



uOttawa

L'Université canadienne
Canada's university

**FACULTÉ DES ÉTUDES SUPÉRIEURES
ET POSTDOCTORALES**



**FACULTY OF GRADUATE AND
POSTDOCTORAL STUDIES**

Robert Moser

AUTEUR DE LA THÈSE / AUTHOR OF THESIS

Ph.D. (Philosophy)

GRADE / DEGREE

Department of Philosophy

FACULTÉ, ÉCOLE, DÉPARTEMENT / FACULTY, SCHOOL, DEPARTMENT

St-Thomas Aquinas and John Haldane on Knowledge of Material Things

TITRE DE LA THÈSE / TITLE OF THESIS

Antoine Côté

DIRECTEUR (DIRECTRICE) DE LA THÈSE / THESIS SUPERVISOR

CO-DIRECTEUR (CO-DIRECTRICE) DE LA THÈSE / THESIS CO-SUPERVISOR

Lawrence Dewan

Paul Forster

Greaeme Hybter

Calvin Normore (McGill University)

Gary W. Slater

Le Doyen de la Faculté des études supérieures et postdoctorales / Dean of the Faculty of Graduate and Postdoctoral Studies

St. Thomas Aquinas and John Haldane on Knowledge of Material Things

Robbie Moser

Thesis submitted to the
Faculty of Graduate and Postdoctoral Studies
In partial fulfilment of the requirements
For the PhD degree in Philosophy

Department of Philosophy
Faculty of Graduate and Postdoctoral Studies
University of Ottawa

© Robert G. Moser, Ottawa, Canada, 2009



Library and Archives
Canada

Published Heritage
Branch

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque et
Archives Canada

Direction du
Patrimoine de l'édition

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file *Votre référence*
ISBN: 978-0-494-61232-3
Our file *Notre référence*
ISBN: 978-0-494-61232-3

NOTICE:

The author has granted a non-exclusive license allowing Library and Archives Canada to reproduce, publish, archive, preserve, conserve, communicate to the public by telecommunication or on the Internet, loan, distribute and sell theses worldwide, for commercial or non-commercial purposes, in microform, paper, electronic and/or any other formats.

The author retains copyright ownership and moral rights in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.

AVIS:

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque et Archives Canada de reproduire, publier, archiver, sauvegarder, conserver, transmettre au public par télécommunication ou par l'Internet, prêter, distribuer et vendre des thèses partout dans le monde, à des fins commerciales ou autres, sur support microforme, papier, électronique et/ou autres formats.

L'auteur conserve la propriété du droit d'auteur et des droits moraux qui protègent cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de cette thèse.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.


Canada

In loving memory of our grandmother

Edna Lillian Moser

Table of Contents

Dedication	ii
Abbreviations	iv
Abstract	v
Acknowledgements	vi
Introduction	1
Chapter 1: John Haldane on Intentionality	9
1.1: St. Thomas's View and Haldane's Endorsement	10
1.2: The First Disagreement: Sensation	17
1.3: The Second Disagreement: Intellect	25
1.4: The Realignment with Thomas	31
1.5: Conclusion	34
Chapter 2: Sensory Cognition and Reference	37
2.1: Cognition as Immaterial	38
2.2: General Account of Sensory Cognition	50
2.3: Phantasms and Reference to Material Things	58
2.4: Conclusion	73
Chapter 3: Sensory Cognition and Immateriality	75
3.1: Sensory Materialism and Thomistic Cognition	76
3.2: Receiving Intentional Being	81
3.3: Intentional Being and <i>per accidens</i> Existence	92
3.4: Conclusion	99
Chapter 4: From Sense to Intellect: The Role of the Cogitative Power	101
4.1: The Cogitative Power and <i>per accidens</i> Existence	102
4.2: Experience and Commonality	108
4.3: Sensing the Universal and the <i>natura communis</i>	112
4.4: Conclusion	125
Chapter 5: Mind, World, and the Problem of Universals	128
5.1: Mind-World Identity and " <i>universalia in rebus</i> "	129
5.2: Thoughts and Things: Natures Universal and Common	133
5.3: Intellectual Abstraction	140
5.4: Identity Theory and Modes of Being	150
5.5: Conclusion	156
Chapter 6: Mind-World Identity and Representation	158
6.1: The Dual Role of the Cognitive Form	159
6.2: St. Thomas and the Unity of Knower and Known	167
6.3: John Haldane and Mind-World Identity	173
6.4: Identity, Intentionality, and <i>esse intentionale</i>	183
6.5: Conclusion	192
Chapter 7: <i>Esse intentionale</i>, <i>esse immateriale</i>, and Cognizance	194
7.1: <i>Esse intentionale</i> and the Cognitive As Such	195
7.2: <i>Esse intentionale</i> Perfect and Imperfect	205
7.3: <i>Esse intentionale</i> as Informational Being	210
7.4: Conclusion	217
Conclusion	219
Bibliography	228

Abbreviations

I have used the following abbreviations to reference Thomas's texts in the footnotes. Complete references can be found in the bibliography:

<i>ST</i>	<i>Summa theologiae</i>
<i>InDA</i>	<i>Sentencia libri De anima</i>
<i>SCG</i>	<i>Summa contra Gentiles</i>
<i>DV</i>	<i>Quaestiones disuptatae de veritate</i>
<i>DEE</i>	<i>De ente et essentia</i>
<i>QQ</i>	<i>Quaestiones de quodlibet</i>
<i>QDA</i>	<i>Quaestio disputata de anima</i>
<i>CT</i>	<i>Compendium theologiae</i>
<i>QDSC</i>	<i>Quaestio disputata de spiritualibus creatures</i>
<i>InSent</i>	<i>Scriptum Super Sententiis</i>
<i>InPostAn</i>	<i>Expositio libri Posteriorum Analyticorum</i>
<i>InSS</i>	<i>Sentencia libri De sensu et sensato</i>
<i>InMeta</i>	<i>Sententia libri Metaphysicae</i>
<i>InPery</i>	<i>Expositio libri Peryermeneias</i>

Abstract

Contemporary philosopher John Haldane advances a version of Thomas Aquinas's well-known doctrine that in knowledge the knower and thing known are somehow one. Haldane calls his version of this claim the "mind-world identity thesis", and it is meant to answer the question of intentionality: how to describe the way thoughts are related to things. In the thesis I engage two specific aspects of Haldane's presentation: (i) his view that a Thomist may defend sensory cognition as an entirely material process, and (ii) his view that "intentional being" is the special criterion of cognition or intelligence. Against these, I argue that any presentation of the "identity thesis" must follow Thomas in (i) holding sensory cognition to involve immateriality, and (ii) recognizing "intentional being" as information at once present in the environment and detectable by knowers. My thesis demonstrates that these two components of Thomas's philosophy of mind are indispensable to any work on the question of intentionality from within Thomas's account, and it offers corrections to a presently influential answer to the question.

Acknowledgements

Thank you to Professor Côté who is an excellent advisor on all accounts. In five years his counsel in matters both administrative and philosophical has never steered me on a wrong course. I have come to know him as a keen and careful scholar, and an engaging and patient teacher. I am deeply grateful for his continuous generosity and concern for my professional and financial well being. In five years I never once doubted that Professor Côté had my best interests in mind, and for this especially I consider myself very fortunate.

Thank you to Father Dewan for his painstaking attention to my work, and above all for sharing with me his tremendous understanding of St. Thomas. Father Dewan expertly sharpened my focus on crucial points of detail, and guided me to the textual “gold mines” for my concerns. He broadened my appreciation of Thomas’s teaching as a whole, and showed me patience in the search to see how so many parts of doctrine are interrelated.

Thank you to Professor Hunter and Professor Forster for their diligence and patience in reading my work, their timeliness in returning drafts, and for their insightful comments that helped in all cases to make the points sharper and my writing clearer. A writer hopes for skilled and thoughtful readers, and in this each of them far exceeded what I could have hoped for.

For this thesis to be written, it took much more than an excellent committee:

Thank you to my professors, friends and colleagues with whom I talked (at length) about my work. They have ranged across cities and provinces and states, and to name them all would take up too much space, so suffice it to say that I count myself lucky to know so many good people. I would be wrong, however, not to name one: Darren Bifford endured my unscientific musings, philosophical, theological, and otherwise, with undue and remarkable charity.

Thank you to the administrative staff in our philosophy department who are constantly working to make sure, when philosophers have their heads in the clouds, that someone is watching where they land. Thanks especially to Jocelyne LaCasse for her attention over the years to my many questions and quandaries.

Thank you to my family and friends in other parts of the country who have, for five years, given me the warmest welcomes on holidays from the ongoing work at the University of Ottawa.

My deepest thank you to my wife, Melissa. What I feel for her is different from gratitude: she shared in every high and low, applauded and encouraged me, and even worked beside me at almost every hour. Words alone cannot express this special gratitude, so here I thank her, simply, for her unending understanding.

Introduction

Two central theses in St. Thomas Aquinas's presentation of human cognition combine to give a rudimentary answer to the question 'how is a thought about a thing?', the question of intentionality. The first thesis is that human thoughts about things are partly "caused by the senses."¹ The second thesis is that knowledge occurs when "the thing known is [...] in the knower [...] according to its likeness."² According to these theses, a thought is about a thing because a representational likeness of the thing known comes to exist in the knower in virtue of some causal and informational involvement of the senses.

Across a series of publications spanning twenty-five years, John Haldane has drawn on St. Thomas theory of cognition to answer the question of intentionality. Specifically, Haldane advances a view that he takes to be a cornerstone of thomistic philosophy of mind, a view he calls the "mind-world identity theory". This theory, says Haldane, is "intended to serve two central explanatory roles: first, to indicate how world-intending thoughts are possible; and second, to show how they engage directly with objects and features within it."³

Both of these explanatory roles serve Haldane's broader commitments in his theory of human cognition—commitments that he shares with Thomas. The identity theory developed out of these shared commitments. The most important of these is that knowledge consists of the cognitive presence of a formal nature. A formal nature may exist either with

¹ Even though the senses are "not the entire cause". *ST* 1.84.6 *in corpore* and *ad* 3: "*non est tota causa.*" See the section on Abbreviations (p. iv) for a legend to my references to St. Thomas.

² *InDA* 2, lect. 12: "*Unumquodque autem recipitur in aliquo per modum sui. Cognitio autem omnis fit per hoc, quod cognitum est aliquo modo in cognoscente, scilicet secundum similitudinem. Nam cognoscens in actu, est ipsum cognitum in actu.*" Cf. *ST* 1.14.2: "It is said in *De anima* that the sensible object in act is the sense in act, and the intelligible object in act is the intellect in act. For it is from this that we sense or understand something actually: that it is actually informed (*informatur in actu*) by the sensible species or intelligible species. And only according to precisely this is the sense or intellect other than the sensible or intelligible object: that either of them is in potency." Cf. *ST* 1.84.1 *ad* 1, where St Thomas states that the human intellect knows material bodies by means of (*per*) "immaterial and intelligible species, which can be in the soul by their own essence."

³ John Haldane, "Mind-World Identity Theory and the Anti-Realist Challenge", *Reality, Representation and Projection*, Crispin Wright and John Haldane, eds. (Oxford, 1993), pp. 15-37 at p. 20.

“natural” being (*esse naturale*) in extramental reality, or it may exist with “intentional” being (*esse intentionale*) in a mind. Despite this difference in modes of being the formal nature in the knower and in extramental nature are the same form. Haldane expresses this idea by saying thought and thing are “formally identical”.⁴ Mind-world identity means to describe how thought is in direct engagement or *en rapport* with things in the world, and thus give an answer to the question of intentionality: a thought is about a thing because the form in the mind and the form in the world are one and the same form. The theory invokes a causal connection between thought and thing via sense perception, in virtue of which a thought comes to have some content that fashions the thinker with knowledge about the extramental thing.

Another commitment shared by both Thomas and Haldane is that human cognition of material things is not achieved by a mental representation.⁵ Here the specific and technical meaning of ‘mental representation’ is a cognitive item that is primarily known and from which the nature of things is inferred. Such a view that cognition occurs with such a mental item might be called “representationalism”, according to which human thought is not directly engaged with things in the world, but rather, thought is mediated through mental items that purport to be veridical representations of worldly things or states of affairs. For Haldane, representationalism is inadequate to answer the question of intentionality because if we have epistemic access only to representations, then we can never be certain how and whether thoughts are about extramental things. Representationalism endangers what Haldane calls “realism”, the view that our thoughts are adequate and veridical presentations of, indeed

⁴ Cf. “Mind-World Identity Theory”, *passim*.

