ethics*. That seminar was crucial for arousing my interest in early modern philosophy in general and in Spinoza's thought in particular. Since that time, Juhani has not only consistently encouraged me to interpret Spinoza from a dynamistic point of view but also shown me the excitement of tracking large-scale lines of development in the history of philosophy. My good fortune did not end with the fading millennium: when, a few years later, I began my Ph.D. studies, Olli Koistinen was appointed as my supervisor. His competence and unfailing support, which I have had the great privilege to enjoy over many years and in innumerable discussions, have had a profound impact on my philosophical life. To these two exemplary mentors I can only express my deepest gratitude. The present work, much revised, has grown out of my dissertation.

I also wish to thank all my colleagues at the Department of Philosophy of my *alma mater*, the University of Turku, for creating such an excellent working environment. Arto Repo's role has been particularly important: for me, his exceptional kindness and helpfulness have been no less important than his philosophical acuity. In the congenial atmosphere of our traditional weekly research seminar, the so-called 'Rationalist Circle', I have been allowed to try out new ideas. I am grateful to all those who have, over the years, taken part and shared their views in the Circle, especially (in addition to those already mentioned) Markku Keinänen, Tapio Korte, and Hemmo Laiho.

The Finnish philosophical community outside my home town has been important for me as well. I have found particularly inspiring and heart-warming the companionship and support of a group of young historians of philosophy: Jani Hakkarainen, Toni Kannisto, Juhana Lemetti, Vili Lähteenmäki, Ville Paukkonen, Mika Perälä, and Markku Roinila. I

would also like to thank the audiences at the universities of Helsinki, Jyväskylä, and Tampere, in which I have had, on several occasions, the opportunity to present material that has found its way into this work.

My prolonged visits to Tübingen (2002–3), Paris (2004), and Uppsala (2008) have enabled me to discuss my work with many people, and I would particularly like to thank the following colleagues: Lilli Alanen, Tomas Ekenberg, Chantal Jaquet, Minna Koivuniemi, Pierre-François Moreau, Paulina Remes, and Andreas Schmidt. A very special thanks goes to Peter Myrdal and Erik Åkerlund for many rewarding discussions on parts of this manuscript.

This work has benefited from a considerable number of expert comments provided by the worldwide community of scholars, and I would like to thank all those with whom I have discussed my views in seminars, workshops, and conferences. I am especially grateful to Steven Barbone and Don Garrett for their insightful reports on the dissertation, and to Don also for all the support thereafter; to John Carriero, Jon Miller, and Lee Rice for instructive feedback on some earlier material eventually incorporated into this work; to Charles Jarrett for his interest in and constructive comments on my work throughout its many stages; to Mogens Lærke for providing a wealth of detailed and helpful comments on a late version of this manuscript; and to Robert Pasnau and Don Rutherford for their valuable suggestions on the Introduction – Don also deserves a special thanks for a memorable discussion in Kilpisjärvi that settled the title of this work.

My warmest thanks are also due to the people at Cambridge University Press, especially to the two anonymous referees for their extremely helpful reports, and to my editor, Hilary Gaskin, for her expertise and effort in bringing the process to completion. I would also like to thank Jo North for her diligent copy-editing.

Last but definitely not least, I am grateful to my family and especially to my wife, friend, and kindred philosophical spirit Hanna Meretoja, whose commitment to academic life has always set an example for me. Without her affection and encouragement the research leading to this book would hardly even have begun; so it is to her that I dedicate this work.

This monograph contains, in a revised form, material that has previously been published in the following articles:

'Field Metaphysic, Power, and Individuation in Spinoza'. *The Canadian Journal of Philosophy* 37 (3), 2007: 393–418.

'On the Derivation and Meaning of Spinoza's *Conatus* Doctrine'. In *Oxford Studies in Early Modern Philosophy, Volume IV*, ed. Daniel

Garber and Steven Nadler, pp. 89–112. Oxford: Clarendon Press, 2008.

'Spinoza's Essentialist Model of Causation'. *Inquiry* 51 (4), 2008: 412–37. Permission to incorporate this material into the present work is gratefully acknowledged.

Finally, I would like to acknowledge that the work on this monograph has been financially supported by the Academy of Finland (project number 127410).

Abbreviations

SPINOZA'S WORKS

Collected works

C *The Collected Works of Spinoza, Volume I*. Translated and edited by Edwin Curley. Princeton University Press, 1985.

G *Spinoza Opera* I–IV. Edited by Carl Gebhardt. Heidelberg: Carl Winter, 1925.

S *Complete Works*. Translated by Samuel Shirley, edited by Michael L. Morgan. Indianapolis: Hackett, 2002.

The Ethics

I am using Curley's translation (in C). Unless otherwise indicated, a reference to a work by Spinoza is to the *Ethics*; the first arabic number specifies part of the work and the abbreviations following it are as follows:

a	axiom
defaff	definition of the affects (in the third part of the *Ethics*)
app	appendix
c	corollary
d	definition (when not after a proposition number)
d	demonstration (when after a proposition number)
le	lemma
p	proposition
po	postulate
pr	preface
s	scholium

For instance, 1p8s2 refers to the second scholium of the eighth proposition in the first part of the *Ethics*.

Other works by Spinoza

CM	*Metaphysical Thoughts* (*Cogitata Metaphysica*)
Ep	*Correspondence* (*Epistolae*)
KV	*Short Treatise on God, Man and His Well-being* (*Korte Verhandeling van God, de Mensch, en des zelfs Welstand*)
PPC	*Descartes' 'Principles of Philosophy'* (*Principia Philosophiae Cartesianae*)
TdIE	*Treatise on the Emendation of the Intellect* (*Tractatus de Intellectus Emendatione*)
TP	*Political Treatise* (*Tractatus Politicus*)
TTP	*Theological-Political Treatise* (*Tractatus Theologico-Politicus*)

Other sources

Works by all other authors up to and including Friedrich Nietzsche are referred to by the abbreviations in the following list. Works by later authors are listed, with their publication dates, in the bibliography at the end of this volume.

AG Leibniz, Gottfried Wilhelm. *Philosophical Essays*. Edited and translated by Roger Ariew and Daniel Garber. Indianapolis: Hackett, 1989.

BGE Nietzsche, Friedrich. *Beyond Good and Evil: Prelude to a Philosophy of the Future*. Edited by Rolf-Peter Horstmann and Judith Norman, translated by Judith Norman. Cambridge University Press, 2001.

CAM Thomas Aquinas. *Commentary on Aristotle's* Metaphysics. Translated by John P. Rowan. Notre Dame: Dumb Ox Books, 1995.

CSM Descartes, René. *The Philosophical Writings of Descartes* I–II. Translated by John Cottingham, Robert Stoothoff, and Dugald Murdoch. Cambridge University Press, 1985.

CSMK Descartes, René. *The Philosophical Writings of Descartes* III. *The Correspondence*. Translated by John Cottingham, Robert Stoothoff, Dugald Murdoch, and Anthony Kenny. Cambridge University Press, 1991.

CWA Aristotle. *The Complete Works of Aristotle. The Revised Oxford Translation* I–II. Edited by Jonathan Barnes. Princeton University Press, 1984.

Duties Cicero. *On Duties*. Edited by M. T. Griffin and E. M. Atkins, translated by E. M. Atkins. Cambridge University Press, 1991.

EG Galilei, Galileo. *The Essential Galileo*. Edited and translated by Maurice A. Finocchiaro. Indianapolis: Hackett, 2008.

EW Hobbes, Thomas. *The English Works of Thomas Hobbes* I–XI. Edited by William Molesworth. London: John Bohn, 1839–45.

LM Kant, Immanuel. *Lectures on Metaphysics*. Translated and edited by Karl Ameriks and Steve Naragon. Cambridge University Press, 1997.

MD Suárez, Francisco. *On Efficient Causality. Metaphysical Disputations 17, 18, and 19*. Translated by Alfred J. Freddoso. New Haven: Yale University Press, 1994.

ME Cicero. *On Moral Ends*. Edited by Julia Annas, translated by Raphael Woolf. Cambridge: Cambridge University Press, 2001.

NG Cicero. *The Nature of the Gods*. Translated by P. G. Walsh. Oxford University Press, 1998.

NM Kant, Immanuel. *Attempt to Introduce the Concept of Negative Magnitudes into Philosophy*. In *Theoretical Philosophy, 1755–1770*. Translated and edited by David Walford in collaboration with Ralf Meerbote. Cambridge University Press, 1992.

PW Newton, Isaac. *Philosophical Writings*. Edited by Andrew Janiak. Cambridge University Press, 2004.

SCG Thomas Aquinas. *The Summa Contra Gentiles*. Translated by the English Dominican Fathers. London: Burns, Oates, and Washbourne, 1934.

Sophist Plato. *Sophist*. In *The Collected Dialogues of Plato*. Edited by Edith Hamilton and Huntington Cairns. Princeton University Press, 1989.

ST Thomas Aquinas. *Summa Theologica*. Translated by the Fathers of the English Dominican Province. New York: Christian Classics, 1981.

SW Thomas Aquinas. *Selected Writings of St. Thomas Aquinas*. Translated by Robert P. Goodwin. Upper Saddle River: Prentice Hall, 1965.

World Descartes, René. *The World*. In *The World and Other Writings*. Translated and edited by Stephen Gaukroger. Cambridge University Press, 1998.

WP Nietzsche, Friedrich. *The Will to Power*. Translated by Walter Kaufmann and R. J. Hollingdale, edited by Walter Kaufmann. New York: Vintage Books, 1968.

Introduction

We must begin with two convictions prevalent in Western thought and old as philosophy itself, one that concerns us as cognitive beings, another the nature of reality itself. To take the better-known first: in geometry, the scientifically oriented human mind has found its apogee of clarity, lucidity, and certainty. Through the tumults that gave birth to the modern era, the status of geometry remained strong: nature itself was seen, to an increasing degree, in its terms. There is perhaps no more striking indication of this than the memorable passage in Galileo's *The Assayer* of 1623:

> Philosophy is written in this all-encompassing book that is constantly open before our eyes, that is the universe; but it cannot be understood unless one first learns to understand the language and knows the characters in which it is written. *It is written in mathematical language, and its characters are triangles, circles, and other geometrical figures; without these it is humanly impossible to understand a word of it*, and one wanders around pointlessly in a dark labyrinth. (*EG*, p. 183, emphasis added)

Only geometry is thus able to capture the very texture of nature: the universe is written with its characters. This spirit finds its way to the thought of Benedict de Spinoza (1632–77), who in his masterpiece, the *Ethics*, claims that however profound and intricate a question, it can be answered, but only after realizing a fundamental truth:

> So they [men] maintained it as certain that the judgments of the Gods far surpass man's grasp. This alone, of course, would have caused the truth to be hidden from the human race to eternity, if Mathematics, which is concerned not with ends, but *only with the essences and properties of figures*, had not shown men another standard of truth. (1app; C, p. 441; G II, p. 79, emphasis added)

That the philosopher renowned for expressing his ideas in geometrical order has a high regard for mathematics is of course only what we should expect; but it should be appreciated that here geometry is *not* conceived of as a method or manner of exposition. Rather, it is the branch that has revealed

the inner make-up of things. This idea manifests itself in various ways in Spinoza's thought, and forms one of the recurring themes of this study.

The other conviction, less often acknowledged but still extremely influential, finds its expression in Plato's *Sophist*, whose Eleatic Stranger suggests that

> anything has real being that is so constituted as to possess any sort of power [*dunamin*] either to affect anything else or to be affected, in however small a degree, by the most insignificant agent, though it be only once. *I am proposing as a mark to distinguish real things that they are nothing but power* [*dunamis*]. (*Sophist* 247d–e, emphasis added)[1]

In other words, real or actual existence requires causal power; having no effects implies non-existence. Much of the ensuing dominant Aristotelian-scholastic metaphysics takes the linkage between existence and power as given: no natural agent is without its causal powers. Thus it should not be particularly surprising that in Spinoza we find a thinker who not only equates God-or-Nature's essence with power (1p34) but one who argues that as expressions of God's power, the innermost nature of temporal existents is striving power – *conatus* – to persevere in being (3p6–p7).

That geometry is important for Spinoza and that the doctrine of finite things as striving entities is the basis of his theory of human temporal existence are, I take it, beyond controversy. But the unique way in which Spinoza combines the two traditional convictions results in something extremely significant, and something that forms the subject matter of this study, namely, an ontology on which is based a specific view of human individuality and agency. I thus want to develop a unifying overall interpretation of Spinoza's metaphysical thought with a definite centre of gravity: the idea that on the pages of Spinoza's main work and underpinning his ethics proper there is – deeply integrated but still by no means concealed – what may be called *a geometry of power*. The epithet is meant to capture what this study defends above all: *each and every genuine thing is an entity of power endowed with an internal structure akin to that of geometrical objects*. Based on this, Spinoza aspires to offer us a theory of existence – human and non-human alike – as a dynamic affair, but one that takes place with the same kind of necessity and intelligibility that pertain to geometry. It is a sign of challenges to come in advancing an approach of this kind that the two traditional convictions seem so uneasily combinable; after all, neither power nor change pertains to geometrical objects. But I believe it is the interpretative path to be taken, and one that leads us to a philosophy designed to revolutionize not only the

[1] Translation by F. M. Cornford.

view we have of the world as a whole but also our understanding of human existence and happiness.

As suggested by the passage of *The Assayer*, Spinoza's philosophical revolution has its roots in the upheavals of the natural sciences. The rupture with the tradition is considerable: gone are genera and species, substantial and accidental forms, different kinds of change and so on; instead, natural things are seen as mathematical entities concretized – impenetrable and in motion, but nevertheless geometrical figures by their very nature. Given the new 'mathematicized' view's economy and the ease of understanding the world it promised, it is not particularly difficult see why a mind yearning for a systematic grasp of things would find it attractive. Two of Spinoza's immediate predecessors, Descartes and Hobbes, certainly felt that attraction; and turning to Spinoza's younger contemporaries, consider the following statement by Newton in *De Gravitatione*:

> [S]paces are everywhere contiguous to spaces, and extension is everywhere placed next to extension, and so there are everywhere common boundaries of contiguous parts; that is, there are everywhere surfaces acting as boundaries to solids on this side and that; and everywhere lines in which parts of the surfaces touch each other; and everywhere points in which the continuous parts of lines are joined together. And hence *there are everywhere all kinds of figures, everywhere spheres, cubes, triangles, straight lines, everywhere circular, elliptical, parabolical, and all other kinds of figures*, and those of all shapes and sizes, even though they are not disclosed to sight. (*PW*, p. 22, emphasis added)[2]

But Spinoza takes the crucial step further: he is convinced that everything, thus *also the realm of the mental*, is endowed with *the precisely same kind of structure and intelligibility* we can find in the material world.

The very first step in discerning the metaphysical basis of Spinoza's theory of human existence is to examine this general view of the structure of the nature of things. The fact that in the *Ethics* Spinoza leaves many of these basic aspects of his thought unexplicated increases the difficulty involved in carrying out this task. However, my goal is to show that a careful reading of his earlier work such as *Treatise on the Emendation of the Intellect* and *Metaphysical Thoughts* can shed crucial light on many better-known tenets of Spinoza's

[2] The date of this posthumously published manuscript is a matter of controversy. It has been suggested that the text would originate already from the 1660s; for Andrew Janiak's survey of the different views on the issue, see *PW*, p. xviii. Mordechai Feingold (2004, p. 194) claims that 'the document in its present form is of late composition, albeit incorporating earlier material' and estimates that the work's 'origins might be more precisely dated to around 1671, and to a course of lectures Newton delivered at Cambridge against Descartes' mechanics and Henry More's hydrostatics' (p. 26). So, interestingly, it seems to have been a work in progress when Spinoza was writing his *Ethics*.

masterpiece. Here I will approach Spinoza not so much as a naturalist influenced by the advances in the mechanical sciences but as a rationalist metaphysician inspired by geometry. In fact, the opening chapter of this study argues that from early on, Spinoza endorses and develops a general theory of *the being of essences* which aims at explicating the very factors that determine the form that existence takes, and ends with the conviction that all genuine things are endowed with an internal structure not unlike the one we find in geometrical objects. The result is a view that underpins the all-important theory of the two aspects of reality, eternal and temporal, of the *Ethics*. I argue that in Spinoza's rationalism, the natures of things and what takes place in temporality are determined from eternity.