⁵ There is a perfectly acceptable sense in which Thomas deals with representations, but this sense of ‘representational’ is distinct from the undesirable ‘representationalism’, and I address this distinction at relevant points throughout the thesis. Basically the difference is that to be representational just means to have some cognitive or intentional content, while representationalism is the view that a cognitive item is what is primarily known by the knower, from which item the knower infers the existence and qualities of an external world.

engagements with, the external world. Mind-world identity is the desired alternative to representationalism, then, because our thoughts are direct engagements with things in the world in virtue of their formal identity: concept and thing are identical in point of form.

Because Haldane advances his identity theory within these broader commitments he is defending a ‘thomistic’ philosophy of mind. He presents concept-formation and intentionality broadly in the terms of Thomas’s account of sensation and intellection. At the same time, he has made important modifications to Thomas’s presentation; one to correct what he finds to be inconsistencies and philosophical problems, and one perhaps inadvertently. Specifically, Haldane argues deliberately that (i) sensory cognition is entirely material. Also, he argues perhaps inadvertently that (ii) for Thomas (and for Haldane) the distinction between mind and world is given as the distinction between an “intentional” mode of being and a “natural” mode of being. With respect to (i), Haldane thinks sense cognition must be entirely a material process in order to secure conceptual reference to individual material things.⁶ With respect to (ii), Haldane thinks extramental forms exist with “natural being” as the formal counterpart of our concepts, which concepts exist with “intentional being”. The difference in modes of being marks the difference between knower and thing known: the knower possesses a form intentionally and the thing possesses the same form naturally.

It is open to debate as to whether St. Thomas endorsed either or both of points (i) and (ii). I will argue that he endorsed neither, and, moreover, that Thomas’s own position on the question of intentionality is philosophically defensible. With respect to (i), I show that

⁶ E.g., Haldane writes: “Through experience and reason the subject comes to acquire concepts that are intentional counterparts of naturally existing substantial and accidental forms, and thereby an intrinsic connection between mind and world is established. Concepts or intentional forms provide the basis of mental and derivative forms of content, but since they are universal they fail to yield singular reference which is achieved (directly and indirectly) via perceptual states,” in “Forms of Thought”, pp.163-64.

Thomas could not have held that sensory cognition is fully material. With respect to (ii), I show that Haldane's reading cannot accommodate Thomas's presentation of the nature of *esse intentionale*.

Philosophically speaking, neither of these points of Thomistic exegesis may be of concern to John Haldane, who is not opposed to modifying bits of doctrine in St. Thomas. Haldane adopts what he takes to be the Thomistic spirit, that "in philosophy, as in religion, the spirit of ecumenism is to be welcomed, but one cannot negotiate truth".⁷ He is a self-described 'thomist' with a lower-case 't',⁸ departing from Thomas's teaching for the sake of saving Thomas's vision. Haldane understands his presentation of Thomas as part of a broader and necessary project, namely, to adapt Thomas's views and clear away his inconsistencies to form a philosophically desirable and defensible position. He adopted the lower-case-'t'-thomism to emphasize his "non-exegetical" approach to Thomas, which is illustrated in his presentation of the identity theory and its attendant metaphysics.⁹ He believes, however, that it is consistent with the basic ambition and spirit of St. Thomas.¹⁰

My argument in the following work is that Haldane must abandon points (i) and (ii) in his presentation of mind-world identity theory on philosophical grounds. I argue that these points are inconsistent with certain of Thomas's central views that Haldane accepts.

⁷ "The Spirit of Thomism and the Task of Renewal", in *Thomas Aquinas: Approaches to Truth*, James McEvoy and Michael Dunne, eds., (Dublin: Four Courts Press, 2002), pp. 66-76 at p. 72.

⁸ See his "A Thomist Metaphysics", in *The Blackwell Guide to Metaphysics*, Richard M. Gale, ed., (Oxford: Blackwell, 2002), pp. 87-109, at p. 88ff. A lower-case 't' even in the title here would not have been inappropriate, but the indefinite article serves to illustrate Haldane's contention that "there is no unified thomist school" and so no 'thomist metaphysics' as such.

⁹ Cf. "Throughout my aim will be to offer an adequate theory inspired by Aquinas's writings rather than to engage in textual exegesis, and as will become clear I believe it is sometimes necessary to reject aspects of Thomas's stated view and to go beyond it." See his "Forms of Thought", p. 150.

¹⁰ Thus the project to realise a 'synthesis of analytical form and Thomistic content' is not only to 'express Aquinas in contemporary idiom', but also to alter Aquinas so that his thought does not conflict with 'the linguistic idiom of our time'. See Haldane's "Thomism and the Future of Catholic Philosophy", *New Blackfriars* 80 (1999), pp. 131-146. The expression "the linguistic idiom of our time" is Peter Geach's, in his "Teleological Explanation", in *Explanation*, S. Körner, ed., (Oxford: Basil Blackwell, 1975), p. 93.

Accordingly, Haldane must abandon (i) his view that sensation is entirely material. This is because Haldane accepts Thomas's general view that all knowledge is the possession of the form of another as other, and, as I shall argue, this possession must involve immateriality. Second, Haldane must abandon (ii) his view that the distinction between mind and world is given as that between "intentional" and "natural" being. This is because Haldane accepts Thomas's view that the criterion of cognizance is that it is representational or intentional, and, as I shall argue, this criterion is better expressed by accounting for Thomas's view that "intentional being" (*esse intentionale*) exists in non-cognitive modes.

In the following work, then, I place John Haldane in dialogue with St. Thomas. I defend Thomas's account of human cognition of material things against certain of Haldane's modifications, and I suggest some modifications to Haldane's presentation. I argue that neither of Haldane's theses, viz., (i) that sensory perception is material, and (ii) that the distinction between mind and world is one between "intentional" and "natural" modes of being, are defensible given Haldane's commitments to other parts of Thomas's theory of human cognition.

Chapter one is itself an introductory statement of the problems involved, so I shall not devote space to these here. Chapter one also presents a general overview of Thomas's account of human sensation and intellection, and, of Haldane's two central difficulties with that account. This presentation also involves showing how Haldane first rejected and then adopted Thomas's "moderate" position on universals as existing only in the mind. This latter discussion prefaces a suggested modification to Haldane's position, which comes in chapter five.

Chapters two through four present Thomas's doctrine of sense perception and defend it against Haldane's criticism that it must be construed as purely material in order to account

for reference to material things. Haldane argues that sensory immateriality must be rejected on the grounds that it does not permit phantasms to secure reference to material things. I begin the chapter by showing that Haldane misconstrues Thomas's teaching on the nature and purpose of the phantasms. Contrary to Haldane's reading, the phantasms are not meant to secure direct reference to individual things, and, they are sensory images that participate in some degree of immateriality. The chapter establishes that since phantasms are not meant to secure such reference, sensory immateriality may not be rejected on these grounds.

In chapter three I present and defend Thomas's doctrine of degrees of sensory immateriality in a discussion of his doctrine of intentional or spiritual being in both the senses and the non-cognizant medium. I reject Haldane's view that the senses are entirely material, because this rules out the possibility that sensation can be a form of knowledge. Since Haldane is committed to Thomas's theses that knowledge is the cognitive possession of the form of another, and such possession requires immateriality, then immateriality is required for Haldane's account of knowledge, including sensory knowledge.

Chapter four completes my case against Haldane's sensory materialism within a thomist philosophy of mind. I present the role of the cogitative power in Thomas's account of how sensory information gives rise to conceptual knowledge in the passage from sense to intellect. Within this account I present Thomas's doctrine that the universal nature exists, in a way, at the level of material sensation. I read this doctrine through the lens of Thomas's presentation of a hierarchy of grades of immateriality in the senses. The aim of this description is to emphasise that for the thomist, cognition of any kind must involve immateriality, and so the senses, as cognitive, must be immaterial "all the way down".

Chapters five through seven concern the second of Haldane's theses that interest me here, namely, the view that "intentional being" is uniquely intellectual, which entails that the

distinction between mind and world is given as the distinction between “intentional being” in the mind and “natural being” in the world. In chapter five I show that Haldane’s presentation of this point may have arisen from an early objection to Thomas’s position on the status of natures in extramental reality. I suggest that since Haldane has changed his mind and sided with Thomas on this issue, he should change his presentation of mind and world accordingly. First I turn to Haldane’s original objection to Thomas’s position and I show how Thomas can offer a reply. I present this from within a discussion of Thomas’s treatment of the problem of universals, suggesting how Thomas’s treatment can avoid Haldane’s original worries while at the same time upholding what Haldane finds interesting and important about mind-world identity.

In chapter six I show how and why Haldane sees the identity thesis as answering the question of intentionality, and I raise some questions about this account. I suggest two specific corrections to Haldane’s presentation. Specifically, Haldane’s presentation of the identity thesis remains couched in language more suitable to his early and now-rejected views, and in order to defend the thomistic philosophy of mind it would be better to follow Thomas’s own presentation of the doctrine. Second, Haldane departs from Thomas on the question of the nature of representational character of cognition, opting to explain representation in terms of formal identity. I suggest that this raises the problem of being unable to distinguish cognitive forms from non-cognitive forms. The solution to this problem is to see that the representational character of the cognitive is a special mode of being, which solution I present in the final chapter.

Chapter seven completes my argument for some modifications to Haldane’s mind-world identity theory in order to provide a ‘thomistic’ answer to the question of intentionality. I argue that since Haldane thinks the distinction between the cognizant and the

non-cognizant is the same as the distinction between *esse intentionale* and *esse naturale*, so he takes *esse intentionale* to be the mode of being tantamount to cognition. In order that the identity theory provides an answer to the question of intentionality, I suggest Haldane must attend to Thomas's doctrine that representation and *esse intentionale* are not coextensive, according to which representation requires *esse intentionale* but *esse intentionale* does not entail representation. I end with a discussion of the extramental existence of *esse intentionale* and its role in cognition as informational being.

In my concluding remarks, I address the significance of mind-world identity and the question of intentionality for broader contemporary philosophical debate. Specifically, I very briefly present an overview of a debate between John Haldane and Hilary Putnam on the nature of mind and world and the question of intentionality. There is further work to be done in sorting out all of the complex issues raised in their informative and important engagement on these problems, and I will highlight some of the places for that work to be done. I will end the thesis, then, on the very issue with which I shall now begin: John Haldane on how best to give a thomistic answer to the question of intentionality.

Chapter 1: John Haldane on Intentionality

John Haldane believes that St. Thomas's general theory of cognition is invaluable for combating "representationalist" views of the mind. But he has worried about two details of Thomas's presentation that seem to threaten realism, i.e. an account of how thought is engaged in a veridical and adequate way with extramental reality. First, Haldane thinks Thomas must be read as saying that sensation is a fully material process or else his account of sensation cannot secure reference to material things. Second, Haldane thinks Thomas's account of the nature of minds and material things cannot explain how universal concepts represent individual things. Haldane understands both of these problems as concerning the question of intentionality: how thought is about things in the world. He presents Thomas's theory as best equipped to give a satisfying realist answer to this question, as long as his modifications are taken into account. Accordingly, Haldane has devoted most of his work in philosophy of mind to developing a position he calls "mind-world identity theory".¹ He thinks he finds this view in essence in St. Thomas, and with slight changes, he thinks it will save the better part of a thomist philosophy of mind.

In the first section of the chapter, I present a general overview of Thomas's account of cognition, highlighting the points relevant to Haldane's work. This sets the stage for the reader to understand what Haldane is trying to preserve and what he decides he must reject in Thomas. In the second section I present Haldane's disagreement with Thomas concerning the way sensation engages reality. In the third section I present Haldane's disagreement with Thomas concerning the way intellect engages reality. I close by introducing two worries that arise from Haldane's modifications; one general worry arises from his presentation of

¹ This theory is the subject of most of Haldane's work in philosophy of mind, but see especially his "Mind-World Identity Theory and the Anti-Realist Challenge", in *Reality, Representation and Projection*, J. Haldane and C. Wright, eds., (Oxford, 1993), pp. 15-37.

sensory cognition and one general worry arises from his presentation of intellectual cognition. These worries, and my suggestions for how Haldane might dissolve them, are the focus of the subsequent chapters.

§1.1: *St. Thomas's View and Haldane's Endorsement*

At the outset I began by highlighting two of Thomas's theses about human cognition, namely, that (i) knowledge "is caused by the senses,"² and (ii) knowledge occurs when "the thing known is [...] in the knower [...] according to its likeness."³ To these I now add two more theses to develop the picture more fully, namely, that for Thomas (iii) the way the thing known comes to exist in the knower is in virtue of form, and (iv) the form exists in the knower immaterially.

Of the many and varied ways in which Thomas Aquinas uses the term 'form' (*forma*) and its sometime-synonym 'species' (a technical term, to be discussed, and usually left untranslated), I am interested here in how he uses them in discussions of cognition, particularly to cognition of material things. I am especially interested in the way 'form' denotes what Thomas sometimes calls an 'essence' (*essentia*) or a 'quiddity' (*quidditas*). I take a passage from Thomas's *De ente et essentia*⁴ to show how I will be using 'essence' and similar terms to speak about human cognition:

'Essence' signifies that which is common to every natural kind (which kinds sort diverse things into various genera and species), just as 'humanity' is the essence of humans, and similarly for other things. Now, that by which things are sorted into their proper genus and species is that which is signified by

² *ST* 1.84.6 *in corpore* and *ad* 3. Again, the senses are "not the entire cause".

³ *InDA* 2, lect. 12; Cf. *ST* 1.14.2.

⁴ The *De ente et essentia* is an early work, but the statement that concerns me is general enough that the sense of 'essence' here given, and which I will treat, did not change throughout Thomas's career, and is germane to the nature of the present discussion of human knowledge.

the definition indicating what the thing is, hence some philosophers have adopted the word ‘whatness’ (*quidditas*) to mean ‘essence’ (*essentia*). And this is what Aristotle frequently called ‘what it is to be that thing’ (*quod quid erat esse*), i.e. that which makes something what it is.⁵

Here we see that ‘essence’ is both a metaphysical and a logical notion. ‘Essence’ is metaphysical insofar as it is the “whatness” (*quidditas*) of a thing. In this sense it refers to that which gives a thing a stable identity or unity (*certitudo uniuscuiusque rei*), and Thomas notes that this metaphysical aspect is also sometimes referred to by the words ‘form’ or ‘nature’ (though these words mean other things too).⁶ ‘Essence’ is logical insofar as it is that which is signified by the specific definition of the thing. In this sense, ‘essence’ is that aspect of a thing that is intelligible or understandable: it is the answer to the question ‘what is this?’ (*quod quid est?*) Thomas often uses the term ‘*species*’ when speaking of essence this way, and so I will use ‘species’ throughout the thesis as a technical term indicating a cognitive essential form: a form in cognition is called a ‘species’.⁷

An ‘essential form’, then, is structuring principle or a determinant of both knowledge and of things.⁸ When the form (or nature) ‘apple’ exists in matter, there exists an apple, and

⁵ *DEE* 1: “*essentia significet aliquid commune omnibus naturis, per quas diversa entia in diversis generibus et speciebus collocantur, sicut humanitas est essentia hominis, et sic de aliis. Et quia illud, per quod res constituitur in proprio genere vel specie, est hoc quod significatur per diffinitionem indicantem quid est res, inde est quod nomen essentiae a philosophis in nomen quidditatis mutatur. Et hoc est quod philosophus frequenter nominat quod quid erat esse, id est hoc per quod aliquid habet esse quid.*”

⁶ Cf. *DEE* 1. Also: “What is important to note in this paragraph is that the terms ‘quiddity’, ‘essence’, ‘form’ and ‘nature’ are coextensional; that is to say, they denote one and the same thing. But they are not cointensional, for their connotations are different.” Jorge J.E. Gracia, “Cutting the Gordian Knot of Ontology: Thomas’s Solution to the Problem of Universals”, in *Thomas Aquinas and His Legacy*, David Gallagher, ed., (Washington, DC: Catholic University of America Press, 1994), pp. 16-36, at p. 30. Fr. Dewan has pointed out to me that the quoted passage from *DEE* 1 does not contain the term ‘form’ at all; for the doctrine that the essence of things includes both form *and* matter, see *DEE* 2 [Leonine ed.; ch. 1 in earlier eds.]

⁷ E.g., *SCG* 2.98: “the cognitive power is made actually cognitive through some species.” (*potentia cognoscitiva fit actu cognoscens per speciem aliquam*)

⁸ An analysis of everything Aquinas means by ‘essence’ and ‘form’ and similar terms goes well beyond my purposes here. But it should be possible to carry out an investigation of cognition as involving forms, and to be able to speak about their role at some level of specificity. While certainly more will be said about form as the discussion proceeds, it is useful to note this opinion from Gyula Klima: “just as we could start talking about concepts without having to commit ourselves to any particular theory about what concepts in themselves are, so

when the form (or species) ‘apple’ exists in the knower, the knower is actually knowing what an apple is.⁹

According to this picture, the way a form exists in the knower is different from the way the form exists in the thing known. When the form ‘apple’ exists in matter, there exists an apple, but when the form ‘apple’ exists in the knower, no apple comes to be, nor does the knower become an apple. Rather, the knower is now apprised of some quality, the quality of knowing an apple. Thomas describes this distinction between how forms are present by saying that a form making an apple is form appearing in a material way, but a form causing knowledge appears in the knower in an immaterial way.¹⁰

Immateriality, the absence of matter, is a fundamental notion in Thomas’s theory of knowledge, and this must occupy our attention here in these early pages. Thomas believes that the human intellect is immaterial,¹¹ and as such, the species in the intellect (‘intelligible species’) are immaterial as well.¹² In extramental material things, essential form is “enmattered”, as it were. In the intellect, however, form is freed of matter. The immateriality of form in the human intellect is a specific instance of Thomas’s doctrine that “what is

we can start talking about the “forms” of things as the ultimate significata of our words without having to take a metaphysical stance about what these “forms” in themselves are.” Gyula Klima, “The Semantic Principles Underlying Saint Thomas Aquinas’s Metaphysics of Being”, *Medieval Philosophy and Theology* 5, 1 (1996): 87-141.

⁹ Although this is presently just an introductory statement, it will be necessary later to say something about the distinction between ‘substantial form’ and ‘accidental form’, where, ‘substantial form’ denotes a natural kind (e.g., ‘apple’, ‘dog’) and ‘accidental form’ denotes a property of some substance (e.g., ‘being red’, ‘being furry’). As forms, properties may also be cognitively instantiated. So, when the form ‘red’ exists in an apple, the apple is actually red, and when the form ‘red’ exists in the senses and intellect, there is an actual sensation and understanding of ‘red’. In chapters two and three I will offer a more detailed account of what Thomas means by cognitive forms being ‘determinants’ or principles of actualization and cognition.

¹⁰ Cf. *ST* 1.84.2: “[...] material things known exist in the knowing being not materially, but rather immaterially.” (*materialia cognita in cognoscente existere non materialiter, sed magis immaterialiter*)

¹¹ Cf. *ST* 1.75.5.

¹² 1.84.1 *ad* 1.

received is in the recipient in function of the mode of the recipient”.¹³ In other words, when form exists in things, it exists ‘materially’, or in a material mode, and, when form exists in knowers insofar as they are knowers, it exists ‘immaterially’ or in an immaterial mode. The form in the intellect as such is called an ‘intelligible form’ or more usually an ‘intelligible species’ (*species intelligibilis*).

Because the intelligible species is freed of matter, it is not determined or contracted to any one particular thing (e.g., this particular apple). Considered as such, the form ‘apple’ could exist in any number of material individuals, and when it does (i.e., when there is an apple), Thomas says the essential form is “individualized”.¹⁴ When it is freed of matter, existing in the intellect, it is not determined to any individual thing, and so it exists there not as individual but as “universal”.¹⁵ The cognitive species ‘apple’, according to St. Thomas, is a likeness of the essential nature common to all apples,¹⁶ and as such it may be predicated of not just one individual, but may be predicated “universally”.

Once these forms exist in the knower, they exist not according to the mode of being they have in material things, but rather according to the mode of being of the knower: “immaterial being” (*esse immateriale*). In the case of human beings, the forms of things (usually) come to exist in the knowing human via a causal process in sense perception. According to Thomas, it is by means of (*per*) these “immaterial and intelligible species”¹⁷ working in conjunction with sensation that the human knows material bodies.

¹³ *ST* 1.84.1. Cf. *InDA* II, lect 27: “every receiving thing receives something in function of its [the receiver’s] own mode.”

¹⁴ *ST* 1.3.2 *ad* 3: “Forms which can be received in matter are individualized by matter” (*formae quae sunt receptibiles in materia individuuntur per materiam*).

¹⁵ Cf. *ST* 1.84.1, 1.85.1, especially *ad* 5, and 85.2, especially *ad* 2.

¹⁶ Cf. *ST* 1.85.1

¹⁷ *ST* 1.84.1 *ad* 1.

Much detail remains to be presented, but for now we have the background needed to make sense of the account of cognition with which John Haldane is working. Haldane believes that this broad picture is very useful to bring to questions in philosophy of mind, and in the specific case of interest here, the question of intentionality. Haldane thinks Thomas's general picture offers the only plausible form of realism, which is, as Haldane uses the term, the view that our cognitive experience just is an unmediated engagement with our natural environment. By 'unmediated' I mean that there are, as Haldane says, "no *cognitive* causal intermediaries" between the thinker and the world,¹⁸ from which one *infers* the existence of such-and-such properties, objects, or events in extramental nature. Haldane thinks that Thomas's general account of species and natures is the bedrock for this realism:¹⁹

Only the claim that thoughts are shaped by concepts which reflect the general structure of reality is sufficient for full-blooded realism, and that claim presupposes that the world is divided into kinds of things independently of the organizing tendency of thought.²⁰

To be a realist, then, means holding that "concepts must be naturally and not conventionally linked to what they signify",²¹ and this means positing formal extramental structures with which thought can be *en rapport*.²²

¹⁸ "On Coming Home to (Metaphysical) Realism", p. 291.

¹⁹ "Direct acquaintance [...] requires the exercise of concepts to structure the sensuous presentations of the world. What we need, therefore, is some account consistent with realism but which explains the role of sense-experience, says something of the nature of concepts and of their origins, indicates how the contents of thought are structured and can recur in other thoughts, shows how consciousness can embrace reality while allowing for thoughts that either miss the target or aim at none, and, finally, gives an explanation of how thought is intrinsically intelligible. [...] Only the Thomist [theory] offers even the promise of meeting these requirements [considering] the account it has to give of the way in which mental entities are natural signs of their objects", in "Life of Signs", p. 466.

²⁰ "Mind-World Identity Theory", p. 30.

²¹ "Life of Signs", p. 469.

²² For Haldane, realism requires the notion that "content-determining principles of perception are one and the same as the character-determining principles of the objects of perception—the identity of act and object." See his "On Coming Home", p. 296. Cf. "Perception is hylomorphically constituted, with 'sensibles' standing as forms to the matter of the sense organs," in his "Return to Form", p. 59.

Since thought must directly engage reality, thought cannot consist of cognitive “representations” that stand between the knower and the thing known. According to representationalism, human thought is not directly engaged with things in the world, but rather is primarily a cognitive relationship to mental items (e.g., images, concepts)²³ which themselves stand in some further relationship to the world. Haldane is concerned to deny representationalism, since he believes that if we posit intermediaries between thought and world, there will be no answer to the questions of whether and how our thoughts are accurately “about” things.²⁴ In other words, he believes that representationalism fails to answer the question of intentionality satisfactorily.

Aquinas’s anti-representationalism rests in his view of the nature and role of the cognitive species as a mental item. On the one hand, a mental item could be (i) that which is first known, and (ii) that *from* which we infer the existence of an external thing. Such an item would stand in a “cognitive” or epistemological relationship to the knowing mind, which is to say this mental item is first and foremost known by the mind, and serves as a justification or evidence of its external cause. On the other hand, a mental item could be (i) not itself first known,²⁵ and (ii) that *by* which the knower is activated or ‘switched on’ to know things. Such an item would not stand in a cognitive or epistemological relationship with a mind. Rather,

²³ The pairing in brackets here should not indicate that I equate images and concepts, but rather just that different versions of ‘representationalist’ thinking will posit different mental items as the intermediaries between the thinking mind and the worldly objects. Haldane doesn’t care what is posited as an intermediary, since it is the very notion of such an intermediary (common to all theories of representationalism) is what he is attacking.

²⁴ Haldane rejects the view “that cognition involves the subject standing in a relation to internal items that themselves stand in some further relation to elements of the external environment—‘inner representations of non-inner items’,” and requires that cognition is “the intentional communion of an agent and an object.” Further, “no explanation of this unity will be forthcoming from the hypothesis that thought is made possible by intermediaries, such as are posited by the Representational Theory of Mind.” See Haldane’s “Whose Theory? Which Representations?” *Pacific Philosophical Quarterly* 74 (1993), pp. 247-257, at 255 and 256.