Discerning Spinoza's theory on the foundational but intangible ontological features of the world allows us to begin the journey towards a theory concerning actual 'flesh and blood' entities of temporal existence to which pertain dynamics in the most salient sense. As noted, real existence is, traditionally as well as for Spinoza, causally efficacious existence (this in fact is what makes the introduction of the concept of power – a causal notion – legitimate and useful). An analysis of causation is thus required of any overall reading of Spinoza's metaphysics, and especially of one that underscores the dynamism of his system. As Chapter 2 shows, it is precisely here – importantly for my main thesis – that we find Spinoza's geometrical tendencies at work: his doctrine of causation is *derived from* the geometry-inspired doctrine of being. A particular conception of essentialism is the philosophical centre of gravity: just as the structure of being is determined by the eternal natures of things, effects follow from the essences of things.

With all this in place, I turn to the focal concept of this study, that of power. Chapter 3 starts with a contextual discussion explicating how the concept operated and came to be questioned in metaphysics before Spinoza; this together with the already acquired understanding of the essentialist model of causation allows us to discern the concept's role in Spinoza's thought as well as his reasons for including it in his system. Clearly, Spinoza thinks that within his metaphysical framework, the concept of power can be assigned not only a transparent meaning but also a proper task in a theory concerning the ethically relevant features of our causal status. From the opening part of the *Ethics*, Spinoza makes the distinction between power *to exist* and power *to act*; accordingly, Chapter 3 offers an analysis of power, existence, and activity. First, it is shown how power figures in the existence of all the different types of Spinozistic entities: substances, modes, and attributes. After this, an examination of *power of acting* reveals it to be a particularly prominent feature of the causal machinery that later proves to

be constantly at work in the vicissitudes of finite temporal existence. Moreover, given that the chapter shows things to be endowed with power (whether to exist or to act) in virtue of their essences, it is warranted to speak of Spinoza's *dynamic essentialism*.

Elaborating a workable metaphysic is of course a valuable undertaking in its own right, but Spinoza wants to accomplish something more with it: an adequate account of actual (i.e. temporal) human existence. In it, the notion of *conatus* emerges as the key feature: it is through the doctrine of our essential *power as striving to persevere in being* that Spinoza's geometry of power becomes a fully developed doctrine of human existence. The scientific revolution and its groundbreaking conception of motion have an impact on how Spinoza conceives the essential power of things to manifest itself in actual existence, and Chapter 4 starts by discussing the historical roots of the *conatus* doctrine as well as its place in Spinoza's metaphysical framework. The derivation of the doctrine has been severely criticized, and the apparent errors in it have been claimed to have devastating effects on the overall cogency of Spinoza's system. The main task of this chapter is to take up this issue and show that provided that Spinoza's argument is carefully reconstructed by taking properly into account his geometry-laden theory of power, the reasoning in it turns out to be, in fact, basically valid.

The reconstruction of Spinoza's argument – if not the ontological considerations of Chapter 1 – makes it increasingly clear that we should rethink what Spinoza means by the 'being' in which we strive to persevere. This leads to the subsequent discussion of the nature of the *conatus* doctrine, and Chapter 5 opens by outlining the two main interpretative positions prevailing in the scholarship, the inertial and the teleological. Despite the indisputable merits of these two interpretative traditions, it is argued that Spinoza's views on these matters have not thus far been satisfactorily discerned. The rest of the chapter elaborates a new interpretative stand along the lines of geometrical dynamism; on this view, *what we strive for is the unhindered realization of our essence – to produce being as determined by what is innermost to us*. This, in turn, requires reconsidering Spinoza's view of human agency: it is a theory according to which our actions have directions without ends.

The final chapter draws on the preceding analyses to offer a fuller picture of Spinoza's thought about human existence, or what I would call his geometrical dynamics of individuality. What individuates any finite individual – makes it the individual it is – is a specific kind of power: a striving or a resilient disposition to bring about effects derivable from a definition expressing a unique eternal essence. As long as there is such a striving, even as weak or severely opposed, the individual persists in actuality. Our limitedness implies

constant passivity, and it is a central part of Spinoza's philosophical psychology to map out the most relevant ways in which human beings are passively constituted. Spinoza firmly believes a project that endeavours to provide a veritable geometry of emotions to be feasible; this calls for an examination revealing his grounds for thinking that any entity with a specific nature is determined, in particular circumstances, to everything it also passively does with the kind of necessity characteristic of geometrical objects. Finally, to offer a more comprehensive interpretation, the chapter rounds off by presenting some of the major attribute-specific ramifications of Spinoza's dynamistic metaphysics: the attribute of extension can be seen as a continuous spatial field of power in which there are particular bodies as patterns of intensifications; under the attribute of thought, ideas are formed by power of affirmation – a power which, when used freely, can only lead to understanding, that is, to forming adequate ideas.

Methodologically my approach can be described as follows. With respect to each aspect of Spinoza's geometry of power, I will attempt to find its proper historical context, situate it in that context, and then, in light of this understanding and of my understanding of what Spinoza elsewhere says, engage in detailed conceptual analysis to find out how Spinoza's system works. I know of no good reason not to see contextualization and conceptual analysis as mutually supportive: being familiar with the relevant context is often a precondition for knowing what an author is talking about and practically always useful for discerning the meaning of the terms he or she uses; successful analyses, in turn, will result in a better understanding of the philosophical context which is partly constituted by the author's works. I believe that this kind of enquiry can offer us new insights into pertinent philosophical questions.

In Spinoza's case, taking a look at Descartes's philosophy is almost always in order; with regard to some questions, it is also enough, but usually one has to dig more deeply and explicate how, for example, Hobbes or late scholastics viewed things. Of Spinoza's writings I will focus on the *Ethics*, but whenever I think an earlier work or a letter is helpful, as is especially the case with regard to some metaphysical issues discussed in the beginning, I will take it into account. Fortunately, as already mentioned, Spinoza's thought is and has been the subject of lively discussion during the last decades, and I aim to make my study as well informed as possible, doing my best to bring forward the secondary literature relevant to each topic. There is no scholar whose own time and philosophical heritage would not have a major impact on his or her approach and the sort of questions he or she considers worth asking; for me, the Anglo-American early modern scholarship flourishing today forms

the most immediate background against which, and in dialogue with, I develop my own views; but I will also take the French Spinoza scholars into account and strive to make connections between them and the writers belonging to the Anglo-American tradition.

The metaphysical nature of the discussed topics, Spinoza's rationalistic approach, and my endeavour to discern, through my analysis, systematic linkages between the concepts Spinoza employs may, at times, lead to passages of a rather abstract nature. Thus, to make my text more accessible I will illustrate the discussed issues with some concrete examples and analogies to offer us a firmer grasp of them. However, here the revisionary nature of Spinoza's philosophy should be kept in mind: he would insist that if sound philosophical principles and proofs so demand, we should be ready to revise our beliefs, even those widely held to be most natural (for instance that there are innumerably many substances, or that our will is free). It seems to me that we should give any piece of philosophy a fair chance of convincing us, and this applies in particular to texts from which we have a considerable amount of historical distance, such as the *Ethics*, strange as they often first appear to our contemporary eye. Otherwise we run the risk of dogmatically demoting them to the status of historical curiosities, which would keep us from learning from them. And indeed, I believe that the dynamistic view of the nature of our individuality, agency, and happiness that this study aims at explicating is highly compelling, and merits serious attention.

CHAPTER 1

Spinoza on being

No doubt, the spirit of the early modern science had a great impact on Spinoza's cast of mind. But the pre-eminent aspect of this influence is *not* the one the victories of the mechanical sciences had on the conception of causation and of the nature of bodies; rather, it is the effect the new mathematical understanding of the realm of nature had on Spinoza's deepest assumptions concerning the way in which all genuine things are built, or how the basic nature of their being is determined. A clear grasp of these commitments will later prove vital for understanding Spinoza's way of thinking about power and related topics.

It is not only in the *Ethics* that Spinoza tackles fundamental ontological questions; we have much to gain from his early works. *Metaphysical Thoughts* (published in 1663) is an especially relevant tract for our purposes, for its first part discusses the question of being and the way it should be classified. The work is an appendix to a presentation of Descartes's *Principles of Philosophy* in the geometrical manner, and it is not always completely clear to what extent Spinoza is voicing his own views; but I believe that especially the first two chapters of the opening part of the *Metaphysical Thoughts* deserve to be read very carefully. The other two early works I will take up are the *Treatise on the Emendation of the Intellect* (c. 1661) and the *Short Treatise on God, Man, and His Well-Being* (c. 1662, discovered in the nineteenth century). In the latter section of this chapter, I will discuss the way in which the ideas expressed in these works are further elaborated in the *Ethics*.

EARLY SPINOZA ON THE BEING OF ESSENCES

Metaphysical Thoughts begins with a warning: we should keep firmly in mind that beings of reason, that is, modes of thinking which help 'us to more easily *retain*, *explain*, *and imagine* the things we have understood' (*CM* 1.1; C, p. 300; G 1, p. 233), should never be taken for real beings, or as

referring to such. To this category of entities belong such cognitively generated things as genera and species as well as ideas used to measure duration, such as time. Having emphasized this, Spinoza moves on to discuss different types of being. The discussion is fairly convoluted, but it contains a distinction made *within* the realm of reality, or real being, whose importance cannot be overstated: the distinction between *the being of essence* and *the being of existence*. The crucial passage reads as follows:

> Hence we can easily reply to the questions that are usually raised concerning essence. These questions are as follows: [Q1] whether essence is distinguished from existence? and [Q2] if it is distinguished, whether it is anything different from the idea? and [Q3] if it is something different from an idea, whether it has any being outside the intellect? [A3] The last of these must surely be granted.
>
> [A1] To the first question we reply by making a distinction: in God essence is not distinguished from existence, since his essence cannot be conceived without existence; but in other things it does differ from and certainly can be conceived without existence. [A2] To the second we say that a thing that is conceived clearly and distinctly, *or*[1] truly, outside the intellect is something different from the idea.
>
> But again it is asked [Q4] whether that being outside the intellect is by itself or has been created by God. [A4] To this we reply that the formal essence neither is by itself nor has been created, for both these presuppose that the thing actually exists. Rather it depends on the divine essence alone, in which all things are contained. So in this sense we agree with those who say that the essences of things are eternal. (*CM* 1.2; C, pp. 304–5; G 1, pp. 238–9)[2]

Slightly later Spinoza adds,

> although the essences of nonexistent modes are comprehended in their substances, and their *being of essence* [*esse essentiae*] is in their substances, nevertheless we wished to recur to God in order to explain generally the essence of modes and of substances, and also because the essence of modes has only been in their substances after the creation of the substances and we were seeking the eternal *being of essences*. (*CM* 1.2; C, p. 305; G 1, p. 239)[3]

If these passages sound opaque, it is at least partly because they contain so incredibly much; at this point I would like to highlight the following points. First, there is the standard medieval distinction between essence and

[1] Edwin Curley italicizes the word 'or' when translating *sive* or *seu*, which generally denote equivalence, not alternative (C, p. xv).

[2] I have inserted the square brackets with abbreviations to help in structuring the discussion.

[3] I think it can be safely assumed that in these passages, Spinoza is expressing his own views – not only because of the occurrence of such locutions as 'we reply', 'we agree', and 'we wished to recur' but also because the passages are in line with what he writes elsewhere. I think Spinoza is here formulating certain enduring ideas of his in a terminology somewhat different from the one adopted in the *Ethics*, and in a way that is of considerable help in understanding the masterpiece itself.

existence. Second, and more radically, essences are something which have an ontological status of their own: they are endowed with being independent from that of actually existing things (save God) as well as from that of ideas. In other words, essences form a category of entities which is not ideational in the sense that its inhabitants would exist only in our ideas, as their objects (they have being 'outside our intellect'). Where, then, are those entities located? The answer is that, third, the being of essences is something contained or comprehended in God, for it depends 'on the divine essence alone'. Fourth, the essences in question are eternal, completely outside time.

Before unpacking these contentions and the presuppositions they carry, we should stop and ask, why all this talk of essences and their being? What is the purpose of introducing such entities? Spinoza's answer – which is in consonance with the tradition – to this question remains unchanged throughout his philosophical career, and its basic idea finds expression already in another work dating from the same period as the *Metaphysical Thoughts*. The opening chapter of the *Short Treatise* strongly suggests that a *definite nature* (i.e. a definite essence) is what individuates its possessor, for Spinoza says that it is that '*by which the thing is what it is*, and which cannot in any way be taken from it without destroying it' (*KV* 1.1; C, p. 61; G 1, p. 15, emphasis added).[4] For instance, to have a valley belongs to the essence of a mountain, and as we have seen, Spinoza is keen to emphasize the atemporal character of these individuating factors: 'The essences of things are from all eternity and will remain immutable to all eternity', as there can never be a mountain without a valley, and '[t]his is truly eternal and immutable, and must always be in the concept of a mountain, even if it does not exist, and never did' (*KV* 1.1; C, p. 61; G 1, p. 15). Strikingly, Spinoza appears to have been consistently committed to *individual* essences; the most straightforward piece of textual evidence for this is the definition of essence in the *Ethics*, which is uneasily read in any other way:

> I say that to the essence of any thing belongs that which, being given, the thing is [NS: also][5] necessarily posited and which, being taken away, the thing is necessarily [NS: also] taken away; or that without which the thing can neither be nor be conceived, and which can neither be nor be conceived without the thing. (2d2)[6]

[4] The quotation is from a marginal note of the *Short Treatise*; I would agree with Gebhardt and Curley (see C, p. 47) that there is no reason to doubt that it is from Spinoza's pen.

[5] NS refers to the Dutch edition of Spinoza's posthumous works, *De Nagelate Schriften*; see n. 36 below.

[6] Although arguments against individual essences have been presented, I am still occupying a mainstream position here: as Christopher Martin (2008, p. 490) estimates in a recent paper that focuses on this topic, '[t]here is a strong consensus among commentators that Spinoza understands the essence of each mode to be unique to it'. Martin (2008, pp. 490–2) correctly regards 2d2 as the most explicit piece of evidence for this interpretative position.

So, to recapitulate, any true thing is endowed with an essence of its own that has a being different from and independent of the thing's actual existence but still not merely ideal in character (i.e. it is not a mere figment of our imagination), and young Spinoza calls this the being of essence(s). This essential and atemporal form of being is in an important sense real, and as it is precisely this kind of actuality-independent being that makes things what they are, it in fact is – as will become clearer below – the ontologically pre-eminent sense of being. *The being of essences is the prime layer of reality itself*.

Given the aforesaid, it is no surprise that the seminal epistemological work of the early 1660s, *Treatise on the Emendation of the Intellect*, so decidedly focuses on essences as something via which we can obtain the proper cognitive foothold on reality.[7] In that work, Spinoza argues that 'there is something real in ideas, through which the true are distinguished from the false' (§ 70; C, p. 31). What is more, the nature of this reality is something *intrinsic* to the thing of which true ideas are formed, for – and completely in keeping with the doctrine of the being of essences examined above – it does not depend on whether the thing actually exists or not. The following illustration is especially telling:

> For if some architect conceives a building in an orderly fashion, then although such a building never existed, and even never will exist, still the thought of it is true, and the thought is the same, whether the building exists or not. (*TdIE* § 69; C, p. 31)

After this, partly relying on the traditional doctrine (uncontroversial still in the seventeenth century) according to which for each true essence there is a definition that fully captures that essence,[8] Spinoza makes explicit the essentialism involved in his epistemology: '[T]he best conclusion will have to be drawn from some particular affirmative essence, *or*, from a true and legitimate definition' (§ 93; C, p. 39). Thus, understandably, 'the right way of discovery is to form thoughts from some given definition. This will proceed the more successfully and easily, the better we have defined a thing' (§ 94; C, p. 39).

Obviously, Spinoza's position is that if we succeed in acquiring the true definition of an essence, we are in the desirable epistemic position he had earlier described as having a true idea from which 'objective [i.e. representational]

[7] Because of the pride of place given to essences by Spinoza, I would classify him, in terms promoted by Jorge Secada, as a proponent of 'essentialism', 'the view that knowledge of the essence of a substance is prior to knowledge of its existence' (Secada 2000, p. 1).