²⁵ Though it is not first known, such an item could be itself known after conscious reflection. The point is just that cognitive attention is not directed first and foremost at the mental item, but rather first and foremost on things in virtue of the presence of the mental item.

this item would occur in the cognizer as part of the equipment or cognitive apparatus necessary for knowing to take place. Haldane strongly endorses Thomas as someone who holds the latter view of the role of the mental item: cognition requires a mental item whose presence orients or disposes the cognizer directly to know external things.²⁶

Thomas's view secures the direct engagement, for Haldane, because it operates on the principle of mind-world identity theory. The cognitive species central to Thomas's account is "formally identical" with the nature existing in the thing, and not, Haldane stresses, a representation that stands between the knower and the thing known. Thomas is an anti-representationalist ally, Haldane believes, because Thomas holds some version of this identity theory. A thought is about a thing because thought and thing share the same form; thought and thing are formally identical.

But, as I stated earlier, Haldane also thinks Thomas also holds some other views about human cognition that make the desired identity theory problematic in Thomas's own account. Accordingly, in order to retain the realist benefits of identity theory, Haldane makes modifications to Thomas's views. I now turn Haldane's modifications to Thomas's theory of cognition, focusing on his two central disagreements with Thomas's presentation.

²⁶ Because Thomas clearly posits mental items that represent the world, some might say that Thomas endorsed a version of representationalism. For example, see Claude Panaccio, *Le Discours Intérieur: de Platon à Guillaume d'Ockham* (Paris: Seuil, 1999), esp. pp. 179-186; See also Panaccio, "Aquinas on Intellectual Representation", in *Ancient and Medieval Theories of Intentionality*, Dominik Perler, ed., (Leiden, Boston, Köln: Brill, 2001), pp. 185-201. Panaccio presents a strong case that Aquinas believed the concept to be an immanent representation of things, and he goes on to argue that words directly signify this representation. But I do not think that Panaccio's arguments establish that either the concept or the species can be understood as a representation in the sense of epistemologically 'standing between' the knower and the known. Rather, for Thomas, the presence a cognitive species *effects* or "*programs*" the knowing of things. See, e.g., Lawrence Dewan's presentation of the role of the intelligible species in concept-formation in "St. Thomas, Ideas and Immediate Knowledge", *Dialogue* 18 (1979), pp. 392-404. As to the philosophical truth of the matter, as opposed to the question of whether St Thomas held the view, Robert Sokolowski gives a concise critique of representationalism, one that seems consonant with my reading of St. Thomas, in his "Exorcising Concepts", *Review of Metaphysics* 40 (1987), pp. 451-463.

§1.2: *The First Disagreement: Sensation*

Haldane's disagreements are set out particularly clearly in a 1983 paper on Aquinas on sense perception.²⁷ One disagreement concerns intellectual knowledge: Thomas's account of the nature and referents of concepts is incoherent. The other disagreement concerns sensory knowledge: Thomas misuses his own theory of sensation to secure conceptual reference to extramental things. The upshot of both of these disagreements is that Thomas's presentation of human cognition cannot adequately account for how thoughts can be about extramental things, and how it engages directly with those things.²⁸ I will take the disagreements in turn and examine them in detail. In this section I look at the disagreement concerning sensory knowledge.

The purpose of the 1983 paper was to examine the general claim of Thomas's picture that conceptual reference to particular objects is established by the senses. Haldane proceeded by imagining St. Thomas answering "Wittgenstein's question": 'what makes my thought of him a thought of him?'²⁹ The question, in the context of Wittgenstein's discussion, is asking what it is about the thought or image that makes it of a particular thing (in this case a person), as opposed to some other thing (or person).³⁰ Another way of putting

²⁷ John Haldane, "Aquinas on Sense-Perception", *The Philosophical Review* 92 (1983), p. 238.

²⁸ Recall the two explanatory roles of Haldane's identity theory: "first, to indicate how world-intending thoughts are possible; and second, to show how they engage directly with objects and features within it." In his "Mind-World Identity Theory", p. 20.

²⁹ "Aquinas on Sense-Perception", 236. Haldane does not quote the source, but see Ludwig Wittgenstein, *Philosophical Investigations* (trans.) G.E.M. Anscombe (Blackwell: Oxford, 2001), II, iii, p. 151. Anscombe's translation reads: "What makes my image of him into an image of *him*?" Wittgenstein's German word for 'image' or 'thought' is '*Vorstellung*'.

³⁰ Cf. Anthony Kenny, "Intentionality: Aquinas and Wittgenstein", in his *The Legacy of Wittgenstein* (Oxford, 1984), p. 61: "What makes a picture of X to be a picture of X, what makes an image of X to be an image of X, what makes a thought about X to be about X?" The discussion here develops from Kenny's "Intellect and

the question is ‘how do our thoughts attach to things in the world?’³¹ Here is how Haldane presents the answer from Aquinas:

Aquinas would reply that there must be the form of humanity existing intentionally in the thinker, and a causal connection with the particular man, involving sensation. The latter provides the necessary correspondence between the universal humanity and its natural exemplification by the individual being thought of.³²

By “the form of humanity existing intentionally in the thinker” Haldane is referring to Thomas’s account of species existing “according to the mode of the knower”. Both Haldane’s and Thomas’s use of the term ‘intentional’ will occupy us at length later on, but here I will stay with Haldane’s own present focus on the “causal connection invoking sensation”. This causal connection is meant to secure conceptual reference to some particular material thing, but Haldane worries that Thomas’s account is unable to secure this.

This first disagreement involved Haldane in a consideration of a key doctrine in Thomas’s work on human cognition, namely, the doctrine of phantasms (*phantasmata*). A phantasm is so-called because it is a product of the *phantasia*, i.e. imagination. For Thomas the imagination (as we will see in the next chapter) is a function or ability (often spoken of as a ‘power’ or ‘faculty’) of the human sensorium. Thomas holds that all human thinking must make use of sensory images, however abstract.³³ The phantasms serve this role as ‘vehicles

Imagination in Aquinas”, in *Aquinas: A Collection of Critical Essays*, Anthony Kenny, ed., (Notre Dame, 1976), pp. 273-296.

³¹ As something of an aside, this is also how John O’Callaghan presents the central problem with which he is occupied at the beginning of his *Thomist Realism and the Linguistic Turn* (Indiana: Notre Dame Press, 2003).

³² “Aquinas on Sense-Perception”, p. 236.

³³ I offer a more detailed account of this claim of Aquinas’s in chapter two. I note that Eleonore Stump, in her *Aquinas* (London and New York: Routledge, 2003/05), disagrees with this ‘stronger’ claim that *all* human thinking requires imagination, preferring the ‘weaker’ claim that highly abstract metaphysical thought does not require phantasms. I cannot devote space to this here, save only to note a passage in St. Thomas with which she is already duly familiar, *ST* 1.84.7: “In the present state of life in which our intellect is united to a passible body (*quo passibili corpori*), it is impossible for our intellect to understand anything actually, except by turning to the phantasms. [...] Thus it is clear that for the intellect to understand actually, not only when it grasps new

of thought', as it were,³⁴ and as such they are a required element for human knowledge, even when we surpass sensory cognition and ascend to intellectual cognition.³⁵

Because they are sensory products used by the intellect, phantasms are central to Thomas's account of how the immaterial mind can know material objects. The immaterial intellect acquires species in transaction with these products of sensation,³⁶ and so it might be thought that there must be a bridge, of sorts, between the stimulation of the sense organs and intellectual cognition of the thing. Given such a bridging role between the material-bodily senses and the immaterial intellect, it would be relevant to know whether the phantasm itself, the product of sensation, is taken to be material or immaterial.

Haldane's first disagreement with Thomas centres on the nature of the phantasm and its role in intellectual cognition. The phantasm is the product of sensation, and Haldane thinks Thomas's account of sensation is meant "to discharge two functions":

(a) it has to provide the material, or the conditions, out of which universals are formed in the intellect; and (b) it has to provide a route from *f*-ness *qua* universal, which is as such particular-indifferent, to the *f*-ness of *x*, or rather to the *x* which is *f*.³⁷

knowledge, but also when it makes use of (*utendo*) knowledge already acquired, there is need for the act of the imagination (*actus imaginationis*) and of the other powers [that make use of corporeal organs]."

³⁴ Or, more famously, the phantasm, as the high-level product of sensory cognition, acts as the "matter of the cause" of intellectual cognition. See *ST* 1.84.6: "since the phantasms are not themselves capable of affecting the possible intellect, but rather it is necessary that they be made actually intelligible by the agent intellect, it cannot be said that sense cognition is the entire and complete cause of intellectual cognition, but rather that it is in a way the material cause." (*quia phantasmata non sufficiunt immutare intellectum possibilem, sed oportet quod fiant intelligibilia actu per intellectum agentem; non potest dici quod sensibilis cognitio sit totalis et perfecta causa intellectualis cognitionis, sed magis quodammodo est materia causae.*) This is the English Dominican translation of the text, and it seems better to translate '*materia causae*' as 'the matter of the cause'; Fr. Dewan has expressed it to me as follows: "the idea is that one is looking for a *moving or efficient* cause, a producer, of the intelligible species in the human possible intellect; this moving cause is itself composed of a formal contribution (that of the agent intellect) and a material contribution (that of the phantasm in the imagination)." (Personal communication)

³⁵ Note that because a phantasm is the sensory product of any sensing whatever, it need not be only a visual image; there are auditory and olfactory and tactile phantasms, as well.

³⁶ The details would be tangential here but they are set out in chapter 2.

³⁷ "Aquinas on Sense-Perception", pp. 238-39.

We have seen these two functions in Thomas's general picture: (a) Sensation is of material bodies, the natures of which appear as intellectual species as a result of a sensory-intellectual transaction, and (b) then these immaterial and universal species are the means by which the knower is directed to knowing other particular material things of the same essential nature.

Haldane does not think that (a) and (b) are possible both at the same time for Aquinas. He begins his criticism by considering and rejecting Thomas's distinction between two modes or grades of immateriality to account for the way phantasms secure a referential relation between sense perception and intellect, concluding that Thomas's presentation of sense experience is "self-contradictory".

Thomas distinguishes, as we have seen, between a form existing in a material mode and a form existing in an immaterial mode.³⁸ The material mode is matter organized by an essential form: it is an individual thing. The immaterial mode is form freed of, or not inhering in, any matter. What Haldane contests is Thomas's further distinction within the immaterial mode between two modes or grades of immateriality. Haldane presents these as follows.³⁹ First, there is "perfect" (*penitus*) immateriality in the intellect, in which forms exist without any material individuating conditions, and also apart from any material organ. Second, there is "half-way" (*medium*) immateriality in sensation, in which forms exist without matter, but not without material individuating conditions since they exist in a bodily organ, e.g., the red in this eye, the heat in this hand.

Haldane reads Thomas as saying that the *phantasm* enjoys this "half-way" mode of immateriality, which mode permits the phantasm to be a bridge between the material world and the immaterial mind and thus secure conceptual reference to individuals. The alleged bit

³⁸ The above references to this doctrine were to the *Summa theologiae*, but I switch now to find the doctrine in Thomas's commentary on Aristotle's *De anima* (hereafter *InDA*), 2, *lectio* 5.

³⁹ I.e., the quotation marks indicate Haldane's choice of English translation in "Aquinas on Sense-Perception".

of reasoning is that since material things can only ‘contact’ or engage other material things and not immaterial things, then the phantasm, as the high-level product of sensation capable of engaging intellect, must be a special sort of hybrid between a material mode of being (*qua* sense) and an immaterial mode of being (*qua* intellect).

Haldane rejects Thomas’s “half-way” mode of immateriality on the grounds that it does not allow sensation to secure reference to a thing. Haldane says, “to treat sensation as the ‘reception of the form impressed by the sensible [thing],’ prohibits appeal to it in the explanation of knowledge of the individual.”⁴⁰ This specific appeal to phantasms to secure reference fails, says Haldane, due to other parts of Thomas’s picture of human cognition.

Haldane begins to develop his criticism by referencing Thomas in *De veritate* to the effect that “knowledge in us is the stamping of things on our minds”⁴¹ and Haldane says this view “is more fully explained” in the later *Summa theologiae* where Thomas writes: “We have actual sensation or actual knowledge because our intellect or our senses are informed by the species or likeness of the sensible or intelligible object.”⁴² Haldane says Thomas “connects this explanation with the ontological claim about distinct modes of being”, quoting from Thomas’s commentary on *De anima*, where Thomas writes:

And it is thus that a sense receives form without matter, the form having, in the sense, a different mode of being (*alium modum essendi*) from that which it has in the object sensed. In the latter it has a material mode of being (*esse naturale*) but in the sense, a cognitional and spiritual mode (*esse intentionale*).⁴³

⁴⁰ “Aquinas on Sense-Perception”, p. 237; quoting Aquinas *Quodlibetales* 5.5.2 *ad* 2. My brackets within the Aquinas quotation. A ‘sensible thing’ is, for Aquinas, a material individual of the sort I have been discussing.

⁴¹ Haldane cites *DV* 22.1 *ad* 2, without quoting the text. I do not know what Haldane means by “stamping”, though in the *DV* text he cites I find this passage: “*quia, cum cognitio sit per assimilationem, similitudo in esse naturae, non facit cognitionem, sed magis impedit; ratione cuius oportet organa sensuum a speciebus sensibilibus esse demodata, ut possint eas recipere secundum esse spirituale, quod cognitionem causat.*”

⁴² *ST* 1.14.2, Haldane’s translation.

⁴³ *InDA* 2 lect. 24, §553; quoted in Haldane, 1983, p. 235.

Haldane takes this brief discussion to be showing *Thomas's* view that cognition as such “consists in the presence in *esse intentionale* of a form or nature”,⁴⁴ and that sensory cognition similarly involves the reception of form *in esse intentionali*, i.e. according to “intentional being”. So, what we called an ‘essential form’ is something that exists with “natural being” (*esse naturale*), and what we called a ‘cognitive form’ is something that exists with “intentional being” (*esse intentionale*).

Now Haldane turns to examine the “half-way” mode of immateriality supposedly enjoyed by the phantasms. Haldane calls attention to a problem of textual ambiguity. At times Thomas can be read as if sensation involves a non-physical event (the “spiritual” or “intentional” reception of a sensible form), where an immaterial phantasm corresponds to a physical alteration in the sense organ. On the other hand, it is possible to read Thomas as saying that the reception of a sensible form is a physical event, and that a phantasm is not a mental image but a “physical likeness” of the external environment.⁴⁵

Haldane takes the textual ambiguity as reason to consider only philosophical consistency for choosing an interpretation of Thomas. He worries that if a phantasm were immaterial, then it would be stripped of its individuating material conditions and thus, says Haldane, it would be universal.⁴⁶ As universal the phantasm would not be guaranteed to correspond to any individual, and so the universal concept subsequently abstracted from the phantasm would not stand in any causal-referential link to any material individual. Alternatively, if the phantasm is material, it would have individuating conditions and thus be a candidate for referential relation; but it would not be able to interact with the immaterial

⁴⁴ “Aquinas on Sense-Perception”, p. 235.

⁴⁵ “Aquinas on Sense-Perception”, p. 234. For this alternative, Haldane is following the argument of S.M. Cohen, “St. Thomas Aquinas on the Immaterial Reception of Sensible Forms” *The Philosophical Review* 91 (1982): 193-209, at 195.

⁴⁶ “Aquinas on Sense-Perception”, p. 237.

intellect. As for Thomas's introduction of a "half-way" immaterial existence for sensible forms, Haldane says this is a "vain attempt" to have phantasms both guarantee reference and make an impression on the immaterial intellect. Haldane writes:

[I]f singular reference is secured via a sensory component which retains the individuating conditions resulting from matter, must not that component be physical?—some kind of imprint, perhaps? Conversely, if it is, as Aquinas frequently claims, immaterial, how can it retain its relation to an individual, and thereby determine awareness to that particular? It appears as if Aquinas attributes both immateriality and singular intentionality to the form existing in sensation [which] should be an impossibility.⁴⁷

By "singular intentionality" Haldane means a representational relation that holds between the form in the senses and a single material individual. This is impossible because an immaterial species is not determined to any one individual, but is applicable to many. Accordingly, there is a problem in Thomas's account as to how to secure individual reference.

Facing the problem of securing reference via phantasms, Haldane begins his project of modifying Thomas's account:

It appears then that one or other of the following must be abandoned: a sensory element secures singular reference, which is what Aquinas maintains; in which case it must be something physical, one term of a causal relation existing between the subject and an object; or, [the sensory element] is, like its intellectual counterpart a concept (the intelligible species), an immaterial item, a form or nature existing *in esse intentionale* [sic], and hence universal in its representation, for it is a general feature. Clearly it cannot be both.⁴⁸

Haldane rejects the latter view that the sensible form is immaterial, and opts for the view that the phantasm is material. He thinks that phantasms can be a plausible candidate for a causal-

⁴⁷ "Aquinas on Sense-Perception", p. 236.

⁴⁸ "Aquinas on Sense-Perception", pp. 237-8, my brackets. I notice that Haldane elides Thomas's distinction between the intelligible species and concept (*conceptus*), as he does throughout his work on this topic. This need not detain us for the present concern. I address this again briefly later in the thesis.

referential guarantor only if they are material. Since universality is coincident with immateriality, immaterial phantasms cannot secure reference to non-mental particulars. It is better to say that any products or processes of sense perception are physical, which allows us to secure reference to particulars by an unproblematic material-causal connection: the form in the senses is determined by and to the form of the extrasensory thing in virtue of its material conditions. Accordingly, Haldane closes the issue by endorsing the view that Thomas “seems at times to have favored”, namely, “that sensation is a physical process having physical products”.⁴⁹

Haldane has been a ‘sensory materialist’ so far throughout his writings in the philosophy of mind. He most recently invoked sensory materialism in a 2006 paper,⁵⁰ and in 1999 and again in 2002 the following passage appeared in papers on cognition:

Wherever there is individuation within kinds there is matter, wherever there is universality matter is absent. In sensation the sense is (efficiently) caused to change and is formally reordered. But in ‘taking on’ the form of the original object it still does so under material conditions (those of the organ of sense) and so one has particularised qualities: this sensation of redness deriving from that patch of objective redness in the environment.⁵¹

Sensation is an affair of “taking on form”, for Haldane, which is a key thesis of the Thomistic theory of knowledge. But sensation does not involve a “half-way” grade of immateriality. Rather, the sensory organs receive information from the extramental

⁴⁹ “Aquinas on Sense-Perception”, p. 239.

⁵⁰ See “The Metaphysics of Intellect(ion)” in *Intelligence and the Philosophy of Mind*, Proceedings of the American Catholic Philosophical Association 80, Michael Baur, ed., (Virginia: Philosophy Documentation Center, 2006), pp. 39-55. Haldane makes use of sensory materialism in the paper, indicating that he still holds the view, but he does not there offer an extended argument for it, nor anything new or different from the other texts I draw upon here. I discuss a particular passage from this recent paper in chapter three.

⁵¹ John Haldane, “A Return to Form in the Philosophy of Mind” in *Form and Matter: Themes in Contemporary Metaphysics* (ed.) David S. Oderberg (Oxford: Blackwell, 1999), pp. 40-64, at 57; and again in John Haldane, “Realism with a metaphysical skull” in *Hilary Putnam: Pragmatism and Realism*, James Conant and Urszula Zeglen, eds., (London: Routledge, 2002), pp. 97-104, at 104.

environment in virtue of which they are materially altered or reconfigured. From here, as we will examine later on, the agent intellect performs an operation of ‘abstraction’ on the phantasm, which high-level sensory product is, for Haldane, a material configuration-state of the sensing organism. The benefit of this reading of Thomas’s view, for Haldane, is that it preserves a central part of Thomas’s picture of sensation as formal determination while disposing of the problem of accounting for how half-way immaterial forms are supposed to secure reference to material things.

§1.3: *The Second Disagreement: Intellect*

Whereas Haldane’s first disagreement concerns the cognitive form in the sense, his second disagreement concerns the cognitive form in the intellect. To reiterate, Haldane shares Thomas’s view that knowledge is the cognitive presence of form, where ‘cognitive presence’ means that the form of a thing comes to exist in the knower according to a cognitive mode of being. The form in the thing (e.g., dog) and the form in the mind (e.g., dogness) are differentiated by their respective modes of being: being a cognitive species ‘dog’ is a way of being different from being a worldly nature ‘dog’. Yet species (*in esse intentionali*) and nature (*in esse naturali*) are, in some way of being, both a way of being ‘dog’. As Haldane presents this situation, this is so because the species and the nature are “formally identical”: though species enjoys intentional being and nature enjoys natural being, species and nature are different modes of being one and the same form ‘dog’. Haldane calls this view “mind-world identity theory”.⁵²

⁵² “Mind-World Identity Theory and the Anti-Realist Challenge”, in *Reality, Representation and Projection*, J. Haldane and C. Wright, eds., (Oxford, 1993), pp. 15-37.

Haldane's second disagreement with Thomas's presentation, then, runs as follows. Formal identity means that the concept in the intellect and the thing in nature are identical as to their formal structuring principles. But for Thomas the essential forms of natural things include matter:⁵³ what it is to be a dog is, in part, to be enmattered, and to have certain matter (e.g., fur, flesh, bone, etc.). Now because intellectual forms (concepts) are universal, and so not determined to any individual thing, they cannot be identical with anything that includes matter in its nature. The essential form of material things, then, cannot be that with which concepts are identical. The concept must be identical with some other item in virtue of which it has its informational, intensional content. But if this is the case, then concepts are not formally identical with things, but with some other item. So Thomas's account fails to explain how a concept is that-in-virtue-of-which we know an extramental thing.

Haldane thinks Thomas held some version of mind-world identity theory, although he has never provided a textual exegesis or defense of this reading. This is, it seems to me, largely because he is not primarily interested in doing exegesis of Thomas and is more interested in developing a coherent philosophical position.⁵⁴ In any case, in order for his second disagreement to hold he must think Thomas holds at least some version of identity theory, which, as I say, seems evident throughout Haldane's work. It also seems to me that Thomas did hold something like this theory, though important points of detail remain to be examined in a later chapter and so will not detain us here.

⁵³ Cf. *DEE* 1: "Essence comprises both matter and form" (*essentia comprehendit materiam et formam*) [...] "The term 'essence' signifies, in composite things, the matter-form composite." (*nomen essentiae in substantiis compositis significat id quod ex materia et forma compositum est.*)

⁵⁴ I briefly discuss this at the end of this chapter. See, e.g., "Forms of Thought", p. 150: "Throughout my aim will be to offer an adequate theory inspired by Aquinas's writings rather than to engage in textual exegesis, and as will become clear I believe it is sometimes necessary to reject aspects of Thomas's stated view and to go beyond it."

Returning to Haldane's disagreement, Haldane concerns himself with describing that 'part' or 'aspect' of extramental things with which intellectual species must be identical. The obvious candidate is a formal part of the thing, namely, the essence that makes the thing what it is (e.g., dogness). But if, for Thomas, this essence includes matter, then what is needed is a more 'formal' sort of being that does not include matter, and can apply to all members of a kind: something like a 'general nature' as opposed to an individualized one. This is precisely Haldane's reasoning.

Thomas does countenance a notion of a general or common nature; it is, as was said above, the essence that is common to individuals of the same kind, the nature that makes a thing to be 'what it is' or 'such kind' of thing. This turns out to be the locus of difficulty for Haldane's second disagreement. In the 1983 paper, and in much of his subsequent work in philosophy of mind, Haldane followed Thomas in speaking of intellectual species as 'universal forms', and of extramental things as 'individualized forms'.⁵⁵ But Haldane had some noted difficulty coming to terms with Thomas's presentation of the common or general nature. Haldane writes:

[Thomas] does not deny that there are general natures, [though] he maintains that they do not exist as such outside of cognition. In nature there are only individualized forms: to speak of *f*-ness existing *in esse naturale* [sic] is always to designate some particular case of *f*-ness—the *f*-ness of *a*, for example—consisting of a quantity of matter (*materia signata quantitate*) characterized in a certain way.⁵⁶

The view Haldane is here describing is as follows: the common nature, for Thomas, does not exist as common outside of the mind. Outside of the mind there are only individual things.

⁵⁵ Though Aquinas himself talks of 'individualized form', it was Peter Geach who popularized the expression among modern-day Aquinas scholars. See Peter Geach, "Form and Existence", in his *God and the Soul* (New York: Schocken Books, Inc., 1969), pp. 42-64; and also G.E.M. Anscombe & P.T. Geach, *Three Philosophers* (Oxford: Basil Blackwell, 1967), ch. 2. Haldane makes use of Geach's terminology consistently throughout his work.

⁵⁶ "Aquinas on Sense-Perception", p. 236.