[8] Cf. especially 1p8s2, 1p16. Christia Mercer (2001, p. 227) characterizes a widely accepted seventeenth-century view as follows: 'First, an essence is what is given in the definition of the thing and what can be grasped by the intellect; second, it constitutes the nature of an individual and that from which its properties flow.'

effects proceed in the soul according to the formal nature of its object' (§ 85; C, p. 37). Our mind can reproduce 'objectively [i.e. representationally] the formal character of nature' (§ 91; C, p. 38). This kind of orderly conceiving of things can in no way lead us astray, for it only contains mental affirmations that track or accurately represent what they are ideas of, the being of essences. Interestingly, there seems to be a strong element of *compulsion* involved in all this; to borrow a phrase from the *Short Treatise*, 'it is the thing itself that affirms or denies something of itself in us' (*KV* II.16; C, p. 124; G 1, p. 83). Obviously, when given a true idea, our mind has little choice over the fact that it engages in a certain kind of veridical process.

Now striking as the just outlined position may appear, it does not come out of thin air: its immediate background is Descartes's doctrine of true and immutable natures. The famous passage of the Fifth Meditation runs as follows:

> But I think the most important consideration at this point is that I find within me countless ideas of things which even though they may not exist anywhere outside me still cannot be called nothing; for although in a sense they can be thought of at will, they are not my invention but have their own true and immutable natures. When, for example, I imagine a triangle, even if perhaps no such figure exists, or has ever existed, anywhere outside my thought, *there is still a determinate nature, or essence, or form of the triangle which is immutable and eternal, and not invented by me or dependent on my mind*. This is clear from the fact that various properties can be demonstrated of the triangle, for example that its three angles equal two right angles, that its greatest side subtends its greatest angle, and the like; and since these properties are ones which I now clearly recognize whether I want to or not, even if I never thought of them at all when I previously imagined the triangle, it follows that they cannot have been invented by me. (CSM II, pp. 44–5, emphasis added)

At least three points concerning the close connection between Descartes and Spinoza can be immediately established. First, the essences (with their being) Spinoza speaks about are eternal and – just as they are for Descartes – *immutable*. We have already encountered the eternity claim, and in the *Short Treatise* Spinoza makes clear the point concerning immutability.[9] Second, neither thinker leaves unclear the veridical nature of these essences: after all, they are *true* and immutable for Descartes of the *Meditations*, and the basis of true cognition for Spinoza of the *Treatise on the Emendation of the Intellect*. Third, both Descartes and Spinoza argue that the essences in question are mind-independent, not just products of our imagination. As we have seen, Spinoza simply asserts without any further argument, 'a thing

[9] For example: '[T]he essence of a thing is immutable' (*KV* II.15; C, p. 121; G 1, p. 80).

that is conceived clearly and distinctly, *or* truly, outside the intellect is something different from the idea' (*CM* 1.2; C, p. 305; G 1, p. 238), whereas Descartes offers – as we will see in more detail below – an argument based on the element of compulsion involved in cognizing the essences: whether the meditator wants it or not, he recognizes that certain properties belong to the triangle, which, Descartes argues, shows that the geometrical figure with its essence 'cannot have been invented' by the meditator.[10]

I think we can gain deeper insight into what motivates Spinoza's thought by taking a look at two aspects of Descartes's doctrine of true and immutable natures, without getting too deep into the still on-going debate over the nature of that doctrine. I propose we key into these aspects by framing two sets of questions. First, why does Descartes feel the need to introduce the true and immutable natures? What purpose do they serve, what is their task? Second, what is the ontological status of the true and immutable natures? What kind of entities are they, how do they fit into the Cartesian metaphysics as a whole? The first set of questions is, I believe, convincingly answered by the account given by John Carriero; that the latter set of questions has given rise to a lively dispute does not prevent them from shedding light on the kind of influence on Spinoza that the Cartesian doctrine might have had.

In his *Between Two Worlds*,[11] Carriero situates the argument Descartes presents in the Fifth Meditation by stating it to involve 'a reorientation in the methodology of essence': real cognition is not, as it was for the Aristotelians, based on sense experience of actual substances providing the material from which knowledge of the essences of those substances is obtained through a process of abstraction; rather, 'Descartes thinks we are in cognitive possession of the nature of body before we experience any bodies, indeed, before we know whether any bodies exist to be experienced.' According to Carriero, the need for the true and immutable natures stems mainly from the fact that the Cartesian scheme requires mind-independent entities ('somethings') for there to be the necessary foothold for true cognition: '[U]nless there are true things, to which

[10] However, in a marginal note to the *Short Treatise* we find a passage reminiscent of Descartes's argument:

> [W]hether they [ideas of things other than God] exist or not, their essence is always necessary like the Idea of a triangle [. . .], so that even if I thought at first that I had feigned them, afterwards I would still be forced to say that they are and would be no less the same, even if neither I nor any other man had ever thought of them. (*KV* 1.1; C, p. 63; G 1, p. 17)

This, I take it, is an important reason for regarding the entities under consideration as non-fictitious. Moreover, the example involving a mountain and a valley Spinoza gives slightly earlier in the *Short Treatise* (1.1; C, p. 61; G 1, p. 15) appears already in the Fifth Meditation (CSM II, p. 46).

[11] Carriero 2009, p. 293.

we have cognitive access, we won't be able to enter into a relation of "adequation" with them, and we won't be able [to] form true judgments.'[12] In other words, developing an anti-Aristotelian epistemology that does not take sense perception as its basis leads Descartes to posit natures as entities that exercise, to borrow Carriero's expression,[13] proper 'control' over our cognitive processes; 'clear and distinct perception correctly tracks essences'.[14] This sounds plausible given that Carriero's overall characterization of Descartes's approach appears accurate: if our cognition is not sense perception-based as claimed by the Aristotelians, without the fixed extramental points of reference provided by the true and immutable natures the use of our cognitive abilities would risk becoming a bizarrely arbitrary affair.

Interestingly, Descartes's argument for the mind-independence of the natures his new theory requires turns on a central element of the traditional philosophical landscape. As Carriero explains,[15] an essence forms the core of what it is to be a certain thing, and in virtue of its essence alone, the thing has certain necessary properties of which we can be *unaware* even while having a cognitive access to the essence itself (that is, it is possible to know that something has the essence definable as *a closed plane figure formed by three intersecting lines* without knowing that in virtue of that essence the thing in question necessarily has the property of having internal angles summing to two right angles).[16] Now Descartes claims that precisely this shows that an entity we are cognizing is a non-fictitious one: an arbitrarily composed thing (such as a chimera) cannot be the source of such unforeseeable properties.

We have thus, I take it, established the task of the immutable natures (they offer the crucial bridgehead for our cognition) and the argument for their mind-independence (based on them having unforeseeable necessary properties). What kind of entities are they, then? This is where the road of textual evidence ends and a lively interpretative debate commences. Given that the meditator says that a true and immutable nature is an eternal entity 'not invented by me or dependent on my mind' (CSM II, p. 45), it is no surprise that Descartes has been interpreted, most notably by Anthony Kenny, as championing an essentially Platonist position.[17] For our purposes, however, there is no need to take a stand on this debate – and it might

[12] Carriero 2009, p. 311. It should be noted that Carriero (ibid., p. 283) also points out that were there no true and immutable natures, 'it is not clear that there would be anything for God to create'. Of course, the true and immutable natures also are the basis of the ontological argument for God's existence that Descartes presents in the Fifth Meditation.

[13] See ibid., pp. 293–4, 299. [14] Ibid., p. 282. [15] Ibid., pp. 300–4.

[16] For more on this kind of view of essences and properties, see below. Cf. also Wilson 1978, pp. 171–2.

[17] Kenny (1970, pp. 692–3) writes: 'Descartes's theory [. . .] is one of nonexistent objects that *have* essences. [. . .] Descartes's philosophy of mathematics [. . .] is thoroughly Platonic: indeed he is the

well be the best move to refrain from taking a definite stand on it –[18] for here it suffices to make a more modest related point. Namely, whatever the final ontological status of the Cartesian true and immutable natures may be, there is no question that the doctrine may push the reader to think along rather Platonic lines. Kenny delineates a traditional view he calls 'Platonism about essences' which 'has similarities with that of Descartes'; according to it, there also are such things as 'real beings without existence'.[19] He explains:

> Even without existence, a real being differs from a fictional being, in that it *can* have existence and therefore it has a certain absolute reality before it exists. This absolute reality is called '*esse essentiae*': it reminds a modern reader of the status of Meinong's pure objects, beyond being and nonbeing. This belongs to it because of its relationship to an exemplar in the divine mind: just as God is the efficient cause of the existential being of things, so he is the exemplar cause of their essential being.[20]

This view may well be to a certain extent similar to that of Descartes; even more strikingly it resembles what Spinoza asserts in the early passages quoted above. The line of division between reality and fiction is drawn so that concrete existence is not required of real beings; rather, any true essence is endowed with an absolute (i.e. mind-independent) form of reality of its own called *esse essentiae*, being of essence. Of course, Spinoza would not accept the exemplarity thesis according to which essences are what they are because they somehow exemplify God's mind: as the above-quoted passage from the *Metaphysical Thoughts* 1.2 reveals and as we will see in more detail below, he views the relationship between God and the being of essences in a different way. Moreover, it is not altogether clear which things, for Descartes, have eternal essences; in a letter to Mersenne he mentions God, mind, body, and triangle (CSMK, p. 183).[21] Spinoza's answer is unequivocal: God and all the modes of his attributes.

To sum up the discussion thus far, we can discern two components in Spinoza's theory of essences, the ontological and the epistemological, and find a way to relate them to the thought of his predecessors. With regard to the ontological component, Spinoza's thought belongs to – and may in fact

founder of modern Platonism.' Cf. also Kenny 2009 (1958), ch. 7. For discussion and differing views, see Wilson 1978, ch. 5; Schmaltz 1991; Nolan 1997; Cunning 2003; Doney 2005; Abbruzzese 2007; Carriero 2009, ch. 5.

[18] This is what Carriero (2009, ch. 5) does. However, I think it is quite clear that the natures in question belong to *things*, not to our ideas of them; cf. Carriero 2009, p. 467. Moreover, I do not see why Descartes's dualism could not accommodate true and immutable natures, if they are seen to include essences 'of *certain kinds of extended beings* – for example, cubes, spheres, squares, circles, etc.' (Carriero 2009, p. 292, emphasis added).

[19] Kenny 1970, p. 696. [20] Ibid. [21] Cf. Secada 2000, p. 67.

be the high point of – an essentialist tradition that originates with Plato and functions as a shared background for the scholastics (and perhaps for Descartes, too, although this is a debated issue). On Spinoza's view, the being of essences constitutes the pre-eminent layer of reality that determines, eternally and immutably, the way things are. With regard to the epistemological component, the new Cartesian, anti-Aristotelian cast of mind dominates: true cognition of things proceeds through essences to which we can gain immediate cognitive access; sense perception of actually existing things is cognitively posterior.

Hence, on this fundamental level of his philosophical thinking Spinoza is, as it were, Descartes turned monist and, at least in an important sense, Platonist.

One absolutely focal aspect of Spinoza's theory of essences is, however, as yet undiscussed, and the rest of this section is devoted to it. We noted above that Descartes presents what might be called the argument *from unforeseeable properties* to back up his claim that true and immutable natures cannot be mind-dependent. This argument is based on an understanding of essences that is in an important sense completely traditional. Any true essence, whether of a natural agent, God, or a geometrical entity, is such that from it certain necessary properties follow, flow, or emanate (whatever the exact nature of this may be). However, there is something special in the passage of the Fifth Meditation that I want to emphasize: although it deals with a potentially unlimited range of different kinds of things with essences, a *geometrical figure* is taken as the representative of all things.[22] No doubt, here we encounter an important point of contact between the Cartesian ontology and the Galilean view of nature cited in the beginning of the introduction. Consider what Descartes writes in the subsequent Sixth Meditation:

> They [corporeal things] may not all exist in a way that exactly corresponds with my sensory grasp of them, for in many cases the grasp of the senses is very obscure and confused. But *at least they possess all the properties which I clearly and distinctly understand, that is, all those which, viewed in general terms, are comprised within the subject-matter of pure mathematics*. (CSM II, p. 55, emphasis added)

By rejecting substantial forms Descartes may have, as has been pointed out, rejected essences or substantial forms as causally robust entities required for

[22] For instance Margaret Wilson (1978, pp. 169–71) reads this passage from the point of view of Descartes's philosophy of mathematics; and relevant for it as the claims here no doubt are, it should nevertheless be kept in mind that the geometrical example is precisely that, an example – albeit of an especially noteworthy kind.

physical explanations;[23] but the basic *metaphysical* task they also were supposed to carry out, namely the task of individuating things,[24] had anything but vanished. I believe Spinoza was very much alive to the fact that in terms of philosophical explanation, there must be an ontological factor responsible for making the world and its inhabitants what they are; what is more, he models these crucial ontological features after the essences of geometrical entities unique in the intellectual grasp they can offer us of the immutable necessity with which particular (non-essential) properties accompany certain essential features. Descartes's way of thinking no doubt made the deepest impact on the young Spinoza, perhaps giving rise to something akin the following question: what if *each and every thing*, as also suggested by the Galilean view of the physical nature, is endowed with *essentially the same kind of internal structure* as geometrical entities are?[25] I think that, little by little, this idea grew stronger in Spinoza, finally resulting in a full-blown conviction: many subtleties of the Aristotelian-scholastic philosophy can and must be cast aside, for all things are intelligible to the very bottom just as things are intelligible in geometry. Thus the Cartesian spirit becomes radicalized as it were, its doctrine of material nature generalized and implanted into a framework of potentially unlimited number of basic attributes of the unique substance, the modifications of which are finite things.

On the present interpretation, we should appreciate that much in Spinoza's doctrine of being revolves around the thesis that an eternal essence makes a thing what it is; to that essence certain properties pertain, whereby becomes determined the thing's unique internal ontological make-up or structure – the form its being takes. Recall the argument in the Fifth Meditation: it indicates that there is not much if anything in this thesis that either Aristotelians or Cartesians would oppose. In its basics, the idea is quite accessible and attractive enough to motivate much of Western thought: each genuine thing has certain features constitutive of it, forming the core of the thing's being (its nature or essence), and in virtue of being an entity of a particular kind of nature the thing always has some further features that characterize it (its necessary properties). This line of thought seems to be a kind of common factor in Spinoza's philosophical background; it is only

[23] In her very instructive recent study *Descartes on Forms and Mechanisms* (2009), Helen Hattab argues for this and sheds light on the philosophical and historical factors contributing to Descartes's rejection of substantial forms. See also Kenny 1970, p. 698, and Ch. 3 below.

[24] As Hattab (2009, pp. 2–3) puts it: 'At the metaphysical level the substantial form accounts for the individuation of substances, and their identity over time.' See also Des Chene 1996, p. 54. For more on individuation, see Ch. 3 below (n. 68).

[25] See Carriero (2009, pp. 292–5) for Cartesian essences as real structures.

when one has to designate what kind of entities count for essences and properties, and what kind of relation holds between the two categories, that disputes begin. Spinoza simply lays emphasis on the universally acknowledged close and intelligible linkage between a geometrical entity's essence and its properties, taking this as the model of the inner ontological structure of any true thing.

Spinoza puts the geometry-inspired model to frequent use throughout his corpus, but there are a couple of particularly illuminating and philosophically important passages that should be taken up at this point. When he discusses in the *Treatise on the Emendation of the Intellect* the nature of definitions that describe or express essences,[26] Spinoza makes the following assertion:

> We require a concept, *or* definition, of the thing such that when it is considered alone, without any others conjoined, all the thing's properties can be deduced from it (as may be seen in this definition of the circle). For from it we clearly infer that all the lines drawn from the center to the circumference are equal. (*TdIE* § 96; C, p. 40)

Strikingly, '[t]hat this is a necessary requirement of a definition is so plain through itself to the attentive that it does not seem worth taking time to demonstrate it' (*TdIE* § 96; C, p. 40). This basic ontological structure pertains, for Spinoza, so evidently to all things that he appears to be on the verge of not mentioning it at all when he lists the requirements for the definition of an uncreated thing:

> Finally (though it is not very necessary to note this) it is required that all its properties be inferred from its definition. (*TdIE* § 97; C, p. 40)

And then later, having proven in the opening part of the *Ethics* that God is the only substance there is, Spinoza puts forth a proposition as crucial as it is intriguing, and one whose demonstration turns on the fact that also God is endowed with the ontological architecture discussed here:

> From the necessity of the divine nature there must follow infinitely many things in infinitely many modes (i.e., everything which can fall under an infinite intellect). (1p16)
>
> This Proposition must be plain to anyone, provided he attends to the fact that *the intellect infers from the given definition of any thing a number of properties that really do follow necessarily from it (i.e., from the very essence of the thing)*; and that it infers more properties the more the definition of the thing expresses reality, i.e., the more reality the essence of the defined thing involves. But since the divine nature has absolutely infinite attributes (by d6), each of which also expresses an essence

[26] Spinoza's theory of definitions will be discussed in more detail below; see Ch. 4 below.

infinite in its own kind, from its necessity there must follow infinitely many things in infinite modes (i.e., everything which can fall under an infinite intellect), q.e.d. (1p16d, emphasis added)

We will return to this proposition many times over; for present purposes it suffices that precisely what is here left implicit should now be evident.