As Haldane here says, speaking of *f*-ness (e.g., dogness) as existing extramentally always picks out an individual *f* (e.g., a dog). But speaking of *f*-ness in the mind is to speak of some nature that is predicable of many individuals, and, it is predicable of many individuals because it is common to each individual, in each of which it is individuated by matter.

Thomas explains this by saying the nature can exist in two ways (*habet duplex esse*), making use of a now familiar distinction: “one of these ways is material, as in the matter of nature; the other of these ways is immaterial, as in the intellect”.⁵⁷ The nature existing outside the intellect “cannot be represented in a universal notion, since in that mode it is individuated by matter”. Thus Thomas holds that “universality cannot be attributed to a common nature except according to existence in the intellect. [...] Universals as such do not exist except in the soul. But these natures themselves, which may acquire the aspect of universality, exist in things.”⁵⁸

Here is what Thomas means, by way of example. Two humans, Peter and Paul, both have the nature of humanity, but there is no nature of humanity that exists independently of Peter or Paul or other humans. Humanity either is instantiated in material reality as a particular human, or, humanity is considered in the intellect as a universal form abstracted from and applicable to particular things. The natures found individuated in things are thoroughly individuated by matter, but also common to other things. Of the individual Socrates, for example, Thomas writes: “Nothing found in Socrates is common, but rather everything in him is individuated.”⁵⁹

⁵⁷ *InDA 2*, lect. 12 : “*unum quidem materiale, secundum quod est in materia naturali; aliud autem immateriale, secundum quod est in intellectu.*”

⁵⁸ *InDA 2*, lect. 12 : “*naturae communi non potest attribui intentio universalitatis nisi secundum esse quod habet in intellectu [...] universalia, secundum quod sunt universalia, non sunt nisi in anima. Ipsae autem naturae, quibus accedit intentio universalitatis, sunt in rebus.*”

⁵⁹ *DEE 2*: “*in Socrate non invenitur communitas aliqua, sed quicquid est in eo est individuum.*”

Haldane's worry is that without some nature existing as general in the extramental world, there can be nothing with which concepts can be identical and veridical. In the 1983 paper, he floated the suggestion that Thomas's doctrines that (i) universals exist only in the mind, and (ii) individuals have natures that the intellect correctly recognizes as common, combine to yield a contradiction. He wrote: "I suspect that this theory is incoherent and collapses to a version of *universalia in rebus*, for there cannot be a plurality of human natures, but only the one nature multiply exemplified."⁶⁰ Ten years later, in a paper focussing on the identity theory, Haldane footnoted his uncertainty about this early suggestion, writing that he now understood Thomas as saying "a nature is not as such, or 'in itself', either particular or general, but rather particular-in-nature and general-in-the-mind", which notion "may not be incoherent".⁶¹ This footnote is inserted as a caveat to comments that Thomas's view of universals "may be of doubtful coherence and risks collapse into conceptualism". Then in a later paper, Haldane very clearly rejects Thomas's view as "an impossible doctrine" that needs modification to retain the desirable elements of the broader picture of cognition and still be philosophically palpable.⁶²

Why did Haldane think Thomas's view is impossible? Because "it appears to make sense only on the basis of an assumption it denies," i.e. naturally existing similarity among distinct particulars.⁶³ Thus the impossible assumption is that the *f*-ness of *x* (e.g., the humanity of Paul) and the *f*-ness of *y* (e.g., the humanity of Peter) are specifically alike though numerically distinct, which, says Haldane, "surely amounts to the claim that they are instances or cases of the *same* nature". The complaint couched in his italics on 'same' is that

⁶⁰ "Aquinas on Sense-Perception", p. 237; cf. "Forms of Thought" in *The Philosophy of Roderick Chisholm* Lewis Hahn, ed., (Illinois: Open Court, 1997), pp. 149-170, at p. 152ff.

⁶¹ "Mind-World Identity", p. 36 note 18.

⁶² "Forms of Thought", p. 151.

⁶³ "Forms of Thought", p. 152.

two members of a kind, say Peter and Paul, will have something in common, humanity, not merely in an intellectual grouping, but because of some proper features that by hypothesis are supposed to be unique to each of them. Surely, says Haldane, this is what is entailed by Thomas's claim that Peter and Paul are distinct individuals who nevertheless share a common nature: "For [...] what Peter and Paul are [...] are different *cases* of the same *general* thing, viz. humanity."⁶⁴ Haldane accordingly insisted that "the notion of an individualized universal, or particularized quality, presupposes that of a multiply exemplifiable item of which the former is a case or instance".⁶⁵

The claim of Haldane's identity theory is that the different modes of existence are different modes of being one and the same form: the essence is one thing but able to exist in different modes. This in part describes why a dog does not come to exist in my mind when I think of dog: when I think of Fido, says Haldane, I "exemplify" dogness, though I do not "instantiate" it.⁶⁶ Another way of putting the point is to say cognitive form "involves the occurrence of the form as such, and not the generation of a case".⁶⁷ With this proposal, Haldane allows that a thought need not be numerically one and the same instance (individualized form) as the thing it is about, but can be identical in point of formal principle:

Each actuality (thought and object) has a structuring principle (concept and substantial form); and these principles, though distinct in the modes of their actualisation, are specifically alike. The form of the dog exists naturally and substantially (*in esse naturale*) [sic] in the dog, and intentionally and predicatively (*in esse intentionale*) [sic] in the thought.⁶⁸

⁶⁴ "Mind-World Identity Theory", p. 22.

⁶⁵ "Forms of Thought", p. 169, fn7.

⁶⁶ Cf. "Forms of Thought", and "A Return to Form".

⁶⁷ "Forms of Thought", p. 163.

⁶⁸ "A Return to Form", p. 54, my brackets.

A thought is about a thing in virtue of the formal identity of thought and thing, and the forms existing both in thought and in thing are general, which fact partly explains and fully enables their identity.

§1.4: *The Realignment with Thomas*

It was early and often that Haldane disagreed with Aquinas about the status of universals. But in 2002, around the same time that he tapered off his explanation and defense of mind-world identity theory,⁶⁹ Haldane published a paper in which he sides with Aquinas on the existence of universality as a feature only of intellectual being, and presents Aquinas's view as his own. Here is the telling passage:

In antiquity, in the middle ages, and again in our time, there have been extensive debates about the reality and status of common natures. Here I follow Aquinas and maintain a position between the view that everything that exists is individual, and the opinion that universals exist as such outside the mind. This *via media* holds that distinct substances may yet possess formally identical (though numerically diverse) natures: the *fness-of-a*, the *fness-of-b*, etc., and that these are the basis for the formation of a universal entity *Fness* which really exists as a universal species—but only as abstracted in the intellect. An implication of this view is that the old question ‘are natures plural or single?’ rests on the false presupposition that the answer must be exclusively one or the other. Instead we must say that it is both: natures are many in things and one in the mind; but that as such, i.e. until a context has been specified, they are neither.⁷⁰

Clearly Haldane has recanted on his position that Aquinas's doctrine is “impossible”, and he presents Aquinas's view as his own. What is striking is that he does not offer any

⁶⁹ Haldane published a couple of papers invoking identity theory after this, but they did not offer extended development or new defense of the theory. See his “Contemporary Philosophy of Mind and the Need of Thomism”, *Iride*, 17 (2004), and his “The Metaphysics of Intellect(ion)” (2006).

⁷⁰ “A Thomist Metaphysics”, pp. 103-04. Haldane adds: “Universality is only to be found in the intellect, but general species are nonetheless real: they are formed by abstraction from a plurality of formally identical natures existing in materially individuated substances.”

philosophical justification for his shift back toward Aquinas. In other words, he doesn't answer his own earlier worry that Aquinas's view is incoherent.

Haldane initially rejected Aquinas's view because he thought it threatened the possibility of giving a realist account of the referent of thoughts: the thesis that concepts are formal counterparts of extramental things "is only intelligible if one discounts the suggestion that generality is nowhere to be found outside of thought."⁷¹ To say that there are many individuals of the same kind either supposes that the individuals are entirely unlike and distinct or that they share a real general feature. If individuals are entirely unlike *in esse naturali*, then nature itself does not contribute anything essential to our groupings into natural kinds. On the other hand, if individuals share some nature that is common *in esse naturali*, universality is not a feature only of intellect. Since Aquinas accepts neither of these positions, Haldane could not see how Aquinas's stated view secures conceptual reference to material things:

In order to secure reference we need to invoke some principle of classification supplied by concepts expressed by the use of general terms; and the application and reapplication of such a term in different contexts presupposes sameness in respect of those features that invite its use.⁷²

This was Haldane's motivation to posit generality existing *in esse naturali*: without admitting generality in nature, we cannot say that our concepts are occasioned by and adequately manifest aspects of nature. In other words, there is no hope of reconciling the claim that our concepts are general with a realist account of reference to extra-mental individuals:

Unless individualized forms are instances of general, and thereby multiply exemplifiable, features they must be distinct natures; and if the latter then there is no ontological basis for our ways of grouping things. The association of X and Y in

⁷¹ "Mind-World Identity Theory", p. 22.

⁷² "Forms of Thought", p. 152.

point of their characteristics can only be the work of the mind, which is in effect the common underlying thesis of nominalism and conceptualism.⁷³

Thus, to save the realism afforded by the identity theory, Haldane “collapsed” Thomas’s position into “an interesting and plausible version of the Aristotelian *universalia in rebus* view.”⁷⁴ There are naturally existing generalities among particulars, and these generalities “invite the use” of concepts: extramental generality as a real feature of things ensures that our thought is about the world in the relevant and veridical respect.

It is unclear what has changed for Haldane.⁷⁵ But two more important and related points remain unclear as well: First, Haldane’s recant notwithstanding, it remains unclear whether Thomas’s view can meet Haldane’s original criticism: if concepts in the intellect are meant to be in some way identical with real things, then there must exist real generality in things to account for the generality of the concept. Otherwise there is no identity, and so there is no veridical adequation of mind to world. Second, it remains unclear whether Haldane’s identity theory is possible if we accept Thomas’s view that natures are not general in extramental reality: if concepts are general and natures are individualized, how can universal concepts be identical to individual natures? These two worries are related, insofar as each asks whether it is possible to keep both the identity theory and Thomas’s view that natures do not exist as general external to the mind.

Haldane presently retains the identity thesis as an answer to “Wittgenstein’s question” of how a thought is about a thing: “A merit of this view is that it explains what is otherwise a mystery, namely how a thought can be intrinsically related to its object: they

⁷³ “Forms of Thought”, p. 152.

⁷⁴ “Forms of Thought”, p. 151.

⁷⁵ I discuss the change of mind and its “consequences” for Haldane and Thomas in chapter five.

share a form.”⁷⁶ Haldane does not say whether he thinks *Aquinas* intended the identity theory to serve these two explanatory roles, but it is clear, at least, that Haldane thinks it does. Recall the role Haldane envisions for the identity theory: “this identity thesis is intended to serve two central explanatory roles: first, to indicate how world-intending thoughts are possible; and second, to show how they engage directly with objects and features within it.”⁷⁷ He describes the answer to the question of “how world-intending thoughts are possible” as “the striking claim that the forms or natures which give structure to the world, and the concepts which give ‘shape’ to thought, are one and the same”, and he describes the answer to the question how thoughts “engage directly with objects” as “the insistence that the intellect engages directly with reality and not with some *tertium quid* intervening between them.”⁷⁸ Thus Haldane insists that what the identity theory offers the philosopher working within a broadly Thomistic metaphysical picture is “an *explanation* of how it could be that thoughts are essentially related to their objects. The intrinsic character of a mental act is formally identical with that of the extra-mental entities to which it is directed.”⁷⁹

§1.5: *Conclusion*

Haldane approaches Thomas’s theory of cognition by treating him as answering Wittgenstein’s question of intentionality: how is a thought about a thing. The foregoing chapter shows that in asking this question one might be concerned with two issues. On the one hand, the question might concern how a thought refers to a material thing (e.g., this dog). On the other hand, it might concern how a thought has a certain informational or intensional

⁷⁶ “A Return to Form”, p. 55.

⁷⁷ “Mind-World Identity Theory”, p. 20.

⁷⁸ “Mind-World Identity Theory”, p. 21.

⁷⁹ “Mind-World Identity Theory”, p. 22., emphasis in original.

content (e.g., what-it-is-to-be-a-dog). In the first case, the thought is “about” a material thing, say, a dog, because it is immediately directed upon that thing, referring to that thing in its particularity. In this case the material thing must be present to the thinker at the time of thinking. In the second case, the thought is “about” something, say, ‘dogness’, because it has a certain informational content that is relevantly similar to the structural nature common to dogs. So the two issues of Haldane’s concern are (i) the reference of thought, and (ii) the content of thought.⁸⁰

Haldane thinks that Thomas’s view can neither secure conceptual reference to material singulars nor properly describe what our thoughts are about and how they acquire this aboutness. I have detailed Haldane’s modifications to Thomas’s view to treat both of these issues, which are, respectively, (i) rendering the phantasm as fully material to secure direct material contact with a material individual, and (ii) offering a particular presentation of the direct engagement of thought and thing that Haldane calls “mind-world identity”, which presents the structural content of things as being one and the same formal nature as the structural content of concepts, with the distinction between thing and concept given as a distinction of modes of being: a concept exists “intentionally” (*in esse intentionali*), and a thing exists “naturally” (*in esse naturali*).

In what follows I present my worries for Haldane’s modifications to Thomas. I argue that Haldane must abandon two of his theses if he is to remain consistent with certain of Thomas’s views that he accepts. First, Haldane must abandon his view that sensation is entirely material. He accepts Thomas’s general view that all knowledge is the possession of the form of another as other, and Thomas’s view requires that this possession is according to

⁸⁰ So the basic difference between these issues is that reference to a material particular may need some informational content, but content does not need reference to a material particular.

immateriality. I develop my case for this in chapters two through four. Second, Haldane must abandon his view that “intentional being” is the distinguishing mark of the cognitive (as opposed to the non-cognitive). As will become clear, for Thomas the mind is more than intentional being. So, if Haldane must accept Thomas’s account of immateriality in sensory cognition, then he must accept some semblance of Thomas’s account of modes of being in mind and world that goes with it. I develop my case for this in chapters five through seven. Throughout, the details of both Haldane’s and Thomas’s presentations will occupy my attention. I begin where Haldane began with Thomas—with sensation—, and so now I turn to examine Haldane’s criticism of Thomas’s account of sense perception.

Chapter 2: Sensory Cognition and Reference

Professor Haldane thinks Thomas's phantasms must be wholly material in order to secure reference to material things. This is because he thinks that "an immaterial item, a form or nature existing *in esse intentionale* [... is] universal in its representation",¹ and so if a phantasm were immaterial it could not provide the material conditions specific enough to refer to an individual material thing. Only direct material contact can secure reference to individual material things and thus the phantasm must be material. Thomas, then, must be read as saying reference is achieved in virtue of a wholly material item existing in the wholly material senses. Sensation cannot involve immaterial reception of form, since then phantasms would fail to secure reference. As such, the doctrine of 'half-way' or 'medium' immateriality must be abandoned.

Haldane is right to think that direct sensory reference is achieved at the most material level of the knower's engagement with material things. But this does not require us to present Thomas as teaching that the phantasm secures this reference. In this chapter I argue for an alternative to Haldane's reading of St. Thomas's doctrine of phantasms. I show that Thomas did indeed think reference to material things is achieved by direct material contact, but that this directness is not achieved by the phantasms.

I present phantasms as the products of a sensory operation at a transitional stage in cognition, transitional in the passage of the formal likeness from the external senses to the intellect. This presentation shows two things. First, it will show that neither the production nor use of phantasm is the point in cognition at which Thomas thought we arrived at knowledge of the material particular. As such, the phantasm was not meant to secure

¹ "Aquinas on Sense-Perception", pp. 237-8, my brackets. I notice that Haldane elides Thomas's distinction between the intelligible species and concept (*conceptus*), as he does throughout his work on this topic. This need not detain us for the present concern. I address this again briefly later in the thesis.

reference to individual material things. Second, it will show how Thomas envisioned cognition as an ascent through grades of immateriality of informational being passing from sense to intellect. That is, Thomas envisioned cognition to involve grades of immateriality all the way down to the lowest sense level. As such, sensory cognition cannot be entirely material.

For this entire presentation it is crucial to develop a conception of matter as a block to cognition. So, in the first section I present Thomas's picture of human cognition as involving a certain grade or level of immateriality even at the outermost reaches of sensation. In the second section I present Thomas's general account of sensory cognition. There we will see that cognition involves immateriality, as I say, 'all the way down'. These first two sections prepare the reader for the third section, in which I show that reference to material things is not achieved by the phantasm, nor is it the suitable candidate for establishing such reference.

This chapter thus counters Haldane's charge against Thomas's doctrine of so-called 'half-way' or medium immateriality in the senses. Haldane argued that medium immateriality must be rejected on the grounds that it does not permit phantasms to secure reference to material things. Since phantasms are not meant to secure such reference, medium immateriality may not be rejected on these grounds.

§2.1: *Cognition as Immaterial*

I begin with a presentation of Thomas's teaching that matter is a block to cognition, and that all cognition as such involves immateriality. This doctrine is fundamental to Thomas's teaching that cognition is a certain possession of the form of another thing. This view is crucial not only to Thomas, but also to John Haldane, who accepts the doctrine of possession of forms of other things as central to his own thomistic theory of knowledge.

Thomas understands matter as the principle of individuation in natural bodies, which is to say that matter is that which individuates material things. Two individual humans, say, Peter and Paul, are said to be distinct individuals because they are numerically distinguished from one another by their matter. That is, Peter's humanity is individuated and so numerically distinct from Paul's humanity in virtue of human nature being instantiated in one parcel of matter in Peter and in another parcel of matter in Paul. As Thomas would say, 'humanity' is "terminated by" or "contracted to" material conditions in Peter, and again in Paul:

Now matter is in a way made finite by form, and the form by matter. Matter indeed is made finite by form, inasmuch as matter, before it receives its form, is in potentiality to many forms. But upon receiving a form, it is terminated by that one. Again, form is made finite by matter, inasmuch as form, considered in itself, is common to many; but when received in matter, the form is determined to this one particular thing.²

Just as a block of marble is potentiality a statue or a piece of jewellery, so is matter potentially a dog or a human. The block of marble is "unformed"³ but able to assume any of these various forms. Once a craftsman uses the marble to fashion a statue, the marble acquires a certain form in virtue of which the marble is "made finite" or given determinate features. Its finitude and limit are given by its being this statue, say, of Paul: the marble has the form of Paul.

² ST 1.7.1: "*Finitur autem quodammodo et materia per formam, et forma per materiam. Materia quidem per formam, in quantum materia, antequam recipiat formam, est in potentia ad multas formas, sed cum recipit unam, terminatur per illam. Forma vero finitur per materiam, in quantum forma, in se considerata, communis est ad multa, sed per hoc quod recipitur in materia, fit forma determinate huius rei.*"

³ It is a block, of course, and so has a 'block form'. One might say instead a "chunk" of marble, but the same worry could be raised about a 'chunk' form. The example means only to show the difference between a form (e.g., the statue) and the matter (e.g., the marble) that was previously unformed (e.g., the block) as regards the statue.

The marble case illustrates the way matter itself is made finite or is given certain limits by essential form. So, for example, a common case is natural generation, where by procreation the form ‘human’ limits and contracts certain matter. This is, in effect, another way to say that there now exists another human, namely, *this* one. Also, Thomas often uses the terms ‘termination’ or ‘perfection’ to mean this same ‘making finite’ or ‘limiting’ of matter by form, and the former are usefully translated, respectively, into our more familiar ‘determining’ and ‘completing’.⁴

From this determining and limiting nature of forms Thomas draws an important conclusion about cognition. Since the determining and limiting of form is due to matter, cognition, which involves “form considered in itself” as “common to many”, cannot involve matter. If the cognitive form or species organized matter in the same way as extramental forms organize matter, cognition would be determined or limited to certain material things, and the cognitive form would not be “common”. Thomas thinks this is evidently false: in cognition a form, e.g., ‘dogness’, is common to more than one instance of that form, e.g., to this dog Fido and to this dog Rex. Thomas thus speaks of the “greater amplitude and extension”⁵ of the cognitive species as compared to extramental forms, which latter are contracted to an individual. This amplitude and extension is a result of freedom from the determining and limiting conditions of matter.

⁴ The terms *terminare* and *perficere*. E.g., Thomas continues in *ST* 1.7.1: “Now matter is perfected by the form by which it is made finite; therefore infinite as attributed to matter, has the nature of something imperfect; for it is as it were formless matter. On the other hand, form is not made perfect by matter, but rather is contracted by matter; and hence the infinite, regarded on the part of the form not determined by matter, has the nature of something perfect.” (*Materia autem perficitur per formam per quam finitur, et ideo infinitum secundum quod attribuitur materiae, habet rationem imperfecti; est enim quasi materia non habens formam. Forma autem non perficitur per materiam, sed magis per eam eius amplitudo contrahitur, unde infinitum secundum quod se tenet ex parte formae non determinatae per materiam, habet rationem perfecti.*)

⁵ *ST* 1.14.1, quoted at length below: “*maiolem amplitudinem et extensionem.*”

Accordingly, freedom from matter (i.e., immateriality) is fundamental to cognition.

As such Thomas presents immateriality as crucial to marking the difference between cognizant beings (beings that can know) and non-cognizant beings (beings that cannot know):

Cognizant beings are distinguished from non-cognizant beings in this way: the non-cognizant being possesses only its own form, whereas the cognizant being is naturally suited to have also the form of some other thing. For the species of the thing known is in the knower. Whence it is clear that the nature of a non-cognizant thing is more contracted and limited, while the nature of cognizant beings has a greater amplitude and extension. This is why [Aristotle] says in *De anima* 3 that ‘the soul is in a way all things’. Now the contraction of the form is due to matter. Hence, as was said earlier,⁶ according as forms are more and more immaterial, so they approach more nearly to a kind of infinity. Therefore it is clear that the immateriality of a thing is the reason why it is cognitive, and that the mode of cognizance is according to the mode of immateriality.”⁷

There are two points discussed in this passage, namely, the “greater amplitude and extension” of the cognitive form, and the ability of the cognizant being to possess both “its own form” and also “the form of some other thing”. These are different aspects of cognizance, and both of these involve immateriality. The greater amplitude and extension

⁶ In *ST* 1.7.1. I quoted part of this passage above. Thomas’s reasoning here is that if matter contracts form to individual things, then the more a form is removed or freed from matter, the less it is determined to any number of individuals, and so not finite. This is to say, it more and more approaches infinity.

⁷ *ST* 1.14.1: “*cognoscentia a non cognoscentibus in hoc distinguuntur, quia non cognoscentia nihil habent nisi formam suam tantum; sed cognoscens natum est habere formam etiam rei alterius, nam species cogniti est in cognoscente. Unde manifestum est quod natura rei non cognoscentis est magis coarctata et limitata, natura autem rerum cognoscentium habet maiorem amplitudinem et extensionem. Propter quod dicit philosophus, III de anima, quod anima est quodammodo omnia. Coarctatio autem formae est per materiam. Unde et supra diximus quod formae, secundum quod sunt magis immateriales, secundum hoc magis accedunt ad quandam infinitatem. Patet igitur quod immaterialitas alicuius rei est ratio quod sit cognoscitiva; et secundum modum immaterialitatis est modus cognitionis.*” Thomas continues: “Hence it is said in *De anima* 2 that plants are not cognitive because of their materiality. But the senses are cognitive because they receive species without matter, and the intellect is still further cognitive, because it is even more separated from and unmixed with matter, as said in *De anima* 3.” (Unde in *II de anima* dicitur quod plantae non cognoscunt, propter suam materialitatem. Sensus autem cognoscitivus est, quia receptivus est specierum sine materia, et intellectus adhuc magis cognoscitivus, quia magis separatus est a materia et immixtus, ut dicitur in *III de anima*.)

can be seen by the fact that the species ‘dog’ is not contracted to any individual dog, but is rather common to many dogs, and so it is not associated with matter in the same way as the extramental form ‘dog’. Thus Thomas says, “we must conclude that material things known must exist in the knower not materially, but rather immaterially.”⁸ The second point, the ability of the cognizant being to possess its own form and the form of another, is fundamental to Thomistic theory of knowledge.

This point can be seen by the fact that the possession of other forms does no violence to the cognizer’s own form. If a bit of marble is shaped as a statue of Paul, then to give it the shape of Peter would do violence to the shape of Paul: in gaining the form of Peter the marble would cease to have the form of Paul. Paul would be obliterated and replaced by Peter in the marble. Thomas wants us to see that cognition is not like this. Whereas marble cannot possess two competing forms at the same time in any respect, the cognitive being can keep its own form and possess the form of other things in a certain respect.