Clearly, as already noted, Spinoza's theory of being derives much of its inspiration from the new Galileo–Cartesian picture of material nature. However, Spinoza consistently stresses – this forms a major part of his radicalism – that the geometry-derived model applies, precisely the same way it does to corporeal things, to *all* things, thus to everything mental as well. If there is any doubt of this, consider the *Treatise on the Emendation of the Intellect*: it ends with an attempt to define the nature of the mind which is based on the assumption that the intellect has the kind of structure we have been discussing:

Since the chief part of our Method is to understand as well as possible the powers of the intellect, and its nature, we are necessarily forced, by what I have taught in this second part of the Method, to deduce these from the very definition of thought and intellect. (*TdIE* § 106; C, p. 43)

But so far we have had no rules for discovering definitions. And because we cannot give them unless the nature, *or* definition, of the intellect, and its power are known, it follows that either the definition of the intellect must be clear through itself, or else we can understand nothing. It is not, however, absolutely clear through itself; but because its properties (like all the things we have from intellect) cannot be perceived clearly and distinctly unless their nature is known, *if we attend to the properties of the intellect that we understand clearly and distinctly, its definition will become known through itself. We shall, therefore, enumerate the properties of the intellect here*. (*TdIE* § 107; C, p. 43, latter emphasis added)

After this, Spinoza lists eight properties, such as '[i]t forms positive ideas before negative ones' (*TdIE* § 108; C, p. 44), and then the work abruptly breaks off with the words,

[i]t [the essence of thought] is rather to be sought from the positive properties just surveyed, i.e., we must now establish something common from which these properties necessarily follow, *or* such that when it is given, they are necessarily given, and when it is taken away, they are taken away (*TdIE* § 110; C, pp. 44–5),

never arriving at the sought-after definition or essence of the intellect. The whole attempt, however, clearly is about uncovering the essence/property structure with a specific kind of procedure that exemplifies what Piet

Steenbakkers convincingly identifies as Spinoza's very understanding of method: a combination of both analysis (moving from effects to causes to arrive at simple propositions) and synthesis (moving from causes to effects).[27] Recall that the properties of a thing 'follow' or 'flow' from its essence, which obviously means that they are in some sense causally responsible for those properties.[28] Spinoza acknowledges that 'true knowledge proceeds from cause to effect' (*TdIE* § 85; C, p. 37), and he obviously is trying (1) to list the necessary properties of the intellect, (2) by inspecting the properties, to arrive at the true definition of the intellect, and (3) to derive the properties from the acquired definition.[29] However, he does not get past the first stage.

Spinoza's treatment of the entities of the mental realm betray one of his greatest discontentments with Descartes's philosophy: the idea of humans as beings endowed with a mind, a special kind of substance that does not obey the same kind of laws as all natural (material) things do:

> Most of those who have written about the Affects, and men's way of living, seem to treat, not of natural things, which follow the common laws of nature, but of things which are outside nature. Indeed *they seem to conceive man in nature as a dominion within a dominion*. For they believe that man disturbs, rather than follows, the order of nature, that he has absolute power over his actions, and that he is determined only by himself. [. . .] It is true that there have been some very distinguished men (to whose work and diligence we confess that we owe much), who have written many admirable things about the right way of living, and given men advice full of prudence. But no one, to my knowledge, has determined the nature and powers of the Affects, nor what, on the other hand, the Mind can do to moderate them. I know, of course, that the celebrated *Descartes, although he too believed that the Mind has absolute power over its own actions, nevertheless sought to explain human Affects through their first causes, and at the same time to show the way by which the Mind can have absolute dominion over its Affects. But in my opinion, he showed nothing but the cleverness of his understanding*, as I shall show in the proper place. (3pr; C, pp. 491–2; G II, pp. 137–8, emphases added)

As Spinoza notes, Descartes discusses our mental, especially emotional, life; but clearly, Spinoza does not find that discussion adequate,[30] and he gives

[27] Steenbakkers 2009b, pp. 48–9. Compare the way in which Spinoza combines analysis and synthesis to the Aristotelian *regressus* proof in which 'one begins with observed effects, and reasons to their possible cause(s). Then, after a mental examination of the cause(s), one deduces the observed effect from the proper cause' (Hattab 2009, p. 113; cf. also p. 118).

[28] More on this in the next chapter.

[29] Cf. Joachim (1993 [1940], p. 200): '[W]e must always begin by forming a "good" definition, and always proceed by "deductive" development of its implications.'

[30] The criticism seems to be directed to a great extent against the *Passions of the Soul* §§ 45–50 (CSM I, pp. 345–8).

the impression that he will be doing something different and new when he declares that our affects (i.e. emotions) acknowledge

> certain causes, through which they are understood, and have certain properties, as worthy of our knowledge as the properties of any other thing [. . .]. Therefore, I shall treat the nature and powers of the Affects, and the power of the Mind over them, by the same Method by which, in the preceding parts, I treated God and the Mind, and I shall consider human actions and appetites just as if it were a Question of lines, planes, and bodies. (3pr; C, p. 492; G II, p. 138)

That he thinks even such putatively hard to define things as emotions should be studied in this way is, I think, a clear indication, as well as an important facet, of Spinoza's geometry-inspired ontology. Spinoza's approach is understandable, given the presupposition that such mental entities as emotions of love and hate are constituents of a definite internal structure, the basic character of which is common to all things.[31] Apparently, then, Descartes goes wrong in disregarding that internal structure and in claiming that there could be such a thing as the 'absolute dominion' of the mind – endowed with free will – over the passive emotions. Because those emotions are effects of real causes with definite patterns of operation, complete control over our emotions would, in fact, require nothing less than a sudden and inexplicable annihilation of those causes – an incomprehensible rupture in the very make-up of things.[32]

As the seminal proposition 16 of the first part of the *Ethics* already reveals, the thesis concerning the internal architecture of things remains emblematic for Spinoza's mature thought too, forming an important part of his cast of mind. But the discussion thus far has focused on early material, and Spinoza's *magnum opus* presents his essentialism in an elaborated form. At the same time, Spinoza offers us a better fleshed-out view of the two layers of reality, the eternal and the temporal. So it is to the *Ethics* that we must now turn.

ETERNITY AND TEMPORALITY IN THE *ETHICS*

Judging from what he says about the being of essences, it seems evident that Spinoza's system accommodates a governing assumption inherited from the ancient Greeks: the world is not a chaotic flux but an orderly whole, and this

[31] For more on Spinoza's geometrical treatment of emotions, see Ch. 6.

[32] It should be noted that since according to Descartes (CSMK, p. 183) we do have *an innate idea of the mind* (i.e. of the mind's true and immutable nature), presumably with an internal structure reflecting the triangle example of the Fifth Meditation, Spinoza may be viewed as carrying out in full the Cartesian project (albeit in a framework denying substance pluralism).

could not be without *something* offering the crucial ontological bedrock, determining the nature of reality; that something is provided by the *essences*. New are the ideas that those essences are structured as they are in geometry, and that there is only one substance the modifications of which all the other things, with their essences, are. In fact, we have already seen how these two Spinozistic ideas are combined in a seminal proposition of his masterpiece, 1p16, according to which it is a fundamental fact about finite things that they are modifications of God from whose nature they follow as properties – 'by the same necessity and in the same way' as in geometry (1p17s). All this pertains to the most general metaphysical level, and is put in conspicuously atemporal terms. However, there are not only eternal but temporal things as well, and Spinoza acknowledges this, never suggesting that temporal everyday existence is somehow unreal. Accordingly, a distinction I will discuss in what follows, between eternal and temporal existence, underpins much of the *Ethics*.[33] Moreover, it appears that Spinoza's way of drawing that distinction, with novel terminology, harks back to the early distinction between being of essence and being of existence.

The *Ethics* is famous for the dictum that the proper way of considering things is *under a species* or *aspect of eternity* (*sub specie aeternitatis*), which is to consider them 'insofar as they are conceived through God's essence, as real beings, *or* insofar as through God's essence they involve existence' (5p30d). Respectively, considering things temporally, or insofar as they are 'under duration', is to 'conceive them to exist in relation to a certain time and place' (5p29s). It should be noted that Spinoza is here talking about considering or seeing things in a certain way, under a certain form or aspect. How could this difficult doctrine be further explicated? Thomas Lennon has recently called this the *sub specie*, i.e. 'under the aspect of', model derived from geometry and illustrates it by the following example. It is possible to consider one and the same triangle as an isosceles triangle (i.e. *sub specie* having two equal sides) or as a triangle whose angles at the base are equal (i.e. *sub specie* having equal base angles): '[C]onstructing an isosceles triangle just is to construct a triangle whose base angles are equal, and to think about the one is to think about the other, albeit in a different way, for they are the same thing.'[34] So, just as it is possible to consider geometrical objects under different aspects, it is possible, according to Spinoza, to consider any finite thing as eternal or as durational; and as both seeings-as are evidently veridical, things really are both. If this sounds surprising, it is obviously

[33] Cf. Wilson 1996, p. 97. [34] Lennon 2005, p. 13.

only because we are most often trapped in our temporal viewpoint, which keeps us from seeing the eternal in us.

The important thing for our purposes is that in the *Ethics*, the focal type of entity discoverable under the aspect of eternity is what Spinoza calls the formal essence (*essentia formalis*) of a thing. Understanding the nature and function of formal essences is, I believe, the key to understanding Spinoza's view of the eternal realm. In fact, this is not the first time we encounter these atemporal entities: an above-quoted passage from the *Metaphysical Thoughts* maintained that

> the formal essence neither is by itself nor has been created, for both these presuppose that the thing actually exists. Rather it depends on the divine essence alone, in which all things are contained. So in this sense we agree with those who say that the essences of things are eternal. (*CM* 1.2; C, p. 305; G 1, pp. 238–9)

Obviously, then, when early Spinoza is talking about the being of essences, he is talking about the being of *formal* essences[35] – which is helpful, given that the formal essences of the *Ethics* have proven to be something of a puzzle. One thing is beyond doubt, however: whenever Spinoza explicates the nature of formal essences, he stresses the intrinsic connection these eternal entities have to God's essence or attributes (which constitute that essence, as 1d4 states). This is what he does in the quoted early passage, and the most revealing piece of textual evidence in Spinoza's masterpiece follows suit:

> The ideas of singular things, *or* of modes, that do not exist must be comprehended in God's infinite idea in the same way as the formal essences of the singular things, *or* modes, are contained in God's attributes. (2p8)

Also the following should be considered:

> In addition to these two kinds of knowledge, there is [. . .] another, third kind, which we shall call intuitive knowledge. And this kind of knowing proceeds from an adequate idea of the formal essence of certain attributes of God to the adequate knowledge of the [NS: formal][36] essence of things. (2p40s2)

The former passage makes it clear that formal essences are contained in God's attributes, while the latter suggests that intuitive knowledge has them as

[35] Also Don Garrett (2009, p. 287) notes that formal essences resemble the Cartesian true and immutable natures (as well as Leibnizian essences).

[36] It should be noted that the additional 'formal' here does not carry much weight: Fokke Akkerman has shown that the additions found in *De Nagelate Schriften* are not Spinoza's but glosses made by his circle of friends and incorporated into the Dutch translation by Glazemaker; on this, see Steenbakkers 2009a, pp. 38–40.

objects. It is possible to proceed from the idea of an attribute to the ideas of essences of finite things presumably because those things, with their essences, follow from their attributes.[37] All this, especially the passage concerning the third kind of knowledge, is notoriously difficult. However, based on the textual evidence presented in this section I would suggest that what is revealed when things are conceived under a species of eternity, in the highest attainable way, are precisely formal essences – the eternal and immutable essences of things.[38] Now recall that these essences are endowed with their own kind of being and a specific resulting ontological structure. Given this, certain things can be said to follow from every essence,[39] which makes it possible to derive from the formal essence the complete layout, so to speak, of the thing in itself, as it would exist in complete isolation. This agrees with Charlie Huenemann's contention, 'formal essences [. . .] lack [. . .] extrinsic properties'; for instance a human being conceived as a formal essence 'is conceived in isolation from his particular surroundings, circumstances, ancestors, and descendants'.[40] An entity constituted by a formal essence is thus a thing whose being is autonomously determined by its own essence alone. It seems that here we can see, once again, the profound impact geometry has on Spinoza's mindset: the formal essence appears to match a geometrical object's essence in virtue of which certain properties pertain to the object in question.

When Spinoza illustrates these ontological and epistemological tenets, he relies, in keeping with the geometrical cast of mind, on examples taken from mathematics. He regards intuitive knowledge as a direct grasp of things and their properties, comparable to attaining mathematical insight:

> Suppose there are three numbers, and the problem is to find a fourth which is to the third as the second is to the first. [. . .] Given the numbers 1, 2, and 3, no one fails to see that the fourth proportional number is 6 – and we see this much more clearly because we infer the fourth number from the ratio which, *in one glance*, we see the first to have to the second. (2p40s2, emphasis added)

Alas, as an elucidation this only goes so far. Evidently, the sort of insight Spinoza is trying to depict is further articulable only uneasily if at all, almost as if refusing to be put into words. Margaret Wilson suggests, correctly I think,

[37] For more on the way in which things follow from attributes, see Ch. 3 below. See also Wilson 1983, pp. 182–5.

[38] On the eternality of formal essences, see Donagan 1979 (1973), pp. 250, 255; Koistinen 1998, pp. 74–5; Garrett 2009.

[39] Cf.: '[I]t seems to be his [Spinoza's] view that the most fundamental knowledge of singular things is of their "inmost essence," from which their properties flow' (Wilson 1996, p. 117).

[40] Huenemann 1999, p. 235.

that 'the second kind of knowledge differs from the third both in requiring steps of reasoning, as distinct from direct mental vision, and in failing to arrive at the inmost essences of things';[41] to this I would only want to add that the essences in question are eternal formal essences. Moreover, they are contained in God's attributes. The crucial example of this is drawn from geometry:

> [T]he circle is of such a nature that the rectangles formed from the segments of all the straight lines intersecting in it are equal to one another. So in a circle there are contained infinitely many rectangles that are equal to one another. Nevertheless, none of them can be said to exist except insofar as the circle exists, nor also can the idea of any of these rectangles be said to exist except insofar as it is comprehended in the idea of the circle. (2p8s)[42]

Edwin Curley states this example in a more accessible way: 'If AC and FG are any two lines intersecting at a point B in a circle, then the rectangle with base AB and height BC is equal in area to that with base BG and height BF.'[43] What Spinoza seems to be claiming is that just as any circle can be said to contain infinitely many rectangles of clearly definable nature, each attribute contains all the formal essences of the finite things that fall under the attribute in question; as Huenemann helpfully explains, the containment of rectangles in the circle is geometrical in the sense that 'when X geometrically contains Y, it means that X has sufficient features for producing Y, in accordance with sanctioned means of construction'.[44] And just as, by following this method, an infinity of rectangles can be derived from the idea of a circle, infinitely many things, each one with its own formal essence, follow from any attribute. Also this illustration underscores the point that formal essences are to be conceived in the mould of geometrical objects' essences from each of which an array of properties necessarily follow.

[41] Wilson 1996, p. 118.

[42] A relevant earlier and non-geometrical illustration runs:

> Finally, if any Philosopher still doubts whether essence is distinguished from existence in created things, he need not labor greatly over definitions of essence and existence to remove that doubt. For if he will only go to some sculptor or woodcarver, they will show him how they conceive in a certain order a statue not yet existing, and after having made it, they will present the existing statue to him. (*CM* 1.2; C, p. 305; G 1, p. 239)

For an instructive discussion on this example, see Koistinen forthcoming$_a$.

[43] C, p. 452 (a note to 2p8s); see also my illustration of Curley's point in Figure 1.

[44] Huenemann 1999, p. 233.

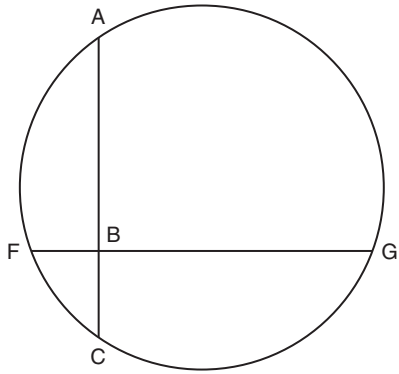

Figure 1

The geometrical example of the attribute/modification ontology is particularly striking when compared to the considerably more traditional relationship obtaining between Cartesian essences and God as their efficient cause – be the exact nature of that relationship ultimately what it may. Spinoza's conception may duly be called immanentist, for it recognizes no ontological gulf between God and creatures; rather, the latter are modifications or *states of attributes* constituting *the divine nature* itself. On this radical position Spinoza never wavers; recall that as early as in the *Metaphysical Thoughts* he says that an essence depends 'on the divine essence alone, in which all things are contained' and that 'the essences of nonexistent modes are comprehended in their substances, and their *being of essence* is in their substances' (*CM* 1.2; C, p. 305; G 1, p. 239). In fact, this idea lies at the core of Spinoza's naturalism: we are not dealing with transcendent God but with Nature itself, the modifications of whose essence are finite things.

Despite the undeniable distance between Descartes's and Spinoza's views on the relationship obtaining between God and finite things, a case can be made that here also Spinoza's thought displays strong Cartesian overtones. Namely, the geometrized understanding of the divine attribute/modification relationship may well be a *generalization* and an *elaboration* of a theory of the material universe Descartes presents in *The World*, provided that Helen Hattab's following recent interpretation of that work is accurate:

> Physically speaking, matter is not pure extension, but delimited extension, in the sense that God has attributed to it the basic divisions, proportions, motions, and relations that give rise to the particular shapes and motions we observe.[45]

[45] Hattab 2009, p. 148. See also pp. 143, 147, 152.

On this reading, Descartes redefines 'the object of physics as reified delimited quantity'.[46] Now for Spinoza, limitedness is the mark of finitude (1d2), and it can be said that particular bodies arise from the infinite extension being limited in specific ways;[47] a thesis that bears a clear resemblance to Hattab's Descartes. Interestingly, she claims that for Descartes, '[t]here is nothing about matter's extendedness that dictates that its particles take on the particular shapes, sizes, and motions that they do'.[48] But here Spinoza surely would object: particular modes of extension are what they are precisely because the attribute of extension 'dictates' them to be so – at least in this sense the Spinozist theory is an elaboration of its Cartesian predecessor. Further, *each and every attribute, also that of thought*, contains and 'dictates' all of its modifications – this is the generalization Spinoza makes. Of course, the circle example of 2p8s appears to apply best to the case of extension, but it is nevertheless supposed to reveal *sub specie aeternitatis* the basic nature of the relationship holding between *any* kind of divine attribute and the formal essences of its finite modifications.

The aforesaid goes also some way towards explicating Spinoza's strictly *a priori* – in both the old and the current sense of the term – way of doing philosophy. After all, the things we are dealing with are not only, to borrow Descartes's words, 'objects of the intellect alone' (CSM II, p. 37)[49] – which, it should be stressed, does not detract from their reality – but also derivable from God's essence.[50] More to the point, acknowledging the latter fact is the necessary first step of all true philosophy. In the *Ethics*, Spinoza asserts that failing to see this has kept philosophers from seeing

> the [proper] order of Philosophizing. For they believed that the divine nature, which they should have contemplated before all else (because it is prior both in knowledge and in nature) is last in the order of knowledge, and that the things that are called objects of the senses are prior to all. That is why, when they contemplated

[46] Ibid., p. 152. According to Hattab (2009, pp. 105–9, 141–3, 147, 150–1), the background of this idea is formed by the distinction between absolute quantity (unchanging *metaphysical* matter) and delimited quantity of geometry (intelligible *mathematical* matter) brought to the fore by such figures as Joseph Blancanus (1566–1624), a scholastic mathematician of Descartes's time.

[47] As Alan Nelson (2005, p. 7) succinctly puts it: 'The perfect wholeness and simplicity of the idea of the infinite must have limitations imposed upon it in thought to arrive at accurate conceptions of finite things. Spinoza expresses this by saying that finite things "follow" from the infinite and must be "conceived through" it.'

[48] Hattab 2009, p. 148.

[49] As Spinoza puts it in a letter to Meyer, 'there are many things that can in no way be apprehended by the imagination but only by the intellect, such as Substance, Eternity, and other things' (*Ep*12; S, p. 789; G IV, p. 57).

[50] Cf. the discussion above on the procedure of synthesis as it is applied in the *Treatise on the Emendation of the Intellect*.

natural things, they thought of nothing less than they did of the divine nature; and when afterwards they directed their minds to contemplating the divine nature, they could think of nothing less than of their first fictions, on which they had built the knowledge of natural things, because these could not assist knowledge of the divine nature. So it is no wonder that they have generally contradicted themselves. (2p10cs)

Again, infinite (God) comes before finite. This is the background against which should be read the following *prima facie* rather striking statements that Spinoza makes in his correspondence: 'To your question as to whether I have as clear an idea of God as of a triangle, I reply in the affirmative. But if you ask me whether I have as clear a mental image of God as of a triangle, I reply in the negative. We cannot imagine God, but we can apprehend him by the intellect' (*Ep56*; S, p. 905; G IV, p. 261). 'For I do not presume that I have found the best philosophy, but I know that what I understand is the true one. If you ask me how I know this, I reply that I know it in the same way that you know that the three angles of a triangle are equal to two right angles' (*Ep76*; S, p. 949; G IV, pp. 319–20). Of course, even if one were convinced that the divine nature is something as accessible to us as the ideas of extension and thought, and that everything finite is contained in and follows from the infinite attributes just as a triangle's properties can be said to be contained in and follow from its nature, it is another and far more radical thing to claim – what the quoted passages also at least suggest – that one grasps *the precise way in which* finite things follow from the divine nature.

Not only (formal) essences follow from the divine nature, but also the way in which things with those essences determine each other. Let us begin with the systematic reasons for this: first, there must be a fundamental explanation for the fact that finite entities enter into relationships of interdetermination (i.e. into interaction) with each other and for the specific nature of those determinations; second, the geometrical model implies this, for a geometrical object (say, a right-angled triangle) has several properties (for instance the property of fulfilling the Pythagorean theorem and the property of having internal angles summing to two right angles), and these properties surely are in some kind of relation of interdetermination. In terms of textual evidence, there is much in the latter half of the opening part of the *Ethics* that revolves around this: '[A]ll things have been determined from the necessity of the divine nature [. . .] to produce effects in a certain way' (1p29d); and Spinoza makes it clear that these determinations result from being determined by other finite modifications (1p28).[51] Moreover, in

[51] Cf. also: '[F]rom the given divine nature both the essence of things and their existence must necessarily be inferred' (1p25s). 'So will does not pertain to God's nature any more than do the

a letter to de Vries he affirms that both things *and the affections of things* are 'eternal truths' (*Ep*10; S, p. 783), which I take to mean that also the way in which finite things become affected (i.e. determined) by other finite things follows from God's nature.

I would suggest that the *formal being* Spinoza discusses mainly in 2p3–p7 involves more than just the formal essences of finite things, namely also all the particular states resulting from intermodificationary determination relations, that is, from the way in which formal essences determine each other. Spinoza calls the mediate infinite mode of extension 'the face of the whole universe [*facies totius Universi*]' (*Ep*64; S, p. 919; G IV, p. 278), and I would be willing to propose that that infinite mode is a system constituted by the formal essences and formal being of all finite extended modes;[52] it thus contains all the determinations pertaining to each and every extended modification. There is also the mediate infinite mode of thought, and thus I would suggest that it contains all the formal essences of ideas and their determinations.[53] But the most important thing is that no matter under which attribute finite things fall, the formal essences and formal being of all finite modes – and thus the whole universe – to its finest detail, is fixed 'from eternity and to eternity', to borrow the words located in 1p17s.

The moves Spinoza makes within his essentialist framework emerge, then, from a central requirement which justifies calling him a 'rationalist': the dislike of brute facts for which there would not be a proper explanation – 'cause *or* reason' (1d11d2) – ultimately derivable from nothing less basic than the nature of reality itself. On the present interpretation, this leads Spinoza to the view that only eternal formal essences (with their accompanying ways of determining each other) that follow from the divine attributes can be the basis of reality: it is only because of this atemporal layer of quasi-geometrically structured entities firmly rooted in the very essence of the whole of nature itself that things are kept from falling apart so that they form, as was commonly taken for granted still a century and half after Spinoza, an ordered whole. Nothing deserves to be called real if it is not included in this infinite blueprint of reality Spinoza of the 1660s calls 'the being of essences', of the 1670s 'things considered under the aspect of eternity'. It is the eternal in us that determines what we are.

other natural things, but is related to him in the same way as motion and rest, and all the other things which, as we have shown, follow from the necessity of the divine nature and are determined by it *to exist and produce an effect in a certain way*' (1p32c2, emphasis added).

[52] For similar views, see Matheron 1988 (1969), pp. 33–4; Huenemann 1999, p. 237.

[53] Here 5p40s is especially interesting; see also Donagan 1979 (1973), p. 255.

It is not difficult to understand, in its rough outlines, the meaning of *actual existence* in Spinoza's system: it equals concrete existence that occurs in time and place. We conceive this kind of existence *sub specie durationis*, and to a great degree through our senses. The task of giving a detailed interpretative articulation of the nature of finite existence – and the related issue of the nature of the actual essence (*essentia actualis*) of finite things – is something I will take up later on; at this point it suffices that we discern the way in which actual being of concrete existents is connected to the formal essences and being of the eternal realm.

On the present interpretation, formal essences as atemporal entities hold a pre-eminent position in determining the character of reality in its entirety.[54] Given this, there must be something in formal essences and formal being that designates the way in which things unfold under duration. In other words, the eternal essences and the being determined by their interrelations must contain *features at least convertible into determinations of time and place*. In his early works, Spinoza does not offer us much by way of elucidation on this topic, but there is one particularly important passage that corroborates my view:

> [W]hen we say that God has decided that the triangle shall exist, we are saying nothing but that God has so arranged the order of nature and of causes that the triangle shall necessarily exist at such a time. So if we understood the order of causes as it has been established by God, *we should find that the triangle must really exist at such a time, with the same necessity as we now find, when we attend to its nature, that its three angles are equal to two right angles*. (*CM* 1.3; C, p. 309; G 1, p. 243, emphasis added)

This implies that there is no difference in the necessity with which things are produced *sub specie aeternitatis* and the necessity with which temporal determinations of actual existents become fixed – both are what they are because they follow, with the same kind of necessity we find in geometry, from God's nature.

These observations point towards an interpretation of formal essences that can shed additional light on this admittedly extremely difficult issue. Olli Koistinen has argued that the formal essences of finite things should be understood as *objects of truths* about finite modes. As such they are not spatiotemporally limited, which justifies considering them to be *infinite* modes.[55] Koistinen explains:

[54] Cf.: 'On the other hand, he [Spinoza] makes it equally clear [. . .] that the formal essence of a singular thing is *directly related* to the singular thing, and even provides a sense in which the singular thing itself can be said to have a kind of derivative being' (Garrett 2009, p. 287).

[55] Koistinen (1998, pp. 71–5) develops his interpretation of formal essences as infinite modes as an answer to the problem that arises due to the fact that Spinoza claims nothing finite to follow from God's absolutely infinite nature. For other views of formal essences as infinite modes, see Martin 2008; Garrett 2009.

Let us suppose that Jones raised his hand in his bedroom 12.2.1995. [. . .] [B]ecause this hand raising has spatiotemporal limits it is a finite mode. But consider now the truth expressed by the sentence 'Jones raised his hand in his bedroom 12.2.1995.' This sentence is *about* the finite mode [. . .] [b]ut [. . .] what makes it true is not just the existence of 'Jones' raising his hand' but 'Jones' raising his hand in his bedroom at 12.2.1995.' [. . .] This entity is beyond the temporal and spatial order and is for that reason an infinite mode. But because all truths about finite modes must involve place and time specifications it follows that all truths about finite modes have as their objects infinite modes and are made true by infinite modes.[56]

On Koistinen's interpretation of Spinoza's necessitarianism, there must be omnitemporally existing entities that function as the bearers of truths concerning finite temporal existents. These entities Spinoza would then call formal essences, and a formal essence corresponds 'to the object of a truth about a finite mode. It is these formal essences or objects of truths about finite modes that follow from the eternal and infinite essence of God.'[57] To my mind this sounds importantly correct; I would only want to add that in addition to the formal essences – which, I think, designate things as they are in themselves[58] – there is formal being that consists of the determinations resulting from the relations the formal essences bear to each other. This is, however, a merely terminological issue; the important point concerns the determinative priority of eternity. Each and every truth about an actual thing has an eternal and unchanging object of truth that follows from God's nature – which also is, given that God is a necessary existent, the crux of Spinoza's necessitarianism.[59] Finite things are not necessary existents, but this does not mean that it would not be absolutely necessary that they exist when they do and the way they do.[60] Interestingly, this seems to be the Spinozistic – that is, the monist, immanentist, and necessitarianist – counterpart of a late scholastic position concerning the eternality of God's volitions and the temporal world, lucidly formulated by Dennis Des Chene: 'Of those propositions that are willed some are, from the point of view of a temporally ordered world, "executed" at a particular time and place. But that does not count against their having been eternally willed.'[61]

[56] Koistinen 1998, p. 73. [57] Ibid., p. 75. Cf. also Garrett 2009, p. 287.

[58] For more on this, see Ch. 3 below.

[59] As Koistinen (1998, p. 75) puts it, 'that they [the formal essences] follow from the eternal and infinite essence of the necessarily existing God is, in Spinoza's system, sufficient for there being only one possible system of finite modes'.

[60] Also in this I agree with Koistinen (ibid., p. 74) who, as I understand him, makes the same point, but in different terminology.

[61] Des Chene 1996, p. 319. Here especially Peter Fonseca (1528–99) is an important source for Des Chene.

The eternal and infinite systems of essences, together with the determinations specified by them, are thus converted into and correspond to the spatiodurational existence of the actual world.[62] As we will see in more detail below, actual finite existence has its peculiar character: in it, limitations are not mere determinations but *oppositions* and *agreements* that take place between *striving* entities. But here the main point concerning actual existence is that any actual thing's temporal path, forged from a specific set of affections, is decreed from, and thus conceivable under the aspect of, eternity. For humans that path may be one of innumerable tumults and conflicts – all of which, however, are based on the imperturbable rigour of the eternal and intelligible structure of being determined by God-or-Nature's essence itself.

[62] Cf.: '[W]e may also think of the actual essence of a singular thing as the *actualization* or instantiation of its existing formal essence, rendering the thing itself actual' (Garrett 2009, pp. 286–7).

CHAPTER 2

Causation and geometry

As we have seen, it is a central characteristic of Spinoza's rationalism that everything can – at least in principle – be explained; there are no brute facts. Moreover, everything has its *cause* through which it can be explained. Indeed, according to Spinoza, not only the existence of everything that exists but also the non-existence of everything that does not exist requires an explanation:

> For each thing there must be assigned a cause, *or* reason, as much for its existence as for its nonexistence. For example, if a triangle exists, there must be a reason *or* cause why it exists; but if it does not exist, there must also be a reason *or* cause which prevents it from existing, or which takes its existence away. (1p11d2)

The essentialist, rationalist, necessitarian, and monist system explicated above is designed to offer us a proper metaphysical picture of why things exist, and of the way they do. And since that system's specifically shaped entities – regardless whether we consider them *sub specie aeternitatis* or *durationis* – are real, what follows from their essences must be real effects. The ordered whole of real things is an infinite causal network. Reasons for thinking in this way will become clearer below, but on a general level it can be observed that this transition into causality evinces Spinoza's silent but persistent sensitivity to a focal intuition of the Aristotelian tradition: that real entities are causally efficacious, or powerful, ones. This means that the ontological structure of things is played out in the causal register, and understanding the nature of Spinoza's dynamic system must thus proceed through an accurate analysis of the view of causality it involves.

The axioms concerning causes and effects are located at the beginning of the *Ethics*:

> From a given determinate cause the effect follows necessarily; and conversely, if there is no determinate cause, it is impossible for an effect to follow. (1a3)

The knowledge of an effect depends on, and involves, the knowledge of its cause. (1a4)

So, causation involves necessity, nothing is outside of it, and effects are known through their causes. In addition to these highly abstract contentions,[1] the latter half of the first part of the *Ethics* deserves to be taken up, for it discusses first and foremost God's causality. In fact, a proposition we are already familiar with, 1p16, signals the beginning of the discussion. It would be difficult to overestimate the importance of that proposition, for in it and its corollaries Spinoza designates what his basic ontological tenets amount to when put in causal terms. Recall that the proposition '[f]rom the necessity of the divine nature there must follow infinitely many things in infinitely many modes (i.e., everything which can fall under an infinite intellect)' turns, to a great extent, on the contention that 'the intellect infers from the given definition of any thing a number of properties that really do follow necessarily from it (i.e., from the very essence of the thing)', which, in turn, is a compact formulation of Spinoza's essentialist understanding of the nature and structure of being. And then, with no forewarning, comes a statement concerning causality: 'From this it follows that God is the efficient cause of all things which can fall under an infinite intellect' (1p16c1).

How should all this be explicated? One useful way to study Spinoza's understanding of causality is to analyse it in relation to the Aristotelian-scholastic tradition, for centuries dominant enough to form the virtually ubiquitous backdrop of early modern philosophical thought. As is well known, that tradition relies on Aristotle's distinction of four basic kinds of cause: the material, the formal, the efficient, and the final cause. I will argue that comparing Spinoza's views to those of some prominent scholastics reveals that the basic model of causation cannot be, for Spinoza, one adopted from the mechanical sciences; what emerges from his ontological commitments is a model of causation heavily inspired by the idea of formal causality pertaining to geometrical objects.

THE FINAL, THE MATERIAL, AND THE EFFICIENT CAUSE

Spinoza uncompromisingly rejects any doctrine that assigns final causes to God: 'Nature has no end set before it, and [. . .] all final causes are nothing but human fictions' (1app; C, p. 442; G II, p. 80). There has been a lively discussion about teleology in Spinoza's thought, but even the most enthusiastic proponents of the teleological interpretation do not maintain that Spinoza would have accepted divine teleology.[2] Since I here concentrate mainly on Spinoza's

[1] As Wilson (1991, p. 133) notes, 'Spinoza says very little to elucidate directly the concept or concepts of causality he relies on.'

[2] See especially Garrett 1999; Lin 2006.

view on God's, or the substance's, causation, I will not pursue this issue further but simply hold Spinoza to be an anti-teleologist concerning God.[3]

The first thing to note about the material cause is that even though Spinoza talks about matter, he does not, to my knowledge, designate it as a cause. However, Huenemann has recently suggested that the Spinozistic extended substance could be regarded as a kind of *prima materia*.[4] This approach may, as Huenemann contends, help to fit Spinoza 'into some of the history of thought about prime matter'.[5] This is primarily so, I think, because the extended substance can be seen as a continuous field that is modified according to individual essences, resulting in actual physical things.[6] Still, the idea of prime matter is deeply embedded in the hylomorphic doctrine, according to which natural things consist of matter and form, and this is quite foreign to Spinoza's framework. Most importantly, no Spinozistic attribute can match prime matter as it was commonly understood, i.e. as devoid of all forms, because attributes such as thought and extension already specify certain fundamental manners of being. Moreover, if extension is interpreted as a kind of prime matter, on the basis of parallelism (2p7) the same applies to all attributes, making thought, too, a kind of prime 'matter', which sounds problematic. So, due to the lacking textual evidence and the difficulties this line of interpretation encounters, I would not be prepared to endorse the idea that the material cause would have found its way to Spinoza's philosophy; it seems that the most we can say is that concerning physical reality, the idea of a spatial field has in Spinoza's system a position somewhat reminiscent of the one held by the doctrine of prime matter in Aristotelianism.

What about efficient causation, then? According to the Peripatetic tradition, the efficient or moving cause is the agent that draws out the form from potency to act.[7] It is important to keep in mind that in medieval philosophy also the efficient cause is closely linked up with the final cause: as Thomas Aquinas explains in *The Principles of Nature* (henceforth *PN*), different kinds of causes are intertwined so that the final cause is the cause of all causality and all other causes, and this implies that the efficient cause, in launching the process of actualization, is always directed or inclined

[3] For a detailed discussion on Spinoza and teleology, see Ch. 5 below.

[4] Huenemann 2004. Des Chene (1996, p. 81) characterizes prime matter as follows: 'Prime matter is the stuff, whatever it may be, which, when joined with substantial form, yields an individual substance.' It is the material cause of things by being a component in complete substances.

[5] Huenemann 2004, p. 32.

[6] Here I have in mind Jonathan Bennett's (1984, pp. 81–110) 'field metaphysical' interpretation of the extended substance; see Ch. 6 below.

[7] See especially *The Principles of Nature* III.18; *SW*, p. 14.

towards an end (*PN* III.18–19, IV.24; *SW*, pp. 14–15, 19). Now, the efficient cause, of course, appears in many central early modern texts, Spinoza's included, but by contrast to the Aristotelians, such anti-teleologically inclined thinkers as Hobbes and Spinoza see efficient causation as 'blind' in the sense that efficient causes are never end-guided.[8] The upheavals that took place in seventeenth-century natural science had undeniably a profound effect on that period's philosophy, and obviously on grounds of this and Spinoza's tendency to separate efficiency from finality, he is often taken to view all causation along the lines of *mechanistic* efficient causation. For instance Bennett asserts, 'Spinoza argues that nothing has a final cause because everything has an efficient cause.'[9] He justifies this by citing the appendix of the first part of the *Ethics* where Spinoza denies final causes by invoking, among other things, 1p16 and by reminding us that everything in nature happens by a certain eternal necessity. As the following quote evinces, Bennett has a rather mechanistic way of looking at Spinoza's conception of efficient causality:

> The phrase about 'a certain eternal necessity of Nature' is a reference to Spinoza's efficient-cause determinism. He is implying that something which is caused mechanistically, i.e., by a 'push' from behind, cannot properly be explained also in terms of goals or purposes or desires, i.e., in terms of a 'pull' towards a resultant state of affairs.[10]

In general Bennett, like many others, seems to take for granted that the rejection of final causes directly entails that all causality is efficient causality, and since the paradigmatic case of efficient causality is usually considered to be the one that reigns in mechanics, a rather mechanistic picture of Spinoza's philosophy thereby emerges.

In a sense the mechanistically oriented interpretation of Spinoza's view on causation is thoroughly understandable, for not only was the science of mechanics prominent in the seventeenth century, but the importance of the efficient cause also emerges from Spinoza's texts; he states, for instance, that 'God is the efficient cause, not only of the existence of things, but also of their essence' (1p25), and that this efficacy takes place through an infinite chain of finite causes (1p28). Further, 'nothing belongs to the nature of anything except what follows from the necessity of the nature of the efficient cause' (4pr; C, p. 545; G II, p. 208). This indicates that any proper

[8] John Carriero (2005, pp. 121–2) expresses this point very instructively in his discussion on Spinoza and final causality. See also Carriero 1991, pp. 58–9. For a detailed examination of this, see Ch. 5 below.

[9] Bennett 1984, p. 215. [10] Ibid., p. 216.

interpretation of Spinoza's conception of causation must accommodate, and offer an explication of, the idea of efficient causality.

SUÁREZ ON THE FORMAL CAUSE AND EMANATION

Although there is no doubt that Spinoza includes efficient causation in his system, a quick look at the central 1p16 already reveals that it is hard to fit it into the mechanistic picture of efficient causality. In other words, judging from that proposition, the basic case of causation does not, for Spinoza, have to do simply with impacts through which motion is transferred from one body to another. Moreover and importantly, Spinoza's *order of presentation* – the fact that 1p16c1 says that God is the efficient cause *because* of 1p16 – speaks for this. So I suggest that we put the mechanism-associated way of thinking about efficient causation aside for a while and see how things look if we approach Spinoza's views by keeping in mind the scholastic conception of the formal cause and a related notion of emanation;[11] as we will see, a different picture emerges, and one that squares considerably better with the ontological considerations of the previous chapter. Thus, to obtain a better grasp of 1p16 and to see Spinoza's ideas concerning causation in their proper context, my next aim is to offer a brief explication of a relevant scholastic understanding of the formal cause and emanation.[12]

[11] That the notion of emanation is relevant in interpreting Spinoza is, as such, by no means a novel observation: already Harry Wolfson (1961 [1934] 1, pp. 372–5, 391–2) lists what he sees as analogies between Spinoza's thought and certain aspects of the traditional doctrines of emanation. However, Wolfson's account of God's productive causality is hardly satisfactory; most notably, I do not think Spinoza is 'interposing infinite modes between God and finite modes' just as the emanationists interpose 'immaterial Intelligences between God and matter' (Wolfson 1961 [1934] 1, p. 391), for this kind of hierarchism, characteristic of the Neoplatonic doctrine of hypostases, is quite alien to Spinoza's system. Martial Gueroult (1968, pp. 246–52) maps Spinoza's relation to the traditional notion, and according to Carriero (1991), Spinoza operates within an Avicennan emanative framework. However, although important connections can be found between Avicenna and Spinoza, the idea of causation as emanation is not exclusively an Avicennan one. Moreover, Carriero seems to have a rather mechanistic interpretation of Spinoza's view of efficient causation. According to him, Spinoza applies 'the lessons of the new physics to human beings and the deity. [. . .] [T]he new science affords Spinoza powerful reasons for divorcing final causality from efficient causality and confining the former to an epiphenomenal status' (Carriero 1991, p. 59); in a later paper Carriero states that Spinoza 'presents a theory according to which the sort of causality the new scientists find in the corporeal order is found throughout all of nature' (Carriero 2005, p. 121). However, I think that precisely because Spinoza's conception of causation owes much to the idea of emanation its relation to mechanistic causation should be reconsidered.

[12] There are, to my knowledge, two noteworthy readings that have regarded formal-emanative causality as focal for understanding Spinoza. According to Gueroult's classic study, Spinoza does not accept the traditional distinction between logico-mathematical emanation and active efficiency because he fuses the formal and the efficient cause together (Gueroult 1968, pp. 293–4, 297–9). Although Gueroult's work is very helpful, the statement that the formal-emanative and the efficient-active are assimilated

Of the scholastic philosophers, Francisco Suárez (1548–1617) offers us a helpful starting point. Suárez was, of course, the most prominent of the Renaissance Jesuit philosophers whose writings had a profound influence on post-Renaissance thought; indeed, medieval philosophy was passed, to an important degree, on to the modern world through his works. Descartes, who was trained in the scholastic tradition, probably had first-hand acquaintance with Suárez's *Disputationes*. In fact, it has been suggested that Suárez is the most important scholastic for Spinoza;[13] however, it should be noted that I am not attempting to establish a direct link between the two thinkers but merely taking Suárez as an instructive representative of a well-known line of thought in sixteenth-century philosophy – a line of thought in some important respects quite close to the claims contained in the *Ethics*. Recognizing this background helps us to see certain characteristics of Spinoza's thought that would otherwise easily go unnoticed.

The first thing to be kept in mind is that Suárez's conception of *natural* or *efficient emanation* seems to be very much unlike mechanistic efficient causation. Suárez's thought starts from the central scholastic distinction between necessary accidents (that is, necessary accidental properties, also known as proper accidents or *propria*) and non-necessary accidents; of these, non-necessary accidents can be taken away from a certain kind of substance (for instance, whiteness from a human being), while necessary accidents cannot (for instance, risibility from a human being).[14] According to Suárez,

(or, as Gueroult also says, that the latter is even in some sense reduced to the former) does not strike me as entirely accurate; a more explicative account of the relations between different kinds of causes in Spinoza's thought remains to be given. Moreover, Gueroult (p. 298) implies that the scholastics would not have seen emanation as true causal activity. But that this does not apply to all the prominent schoolmen – and the implications of this observation for interpreting Spinoza – will be presented below. Also Vincent Carraud (2002, esp. pp. 323–6) objects to interpreting Spinozistic causality as efficient causality; on his reading, proceeding through a discussion focusing on the expression *causa seu ratio*, it is formal causality that emerges as the basis of all causality. This is a good interpretative move, and congenial to the one I will favour below, albeit on different grounds. However, Carraud's reasoning leads him to analysing the formal conditions of the existence of things, whereas I would prefer a different approach to elucidate Spinoza's conception of causation. Moreover, I am unsure of how Carraud's view on the important relationship between formality and efficiency ('efficiency is just the external doublet of formality' [p. 324, translation mine]) should be understood. Although Wolfson mentions geometrical necessity while discussing emanation, he does not clarify its nature but merely proclaims, '[t]he term cause which Spinoza applies to God is [. . .] to be understood in the logical and geometrical sense' (Wolfson 1961 [1934] 1, p. 373). So, although these scholars point in the right direction, I think a still more satisfactory account remains to be given.

[13] Curley estimates, following Jacob Freudenthal's 'Spinoza und die Scholastik' of 1887, that 'of the better-known scholastics Suárez was probably the most important' (C, p. 223) for the medieval and late scholastic background of Spinoza's *Metaphysical Thoughts*. Referring to Curley, Lennon (2005, p. 27) writes that Suárez 'might have been his [Spinoza's] most important medieval source'.

[14] See e.g. *PN* II.9; *SW*, p. 10.

substances produce their proper accidents through what he calls 'natural emanation':

> [T]he accidental properties, especially those that follow upon or are owed [to a substance] by reason of its form, are caused by the substance not only as a material cause and a final cause but also as an efficient cause through a natural resulting [. . .] [I]t is probable that *the substantial form has a certain power for having its proper accidents emanate from it*. Likewise, in this way one discerns more clearly *the natural connection between a* [substantial] *form and its properties*. (*MD* 18.3.4, emphases added)

To illustrate this, Suárez claims that water, even after having been heated, reduces itself to its 'pristine coldness' by 'the [substantial] form through a natural resulting' (*MD* 18.3.4), and this kind of principle of efficient causality is 'the inward substance itself' (*MD* 18.3.8). So, emanation is used to explain how things obtain their properties and why, in different situations, they act and react in certain characteristic ways: a thing's form and the properties resulting from it make the thing what it is.

If emanation has to do with formal causality, why, then, does Suárez call it *efficient*? As Des Chene explains, Suárez is, unlike the Thomists, decidedly of the opinion that emanation is genuine efficient action.[15] According to him, properties of natural things are distinct entities whose coming to being and persistence require a real action (*MD* 18.3.6–7); and this makes emanative causation a real action, even though it is not always, as Suárez acknowledges, counted as such (*MD* 18.3.6). In other words, for changes in the accidents of a substance (one, for example hotness, disappears, and another, for example coldness, appears) a cause, and hence real activity, is needed; and because, to use a traditional example, coldness emanates from the form of water even when water has been heated – bringing about a real change from hotness to coldness – the emanative production of properties must be, for Suárez, a true action.[16]

All this suggests that emanation is efficient because it refers to a true causal consequence or action in contrast to what Suárez calls a mere 'natural appropriateness' that is found, for example, between matter and form of celestial bodies – in them, matter and form are necessarily connected in a certain fashion, but there is no causality involved between form and matter (*MD* 18.3.6).[17] After all, Suárez's notion of the efficient cause seems to be rather broad, for he writes that the efficient cause causes 'by means of a

[15] Des Chene 1996, pp. 158–61. For discussion on Aquinas's position, see also Carriero 1991, pp. 69, 91–2.

[16] Since no thing can exist without its *propria*, it would probably be more accurate to speak here not about coldness but power to make colder (see Ch. 3, n. 7). However, there is no need for us to discuss this in detail here: it suffices to note that Spinoza's theory is subtle enough to give answers to this kind of question; see Ch. 6.

[17] For another reason for regarding emanation as real action, see Des Chene 1996, p. 160.

proper action that flows from it' (*MD* 17.1.6) and that 'to be an actual efficient cause is the same as being something that acts' (*MD* 18.10.5). Even though Suárez designates, in accordance with the tradition, the formal cause as an intrinsic, the efficient cause as an extrinsic cause (*MD* 17.1.6), he obviously thinks that the substantial form is distinct enough from certain accidents for it to be appropriate to think of emanation as one kind of efficient causation. So in its emanative action, a substantial form can be regarded not only as a formal but also as an efficient cause,[18] and Suárez certainly seems to think this to hold with regard to natural agents. This intertwinement does not, however, mean that the substantial form would be somehow unimportant or out of the picture: '*The substantial form is the principal principle by which the efficient cause acts*' (*MD* 18.2.3).

Recent scholarship indicates that the above claims were not contested in scholasticism, on the contrary. In an important paper tracing the role of the substantial form in the Aristotelian tradition, Robert Pasnau contends that '[f]or scholastic philosophers of all persuasions, the substantial form is the explanatory basis of the entire substance, serving as the internal cause of a thing's accidental properties and supplying the identity conditions for the whole substance and its parts.'[19] The following statement, in turn, offers a compact summary of the historical development of the notion: '[W]hereas in Aristotle a more metaphysical conception of form seems to predominate, by the end of the scholastic era the case for form rests entirely on its causal efficacy as the source of a substance's various intrinsic properties.'[20] Moreover, Pasnau discusses Suárez among those many thinkers who regard the substantial form as a robust causal agent or power, operating as a kind of internal efficient cause.[21] Clearly, then, what Suárez writes on emanation fits nicely into a widespread late scholastic line of thought.

The Suárezian view emerging from the preceding paragraphs can be summed up by saying that emanation is formal causation by which a thing produces its properties; in natural agents, this equals genuine causal efficacy. Martial Gueroult instructively observes that emanation was traditionally seen as immediate, with no mediating factors involved; it would thus in fact be contradictory to deny the emanative cause its effect so that the cause would exist but the effect not.[22] To take the traditional example

[18] Cf. Des Chene 1996, p. 332. [19] Pasnau 2004, p. 34. See also Nadler 1998, p. 515.
[20] Pasnau 2004, p. 41. [21] Ibid., pp. 37–8.
[22] Gueroult 1968, pp. 246, 269. As Gueroult notes, in this the emanative cause differs from the 'active' cause that produces its effect mediately (e.g. when a fire heats up a nearby table). For the corresponding distinction in Aquinas, see *SCG* II.30. See also Carriero 1991, p. 69.

Gueroult mentions, fire could not be fire without being hot,[23] so abolition of the hotness equals extinguishing the fire. Clearly, this kind of immediacy and necessity characterize what happens when a thing effects something in itself, in virtue of its own form alone. Moreover, the traditionally prevalent talk about *properties that follow from the essential principles* refers to this; here the key distinction is between a thing's essential principles or features (e.g. rationality of human beings) and the non-essential properties that necessarily follow from these essential principles (e.g. risibility of human beings).[24] In a nutshell, emanation means that from any thing's essence certain properties immediately and necessarily follow.

SPINOZA AND THE FORMAL CAUSE IN GEOMETRY

What does the preceding discussion imply with regard to Spinoza? At this point we should return to the focal 1p16, '[f]rom the necessity of the divine nature there must follow infinitely many things in infinitely many modes (i.e., everything which can fall under an infinite intellect)'. The demonstration turns on the tenet that 'the intellect infers from the given definition of any thing a number of properties that really do follow necessarily from it (i.e., from the very essence of the thing)'; and because 'the divine nature has absolutely infinite attributes (by d6), each of which also expresses an essence infinite in its own kind, from its necessity there must follow infinitely many things in infinite modes'. So there are things other than God, because God's essence is causally efficacious, bringing about all of God's properties. I think this notion of causality bears a striking resemblance to the above-outlined emanative action of the formal cause – moreover, a perfectly consistent resemblance given the fact that Spinoza's doctrine of being, as presented in Chapter 1, clearly has much in common with traditional essentialism. This impression is only strengthened by the final proposition of the first part of the *Ethics*: 'Nothing exists from whose nature some effect does not follow' (1p36). In other words, for Spinoza, things are *essential causers of properties*. Also, the *Theological-Political Treatise* displays these tendencies:

> [S]ince the knowledge of the effect through its cause is *nothing other than the knowledge of a property of that cause*, the greater our knowledge of natural phenomena, the more

[23] Gueroult 1968, p. 246.

[24] See e.g. *SCG* II.30; Carriero 1991, pp. 51, 79; Garrett 1991, p. 201. As Carriero (1991, p. 73) argues, this kind of Aristotelian conception of essence differs from our contemporary way of construing a thing's essence out of its necessary properties. See also Lin 2004, pp. 26–7.

perfect is our knowledge of God's essence, which is the cause of all things. (*TTP* IV; S, p. 428; G III, p. 60, emphasis added)[25]

This way of putting things gestures towards the traditional view, such as the one endorsed by Suárez, according to which properties are caused by the substantial form from which they emanate.

A rather convincing case could be made, I believe, for there being a connection between formal causality and Spinoza's notion of formal essence – the latter seems, as we have seen, to be moulded after the geometrical objects and their essence/property structure, so perhaps calling the eternal essences precisely *formal* essences is a nod in the direction of the traditional notion of form, which also was considered a type of cause.[26] Be this as it may, at this point Spinoza's conspicuous eagerness to use geometrical objects in illustrating his ideas should be taken up. After having claimed that 'God acts from the laws of his nature alone, and is compelled by no one' (1p17) he remarks:

> I think I have shown clearly enough (see p16) that from God's supreme power, *or* infinite nature, infinitely many things in infinitely many modes, i.e., all things, have necessarily flowed [*effluxisse*], or always follow, by the same necessity and in the same way as from the nature of a triangle it follows, from eternity and to eternity, that its three angles are equal to two right angles. (1p17s)

In light of the preceding discussion, it is evident that the talk about 'flowing' exemplifies classic emanative terminology. I would hence suggest that we take a look at what kind of picture emerges when Spinoza's position is considered from the emanativist point of view.

As I have already brought forward, Spinoza's denial of final causes has most often been considered to entail reducing all causation to efficient causation, and the way the triangle analogy has been interpreted evinces this too. For instance Carriero maintains that 'the point of the analogy is that there is no final causality in God's production of his effects: the infinite things in infinite ways that flow from the divine essence are not the consequence of some choice on God's part, directed at the good'.[27] And certainly, in Spinoza's system there is no place for a transcendent chooser-God, but this negative stand is hardly all that Spinoza wants his triangle illustration to convey. Quite the

[25] Cf.: '[E]ffect, *or* property' (defaff22exp).

[26] Note that in the *Treatise on the Emendation of the Intellect* (§ 91; C, p. 38), Spinoza talks about 'the formal character of nature [*formalitatem naturae*]' that our mind can faithfully represent; and in 5p31d he maintains that 'the Mind, insofar as it is eternal, is the adequate, *or* formal, cause of the third kind of knowledge (by 3d1)'.

[27] Carriero 1991, p. 64.

contrary: a brief overview of seventeenth-century mathematics leaves little doubt that once again, we find geometry shaping Spinoza's views.

As Paolo Mancosu explains, at the heart of the most important controversy of seventeenth-century philosophy of mathematics lay the scientific status of geometry: according to the prevailing Aristotelian conception, in order to be scientific an explanation needs to reveal the cause of the phenomenon under examination – be the relevant kind of cause formal, material, efficient, or final. Now, the question whether geometrical demonstrations were truly causal was already raised during the Renaissance period: in many cases those demonstrations did not proceed through the causes of geometrical objects and their properties. A widely discussed example of this was the way in which the sum of the internal angles of a triangle was proven to be equal to two right angles by appealing to certain auxiliary segments, which, understandably, cannot be seen as the cause of the aforementioned equality. Accordingly, this kind of demonstration did not cite causes, and so, granted the Aristotelian conception, it could not be scientific, either. Keeping geometry's paradigmatic position in mind, this was no minor issue.[28]

However, the crucial thing for us is to note what kind of causal explanations would surely accord, for the Aristotelians, with geometry's nature and could thus guarantee its scientificity:

> The scholastic tradition would have assumed this [the proof concerning a triangle's angles] to be a causal proof by maintaining *the triangle must have an essence (given by a definition) that determines, as in a formal cause, the rest of its properties*, in particular, the sum of the internal angles is equal to two right angles.[29]

In other words, a specific kind of intrinsic formal causality was seen to pertain to geometrical objects; the crux of the problem was that although the essence of a geometrical object was traditionally thought to determine the properties pertaining to the object, some important geometrical demonstrations did not refer to these essential causes. For instance, Isaac Barrow (1630–77), who delivered his lectures during the 1660s and is one of the noteworthy mathematicians Mancosu discusses, defends geometry's causality and does not hesitate to use emanative terminology; he sees mathematical propositions as flowing from the essences of things. Moreover, Barrow emphasizes formal causality as the foundation of a necessary consequence.[30]

[28] Mancosu 1996, pp. 10–15. [29] Ibid., p. 14, emphasis added.

[30] See ibid., pp. 21–2. As Mancosu (1996, pp. 17–19) points out, according to some seventeenth-century mathematicians, geometry deals not only with formal but also with material causes. To my mind, however, such passages as *Metaphysics* 1036a26–b6 (*CWA* II, p. 1636) make it rather clear that essences of mathematical objects do not include matter; see also *On Being and Essence* 11 (*SW*, p. 37); *CAM*

The similarity, sometimes finding its way even into the choice of words, of the foregoing geometrical discussion and Spinoza's views on causality is, I think, evident. It is simply improbable that Spinoza was not aware of the most significant mathematical debate of his time or the prevalent ways of thinking about formal causality when he decided to include the triangle analogy in 1p17s. And as the following passage quoted in the Introduction witnesses, if there is a model of causality he is led to by denying the final causes, it is much more akin to formal-essential than mechanistic causation: 'This alone, of course, would have caused the truth to be hidden from the human race to eternity, *if Mathematics, which is concerned not with ends, but only with the essences and properties of figures, had not shown men another standard of truth*' (1app; C, p. 441; G II, p. 79, emphasis added). All this, together with Spinoza's talk about formality in connection with essences and being of things, strongly suggests that Spinoza regards the mathematical standard as the correct one, because through it the true formal character of the world can be pinned down. Given Spinoza's tendency to think about *all* things through the model provided by geometrical objects,[31] it is quite understandable that his doctrine of causality has much in common with the idea of the formal cause, or 'what follows from the essence'. Consistently enough, this applies most clearly to the only substance: according to the passages concerning divine freedom, God-or-Nature has precisely as little choice over the fact that he produces everything there is in virtue of his essence alone, as fire has over its hotness, a rational creature over its ability to laughter, or a triangle over the sum of its internal angles.

To summarize: Spinoza thinks that ontology should be founded on the ideas of essence, property, and (formal-emanative) 'following', which constitute a structure most clearly seen in geometrical entities. The point is that this kind of following, in traditional parlance formal causation, has an autonomous standing and is not reducible to or to be confused with efficient causation: *it holds in geometry* even though no efficient causes (nor matter nor ends) are involved. Most importantly, for Spinoza this primary type of causality is involved in the basic structure of reality and things in it.[32] However, in the case of *real things* it is

VII.9.1468; Lear 1982, p. 169. This – if not the simple fact that Aristotle sometimes equates essence with form alone (see e.g. *Metaphysics* 1032b1–2, 1035b32; *CWA* II, pp. 1630, 1635) – probably explains why Barrow stresses the importance of the formal cause when writing about geometrical causality. As Des Chene (1996, pp. 232–5) explains, it was a debated issue in Aristotelianism whether or not matter should be included in the essence of natural things.

[31] See Ch. 1.

[32] Pasnau (2004, p. 40) writes about the formal cause in Aristotle, 'formal explanation seems to take place at a more abstract, metaphysical level. What is at issue here are not ground-level facts about why a body has this or that observable quality, but more refined questions of unity and individuation,

correct to say that *the formal character of things equals or results in efficient causality*: insofar as things are real, the essential causal architecture equals efficacy, i.e. bringing about *real* effects, states, or properties.[33] In fact, I would argue that Spinoza takes the following route to reach a conclusion rather reminiscent of the above outlined late scholastic position concerning natural things: he starts from the idea that just as properties follow from geometrical objects' essences, they follow from all essences; then, given that some of those essences belong to real existents, the properties brought about cannot but be real effects; thus, it is proper to call the essences in question efficient causes.[34] In light of this, it is understandable that once Spinoza has established that all things follow from God's nature (1p16), God of course being a real (natural) thing, the 'flowing' from his nature has the *corollary* that 'God is the efficient cause of all things' (1p16c1). In brief, Spinoza's notion of efficient causality is based on the geometry-inspired doctrine of the nature of being.

SPINOZA AND THE ESSENTIALIST MODEL OF CAUSATION

The observations made thus far suggest that Spinoza puts forward a particular essentialist model of causation in many respects similar to a traditional understanding of emanation. According to Spinoza's model, causation has fundamentally to do with the fact that as things are what they are – that is, as they have the kind of essences they do – certain properties follow or flow from those essences.[35] And since there is only one substance, God-or-Nature

requiring judgments about, for instance, a thing's modal properties.' I think the same can be said about the position of 'essential following' in Spinoza's system.

[33] Michael Della Rocca (2003a, pp. 80–1) contends that 'the notion of causation somehow depends on the notion of conceivability' and asks,

> is Spinoza willing to say that any form of conceivability or conceptual connection is a kind of causality? Is there, e.g., a *causal* relation between the fact that a triangle is a right triangle and the fact that it satisfies the Pythagorean theorem? This certainly does not seem causal, but at most merely conceptual. Still, I think Spinoza would not balk at calling this relation causal.

I believe my interpretation squares quite nicely with this contention. For I argue that (efficient) causality depends on a ('conceivable') formal structure of a thing; but still a certain kind of causality may be claimed to pertain to this sort of conceivability, namely formal causality. Cf. also Matheron 1991a, p. 23; Scala 1994, p. 36; Macherey 1998, pp. 139–46.

[34] So even though Spinoza's position is in harmony with the late scholastic view, as formulated in Pasnau 2004, in which the substantial form was seen as an internal efficient cause, it nevertheless should be kept in mind that for Spinoza the form of causality reigning in geometry and involving no efficient causality is the primary and autonomous one, determining the basic nature of things. Only if a thing is a real one, its intrinsic formal character can be said to be converted into 'internal efficient causation'.

[35] Here I am in agreement with some noteworthy recent discussions. In his elaborate article on Spinoza's *conatus* argument, Garrett claims Spinoza to have endorsed a view according to which all finite things inhere in God, and since any y that inheres in x is both conceived through and caused by the essence of x (Garrett 2002, pp. 136–42, 144–5), this represents one essentialist way of understanding Spinoza's

that is also a real thing, indeed *ens realissimum*, it is understandable that everything turns out to be what it is and the way it is because God's essential causal activity results in real effects, or 'infinitely many things in infinite modes'.

At least the following points can be said in support of the view that the best way to make sense of Spinoza's conception of causation is by reading certain key passages against the background in which the idea of formal-emanative causation holds a prominent place.

First and foremost, 1p16 seems to be talking about the sort of production of necessary properties characteristic of the formal cause. Aquinas is following the tradition when he states in his *On Being and Essence*, 'a thing is intelligible only through its definition and essence' (*SW*, p. 35), and as we have seen, Spinoza obviously adopts this contention without hesitation: each thing has its definable essence. The triangle analogy of 1p17s is there to drive home the idea that certain properties belonging to any genuine thing follow from its definable essence with the precisely same kind of necessity as in geometry. And on these grounds we are in the position to know that if such an entity is real, it has efficacy, in virtue of its essence, to produce those properties. This observation reveals that all things, be they mere beings of reason or real things, share the same formal architecture of 'following', which explains, at least in part, Spinoza's alleged disregard of the distinction between logico-geometrical following and efficient causation: at least in God's case, the latter occurs as determined by the former, thereby necessarily realizing everything that follows from God's essence. This bears, I think, a striking resemblance to the emanativist way of speaking about both geometrical following and the immanent causal activity of physical and mental things in terms of emanative production of properties. Moreover,

notion of causation. In consonance with this, Garrett emphasizes the causal efficacy of essences: 'In Spinoza's view, something is an individual thing only to the extent that it has some nature or essence through whose genuine activity effects can be understood to follow' (Garrett 1999, p. 330). 'For Spinoza, an individual or singular thing exists to the extent that there is instantiated a definite essence or nature that can serve as a locus of causal activity. Where there is such an essence, properties follow (both causally and logically) from that essence' (Garrett 2002, p. 150; see also 1991, pp. 194, 201). In his article defending a teleological reading of Spinoza, Martin Lin (2006, p. 343) claims similarly that, for Spinoza, 'things are causally efficacious only in virtue of their essences'; but Lin links this kind of 'causation through essence' with a Neoplatonic view of efficient causation according to which 'efficient causation is a kind of giving' in which the cause resembles the effect (see also Lin 2004, pp. 29–33). Although Garrett and Lin are right in emphasizing the importance of essences in Spinoza's theory of causation, I think that the formal-emanative framework allows us an even better grasp of the import and nature of Spinoza's essentialist commitments; for instance, Spinoza is pushed towards his essentialist view on causation not only, as Lin (2006, p. 345) claims, by his 'rationalistic cast of mind' that shuns brute contingencies, but by his *geometrical* brand of rationalism and the model of causation it carries within.

the fact that geometrical objects were traditionally also regarded as causal entities helps to understand why Spinoza finds it so unproblematic to make the transition from the basic ontologico-conceptual considerations (i.e. definable essences and the being determined by them, as in 1p16 and 1p16d) to the causal realm (things as causes in virtue of their essences, 1p16c1).

Second, although the term 'emanation' itself is not to be found in the *Ethics*, Spinoza uses it in his correspondence, for instance in the following fashion:

> [W]hether the good that follows from virtue and the divine love is bestowed on us by God as judge, or whether it emanates from the necessity of the divine nature [*ex necessitate Divinae naturae emanet*], it will not on that account be more or less desirable. (*Ep*75; S, p. 945; G IV, p. 312)[36]

Of course, Spinoza himself endorses the latter of these two views.

Third, as Gueroult explains, the passages of the *Ethics* that deal with causation (1p16–p18) place into the Spinozistic framework a considerable number of the different ways in which Franco Burgersdijk and Adrian Heereboord (two seventeenth-century philosophers from Leiden with whose work Spinoza was acquainted) classify causes; and in this context 1p16 refers precisely to the emanative (vs. active) cause.[37]

Now, if Spinoza's conception of causality really is as close to the formal-emanative one as I claim it is, we should be as clear as possible about its relation to other types of causes. As I mentioned earlier, the final and the material cause pose no problem here: at least with regard to God, Spinoza denies that there is any kind of teleology, and the material cause seems to be altogether expunged from his thought. This leaves us with the efficient cause; Spinoza undoubtedly wants to include it in his system, and now the question is, how is efficient causation accounted for within the essential model? This is a thorny question to say the least, but I believe we have already gathered enough material to answer it. Textual evidence both for the 'emanative-essentialist' and the 'efficient-mechanist' readings of Spinoza's thought can be found; obviously, he regarded the two aspects as quite compatible. Nowhere, to my mind at least, is this witnessed more clearly than in the following already cited passage: '[N]othing belongs to the nature of anything except what follows from the necessity of the nature of the efficient cause' (4pr; C, p. 545; G II, p. 208). This can be taken as a piece of

[36] See also *Ep*43.

[37] Gueroult 1968, pp. 246–8, 251–6. As Gueroult (p. 297) notes, according to Burgersdijk form is the emanative cause of properties.

evidence for the efficient reading;[38] but it can be read the other way round, too, as saying that real things act as efficient causes, and do so because effects necessarily follow from their natures or essences. Actually, this way of reading it concords much better with Spinoza's order of exposition in 1p16 and its corollary, where efficient causality is a consequence of essential causation, and 3p7d, where he states, '[f]rom the given essence of each thing some things necessarily follow (by 1p36), and things are able [to produce] nothing but what follows necessarily from their determinate nature (by 1p29)'. Real things' essence-originating causing can be called efficient because it results in real changes in the agent and other things – indeed, by what other term could this aspect of causality be characterized? However, the key idea is that without the essence-originating, formally structured causal thrust there would be no efficacy in the first place.[39]

The flowing or following from God's nature results in real effects which realize a specific ontological structure; this is something that cannot be affected or intervened in for the simple reason that, in the Spinozistic framework, there is nothing besides God. Because finite things are among the real effects of God's productive activity, God can be called their efficient cause. However, the causality of finite things, or of modifications of God, is another issue, for, unlike God, they are not causally isolated, exclusively self-determining agents. As a consequence, only God's causality amounts to 'full-blown' emanation, which must be taken into account when the essentialist model is used to explicate the causation taking place between finite things.[40]

[38] Carriero (2005, p. 130) writes: 'By "the necessity of the nature of the efficient cause" I take Spinoza to mean what I have referred to as a blind efficient cause.'

[39] Also Lin's (2006) position is, I believe, close to the one presented here. Moreover, it should be noted that Spinoza's views have here, too, some noteworthy affinities with the late scholastic ones: as Hattab observes, the late scholastic camps debating the nature of efficient causation taking place between substances agreed that the efficient cause–effect relation is grounded in some feature (intrinsic mode) either of the agent or the patient (Hattab 2003, pp. 7–8). Now given that in this tradition it is the essence that determines what the substance is and what kind of properties, modes, or features it necessarily has, I think it can be said that efficient causation has its basis in formal (or emanative) causation. Spinoza, in turn, holds there to be things with essences, from which certain things follow and based on which things determine each others' actions, this determining equalling transeunt efficient causation (more on this below).

[40] However, it should be kept firmly in mind that since there is, according to Spinoza, only one substance, considering the essentialist model from the viewpoint of finite things should not be done as if finite things were separate substances (this is what happens quite quickly due to our tendency to endorse a pluralistic ontology). After all, Spinoza thought the only metaphysically appropriate point of view to be the one in which all causation is immanent to the monistic substance (see 1p18); obviously, all talk about causal relations taking place between finite things can and should be translated, as it were, into more adequate talk about God's internal causation (indeed, this is why

Because finite things enter into relationships of interdetermination with each other,[41] they all are under the influence of external causes – whose fundamental manner of operation is respectively determined by their individual essences. These interactions always determine, at least partly, the way a finite thing behaves. In other words, two cases must be distinguished: that in which a thing causes something in virtue of its essence alone, and that in which the thing's essence is only a partial cause of the resulting effect (which means that something happens that is a joint product of two or more disparate things' essences).[42] In this respect the difference between God and his modifications lies in the fact that God's causal activity is determined by his essence alone, whereas finite things' causal activity is determined by other finite things, i.e. by external causes, too.

I think Spinoza attempts to give an uncomplicated formulation to issues pertaining to the necessity of causation by saying that '[f]rom a given *determinate* cause the effect follows necessarily' (1a3, emphasis added): regardless whether an agent is determined to causing effects internally (i.e. actively) by its own nature alone, or externally (i.e. passively) so that the resulting effects also depend on the nature of external causes, once the cause is determined, the effect results with the necessity pertaining to the emanative cause. Moreover, I would like to emphasize that in the case of passivity, too, we are still dealing with what follows from the essences of things (the agent and the patient), or what is the same, joint causing of effects is also, for Spinoza, essence-based causing.[43] So although Spinoza uses the famous example of a stone that 'receives from the impulsion of an external cause a fixed quantity of motion whereby it will necessarily continue to move when the impulsion of the external cause has ceased' to illustrate that 'every single thing is necessarily determined by an external cause to exist and to act in a fixed and determinate way' (*Ep*58; S, p. 909; G IV, p. 266), this should not be taken to mean that the resulting motion would be what it is were the essence of the stone different from what it is; the same impulsion would not, of course, effect the same kind of motion if directed to, say, a feather. This idea is clearly stated by the following axiom:[44]

the Suárezian account of emanation, explicating the way in which a substance obtains its properties, sits so well with Spinoza's thought). As Koistinen (2002, p. 60) points out, Spinoza thought that his monistic doctrine is capable of unlocking the severe problems plaguing both Descartes's interactionism and Malebranche's occasionalism. On immanent causation in Spinoza's system, see especially Nadler 2008; but also Lennon 2005, p. 28; Sévérac 2005, p. 56; Lærke 2009, pp. 183–7.

[41] See the previous chapter, especially the discussion on formal being.

[42] According to 3d2, the first case equals activity, the second passivity; see Ch. 3 below.

[43] For a more detailed explication of this, see Ch. 6 below.

[44] For another illustration of this idea, see *TP* IV.4; S, p. 697; G III, p. 293.

All modes by which a body is affected by another body follow both from the nature of the body affected and at the same time from the nature of the affecting body, so that one and the same body may be moved differently according to differences in the nature of the bodies moving it. And conversely, different bodies may be moved differently by one and the same body. (2le3a1)

It should be noted, however, that although any finite thing is capable of operating in virtue of its essence, it can itself neither determine the kind of essence it has nor come into existence because of that essence, for all finite things come to exist from external causes (1p11s).[45] This means that from the Spinozistically adequate monistic standpoint finite things are God's states which God produces via his other states,[46] so although finite things can be said to be essentialist causers, they are brought about by other finite things, which, operating according to their essences, act as efficient causes on other finite things; and as 1p28 states, this chain of finite causes continues *ad infinitum*. But we should not take Spinoza's idea to be that all finite things are always *completely* externally determined; as the axiom above and Spinoza's view of passivity imply, and as Spinoza elsewhere makes clear,[47] things are also active and self-determined in different degrees.[48]

At this point I would like to address a possible objection to my interpretation. It has been claimed,[49] largely on the basis of the influential reading Curley presents in his *Spinoza's Metaphysics* of 1969, that the general features of the universe that are explicable by laws of nature can be said to emanate from God, but not singular things each one of them a part of, and determined by, an infinite causal chain that consists of finite things. In a way similar to the covering law model of Carl Hempel and Paul Oppenheim,[50] Curley contends that neither infinite modes (the general nomological facts) nor finite modes (the singular facts)

are by themselves adequate causes of finite modes. Taken separately, they are only partial causes; the existence and actions of a particular finite mode cannot be understood either by reference to other finite modes alone or by reference to infinite modes alone, but only by reference to both infinite and finite modes.[51]

So, 'the infinite and finite modes are separately necessary and only jointly sufficient conditions of finite modes'.[52] According to a line of thought

[45] For more on this, see the next chapter.
[46] As Koistinen (2002, p. 68) explains, following Roderick Chisholm, 'individuals enter into causal relations *via* their states'.
[47] See e.g. 2p29, defaff1; *TTP* III (S, p. 417; G III, p. 46). [48] For more on this, see Ch. 5 below.
[49] See Rice 1992; for relevant discussion, see also e.g. Watt 1972; Lennox 1976; Gilead 1990.
[50] See Hempel and Oppenheim 1948. [51] Curley 1969, p. 66.
[52] Ibid., p. 70. See also Curley 1988, pp. 47–50.

inspired by this, a distinction can be made between two kinds of causality in Spinoza's system: the *emanative* one pertaining to (immediate and mediate) infinite modes, and the *sequential* one pertaining to finite modes.[53]

However, despite its merits,[54] this line of interpretation is not without its problems. The weightiest one is that if only general facts are claimed to follow from God's nature, is seems that there is and cannot be any explanation for why precisely the actual sequence of finite modes exists – or for why there are any finite things in the first place.[55] When confronted with this dilemma,[56] Curley argues (with Gregory Walski) that 'the existence of the totality of finite things and [. . .] the existence of the most general laws governing finite things' simply are by their very nature such phenomena that there can never be a proper (scientific) explanation for them; and an explanation should not be sought when it is even in principle impossible to find one.[57] However, as we saw in the previous chapter, Spinoza obviously holds that there *is* an ultimate explanation for everything, namely God's nature, from which all things follow so that a specific immutable and eternal ontological structure is realized.[58]

[53] Rice 1992, pp. 46, 48–50.

[54] As Diane Steinberg (2000, p. 25) comments, Curley's interpretation 'gives us a relatively concrete understanding of the mysterious infinite modes and explains how they are caused by the absolute nature of an attribute'.

[55] Cf. Huenemann 1999, p. 225.

[56] The objection is by Huenemann and presented in Curley and Walski 1999, p. 258 as follows: '"[Y]our [Curley and Walski's] Spinoza cannot explain why one possible universe is actual and another is not. That this universe, and no other is actual is, I take it, a brute fact, true independently of any fact about God."' Huenemann articulates well what seems to be the greatest problem in Curley's interpretation:

> Monism has been understood generally as the view that somehow all things [. . .] owe their existence and essence ultimately and exclusively to a single thing, and Spinoza has been understood generally as such a monist. But according to Curley, Spinoza does not claim that finite modes owe their existence *exclusively* to God. God's nature plays a part in their existence, to be sure: it grounds the laws of nature, which are necessary for the generation of any finite mode. But the laws alone are not sufficient for a finite mode's generation. There must also be an independent causal chain of finite modes, a chain whose links are again governed by the laws of nature, but which (again) do not owe their existence exclusively to God. [. . .] [T]he totality of finite modes cannot be understood as following from God's nature or God's attributes or God's infinite modes, according to Curley, since this would mean that each finite mode does so, and E IPP21–23, 28 rule this out. Thus there is no final explanation, in Curley's account, for the existence of the totality of finite modes other than the individual explanations for the existences of particular members of that totality. (Huenemann 1999, p. 227)

However, discussing Huenemann's (1999, pp. 235–8) own solution to these problems would take us too far afield.

[57] Curley and Walski 1999, p. 259.

[58] Huenemann (1999, pp. 227–8) mentions, justifiably I think, also *KV* 1.4 (C, pp. 83–4; G 1, p. 39), *CM* 1.3 (C, p. 309; G 1, p. 243), and 1P29 as additional reasons to see Spinoza as believing, as Huenemann puts it, 'that some ultimate explanation [. . .] must be given for the existence and determinate nature of the totality of finite modes' (p. 228).

As we will see later on,[59] Spinoza's rather strong brand of geometrical essentialism lurks behind his general ethical project, moral psychology, and political philosophy, too, and has direct implications for how human affects are conceived. Indeed, before embarking upon constructing his theory of the affects, Spinoza proclaims to 'consider human actions and appetites just as if it were a Question of lines, planes, and bodies' (3pr; C, p. 492; G II, p. 138), thus leaving little doubt that he understands his approach to be geometrical, not mechanistic in character. And such propositions as '[e]ach affect of each individual differs from the affect of another as much as the essence of the one from the essence of the other' (3p57) exemplify his essentialist psychology.[60] Also, the doctrine of our actual essence as *conatus*, central for Spinoza's psychology, witnesses the fact that proper grasp of his essentialism is necessary for the correct understanding of his naturalistic ethics. In brief, appreciating the geometry-inspired model of causality is an indispensable step towards understanding Spinoza's geometrical dynamics of human existence.

The longstanding dominance of the Humean conception of causality may make Spinoza's view appear, at first sight at least, strange. However, the recent developments in contemporary metaphysics and philosophy of science, sharing a host of the essentialist intuitions behind Spinoza's thought, may make him easier to approach. To take an important present-day representative of this line of thought, Brian Ellis holds that what things 'do or could do is of their essence'.[61] Contentions such as this are part of an on-going discussion the direction of which is in the making, but these developments at least suggest that Don Garrett's quite positive assessment of Spinoza's fortunes is well-founded: for Garrett's Spinoza, 'thinghood is a function of manifesting a nature suitable for playing a substantive role in explanations – that is, having a nature from which things follow causally and through which they can be understood' – and this is a position which Garrett estimates is 'attractive and deserving of serious consideration'.[62]

To sum up, I think it can be said that Spinoza discards the Aristotelian doctrines of teleology and of activity as actualization of potentiality, but not the geometry-inspired essentialism stemming from that same source: from

[59] See esp. Ch. 6.

[60] For the impact of essentialism on Spinoza's political theory, see *TP* IV.4 (S, p. 697; G III, p. 293); *TTP* XVII (S, p. 536; G III, p. 201).

[61] Ellis 2002, p. 1. Already Rom Harré (1970, p. 88) claims that we may see the behaviour of things 'as flowing from their natures or constitutions as consequences of what they *are*. So they must behave in the specified way, or not be the things that they are.' This essentialist line of thinking is developed more extensively in Harré and Madden 1975.

[62] Garrett 2002, p. 151.

this viewpoint, causality is not about regular succession of event types but about finite things with essences in virtue of which they produce effects and determine each others' manner of acting. Once a thing is determined to act in a certain way, be that determination brought about inwardly or externally, the effect necessarily results. However, when dealing with finite things' causation, we should not lose sight of Spinoza's original monistic vision – as we have seen, from the philosophically adequate eternal standpoint there is, in the end, only one substantial causal agent, God-or-Nature, who, when producing everything there is, determines the nature of reality with unyielding rigour: '[A]ll things have been determined from the necessity of the divine nature, not only to exist, but to exist in a certain way, and to produce effects in a certain way' (1p29d).