In the cognizer the forms in question are not competing, on account of what Thomas calls different modes of receiving form. When the marble receives the form of Peter it does so in the same material way that it possessed the form of Paul, and so the form of Peter supplants the form of Paul in the marble. But in the cognizant being the species is not received in the same way that it possesses its own form, but rather in a way that permits the received form to exist with “greater amplitude and extension” than it has in material things. As such, the cognitive form exists even differently from the way the knower possesses its

⁸ Cf. *ST* 1.84.2: “The reason for this is because the act of knowledge extends to things outside the knower: for we know things even that are external to us. Now by matter the form of a thing is determined to some one thing. Hence it is evident that the nature of knowing stands in opposition to the nature of materiality.” (*Relinquitur ergo quod oportet materialia cognita in cognoscente existere non materialiter, sed magis immaterialiter. Et huius ratio est, quia actus cognitionis se extendit ad ea quae sunt extra cognoscentem, cognoscimus enim etiam ea quae extra nos sunt. Per materiam autem determinatur forma rei ad aliquid unum. Unde manifestum est quod ratio cognitionis ex opposito se habet ad rationem materialitatis.*)

own form. Thomas speaks of this by saying a cognitive form is received not materially, but rather immaterially.

Now we see two points about the different mode of cognition. First, the species ‘dog’, on account of its amplitude and extension, must exist differently from the way ‘dog’ exists in nature. Second, the species also exists differently from the way the knower possesses its own form. Thomas addresses and describes both of these differences by saying that “the thing received exists in the receiver according to the mode of the receiver”.⁹

Thomas reasons that if species were received in the same material way that extramental things receive form then two problems would arise. First, when matter is limited and contracted and organized in such-and-such a certain way, we have an individual instance of the nature ‘dogness’, and so we say ‘this is a dog’. Thus the species ‘dog’ cannot come to exist in a thinker by matter being organized in a specific way, since this would just result in the existence of a dog.

Second, if cognition is achieved by a species organizing and determining matter in a certain way, then there would be no reason why any extramental material thing would not be a cognitive form. That is, since both the species and the extramental thing would exist in virtue of a certain formal determination of matter, there would be no distinction between the species ‘dog’ and an extramental dog as to cognizance. Accordingly, Thomas rejects the view that in cognition forms exist in the same way that they exist in the things known.¹⁰

⁹ ST 1.84.1: “*receptum est in recipiente per modum recipientis.*” Cf. *InDA* 2, lect 12.

¹⁰ ST 1.84.2: “The ancient philosophers held that the soul knows corporeal things through its own essence. For it was universally held that ‘like is known by like’. But they supposed that the form of the thing known is in the knower in the same mode as in the thing known. [...] But we must reject their view. [...] Because if it were necessary for the thing known to exist materially in the knower, there would be no reason why extramental material things should be devoid of knowledge —why, e.g., if the soul knows fire by fire, that extramental fire should not have knowledge of fire. Therefore we must conclude that material things known must exist in the knower not materially, but rather immaterially.” (*antiqui philosophi posuerunt quod anima per suam essentiam cognoscit corpora. Hoc enim animis omnium communiter inditum fuit, quod simile simili cognoscitur.*)

On this notion that form can exist in different ways or modes, Thomas thinks the sensible things around us offer evident examples of different modes of existing of the same form. Whiteness, for instance, exists with “greater intensity” in one thing than in another. Thomas thinks this is an example of the form ‘whiteness’ having different modes of being. Or, whiteness exists in some things accompanied by sweetness (e.g., in sugar) and in other things whiteness exists without sweetness (e.g., in salt). Thomas presents these familiar and everyday examples as cases of a form with different modes of existence. Once again he draws a comparison between these cases and cognition. He wants us to see that the different modes of forms in cognition are like these everyday cases:

In the same way as these, the sensible form exists in one way in the extramental thing, and in another way in the senses, which receive the forms of sensible things without matter, such as the colour of gold without the [metal] gold.¹¹

If we stay with Thomas presentation, he seems to be saying that for a form to exist in an extramental thing is for it to exist with a different intensity from a form existing in cognition. Again, carrying on the analogy with sweetness, he seems to be saying that a form existing extramentally can be accompanied by other forms that do not accompany that form in cognition. Thomas suggests that the different intensity and different accompaniment of forms in sense cognition pertain to these forms existing “without matter”.

Existimabant autem quod forma cogniti sit in cognoscente eo modo quo est in re cognita. [...] Sed haec opinio improbat. [...] quia, si oporteret rem cognitam materialiter in cognoscente existere, nulla ratio esset quare res quae materialiter extra animam subsistunt, cognitione carerent, puta, si anima igne cognoscit ignem, et ignis etiam qui est extra animam, ignem cognosceret. Relinquitur ergo quod oportet materialia cognita in cognoscente existere non materialiter, sed magis immaterialiter.)

¹¹ ST 1.84.1: “[*Quia etiam in ipsis sensibilibus videmus quod forma alio modo est in uno sensibili quam in altero, puta cum in uno est albedo intensior, in alio remissior, et in uno est albedo cum dulcedine, in alio sine dulcedine.*] Et per hunc etiam modum forma sensibilis alio modo est in re quae est extra animam, et alio modo in sensu, qui suscipit formas sensibilium absque materia, sicut colorem auri sine auro.” My bracketed insertion, to contextualize the quotation in the body of the chapter.

A famous image for this doctrine comes from Aristotle's *De anima* and Thomas's commentary on that work. The analogy for sense cognition that Aristotle proposes and Thomas endorses is that sense receives forms in the way that a piece of wax receives the impression of a signet ring. Aristotle writes:

It must be taken as a general rule that all sensation is the receiving of forms without matter, as wax receives a seal without the iron or gold of the signet ring. The wax receives an imprint of the gold or bronze, but not *as* gold or bronze.

Here Aristotle is teaching what we saw Thomas teach: sense receives the forms of things “without matter”. In his commentary on this passage, Thomas goes into considerable more detail concerning how he understands the meaning of this doctrine. In the following passage, he speaks of the one receiving the form as the “patient”, and of the originating formal nature as the “agent”. He writes:

Sometimes the form (*forma*) is received in the patient according to a mode of being other than it has in the agent. This is because the patient's material disposition to receive form is not similar to that of the agent. Hence the patient receives the form ‘without matter’, insofar as the patient is assimilated to the agent in respect of form and not in respect of matter. It is in this way that the sense receives forms without matter, because the form in the sense has a different mode of being from that which it has in the thing sensed. In the latter it has ‘natural being’ (*esse naturale*), but in the sense, it has ‘intentional and spiritual’ being (*esse intentionale et spirituale*).

[...] the wax takes (*accipit*) a sign (*signum*), that is, an image or figure (*imaginem sive figuram*) of the gold or bronze thing, but not precisely as gold or bronze. For the wax takes the image of the gold ring in respect of the image, but not in respect of the ring's specific disposition to be gold. [...] For the sense is assimilated to the sensible object according to form, not according to the disposition of matter.¹²

¹² *InDA* 2, lect. 24: “*Quandoque vero forma recipitur in patiente secundum alium modum essendi, quam sit in agente; quia dispositio materialis patientis ad recipiendum, non est similis dispositioni materiali, quae est in agente. Et ideo forma recipitur in patiente sine materia, inquantum patiens assimilatur agenti secundum*

What Thomas means by “without matter” in the case of the senses, then, is that the form of a material thing is received in sense with the matter of the sensory organs, but not with the matter of the extramental thing. This is an instance of his doctrine that what is received is received according to the mode or “disposition” of the receiver.

If the sensible form were assimilated to the sense organ in point of matter, a material thing would come to exist in a material mode in the sense organ. Against this Thomas says that the form of the object comes to exist in the matter of the sense organ in point of form and not in point of matter. This is just as the impression of the signet ring comes to exist in the wax “not precisely as gold or bronze”, but rather as a “sign” or “image” of the ring within the matter of the wax.¹³

Thomas also expands upon Aristotle’s presentation by introducing some technical vocabulary. He says that we may name the different modes of formal existence according to the mode of existence or being the form enjoys. So, in the extramental thing the form has “natural being” (*esse naturale*) and in the sense the form has “intentional and spiritual” being (*esse intentionale et spirituale*).

In this case, Thomas’s distinction between intentional and natural modes of being distinguishes the form existing in the thing from the form existing in the senses. The natural/intentional distinction also sometimes serves to distinguish between a form existing

formam, et non secundum materiam. Et per hunc modum, sensus recipit formam sine materia, quia alterius modi esse habet forma in sensu, et in re sensibili. Nam in re sensibili habet esse naturale, in sensu autem habet esse intentionale et spirituale. [...] cera accipit signum idest imaginem sive figuram auream aut aeneam, sed non in quantum est aurum aut aes. Assimilatur enim cera aureo sigillo quantum ad imaginem, sed non quantum ad dispositionem auri. [...] Assimilatur enim sensus sensibili secundum formam, sed non secundum dispositionem materiae.” Aristotle’s text in *De anima* is at 424a17.

¹³ In chapter four I will have occasion to return to the doctrine that a cognitive form is an “image” or “sign” of the form in the extramental thing.

in the thing and the form existing in the intellect.¹⁴ This is because it is not only sense but also intellect in which forms exist according to the mode of the receiver:

Similarly [to sense] the intellect receives according to its own mode—i.e., immaterially and unchangingly—the species of material and changeable bodies: for the thing received exists in the receiver according to the mode of the receiver. Therefore it must be said that the soul knows corporeal things by (*per*) the intellect, according to a knowledge which is immaterial, universal, and necessary.¹⁵

Here we see that intellectual cognition is according to an even different mode from sensible cognition, namely, “immaterially and unchanging”. So Thomas draws this further distinction between the form existing in the sense and the form existing in the intellect. Instead of an intentional/natural distinction, he speaks of this distinction in terms of immateriality: “The sense-faculty receives a likeness of the thing sensed in a bodily and material way, whereas the intellect receives a likeness of the thing understood in an incorporeal and immaterial way.”¹⁶

This presentation of the difference between forms in sense and intellect is also given in terms of their different mode of existence. Thomas thinks we must do this to account for the greater range of applicability of forms found in intellect than the forms in sense. Although sensation receives the species “without matter”, the form is received in a “bodily and material way”, which means that the form is individuated in the material conditions of the sense organ. For Thomas, a form individuated by matter is a form “determined to the here and now”,¹⁷ and so the sensible form exists with the material conditions of “here” and

¹⁴ The way *esse intentionale* figures in this distinction is an important point to which I turn in the final chapter.

¹⁵ *ST* 1.84.1: “*Et similiter intellectus species, corporum, quae sunt materiales et mobiles, recipit immaterialiter et immobiliter, secundum modum suum, nam receptum est in recipiente per modum recipientis. Dicendum est ergo quod anima per intellectum cognoscit corpora cognitione immateriali, universali et necessaria.*” My brackets.

¹⁶ *InDA* 2, lect 12.

¹⁷ *ST* 1.110.1: “*omnis forma corporalis est forma individuata per materiam, et determinata ad hic et nunc.*”

“now”,¹⁸ e.g., this present sensory stimulation, say, this red. In intellect, however, cognitive forms exist without any sort of determining material conditions.¹⁹ As such, intellectual forms are not in any way “enmattered” as are the forms in sense.

Accordingly, since the form in the senses enjoys a different mode of being immaterial than the form in the intellect, Thomas introduces a distinction between more and less “enmattered” modes of existing.²⁰ Just as Thomas spoke of different modes of being as different intensities, he speaks of the distinction of more and less enmattered forms in terms of different grades (*gradus*) of immateriality. At one gradation, in intellect, the form reaches a ‘complete’ or ‘perfect’ state of immateriality, whereas in sense the form is at a lower-grade or more incomplete mode of immateriality. Thomas calls this incomplete immateriality—forms “existing without matter” but “in a bodily and material way”—a ‘*medium*’ grade of immateriality. He writes:

Among [human knowers] immaterial being has two grades. One is ‘perfect’ immateriality (*penitus immateriale*), namely, intelligible being. For in the intellect things have being both without matter and without the individuating conditions of matter, and also without a bodily organ. However, sensible being is a ‘half-way’ (*medium*)²¹ between both material and

¹⁸ *ST* 1.75.6: “The senses do not know being except under the conditions of here and now.” (*Sensus autem non cognoscit esse nisi sub hic et nunc*). Cf. *ST* 1.57.2: Concerning the ‘hic and nunc’, “nothing but sense can grasp these” (*nisi per sensum accipiat*).

¹⁹ So Thomas says, speaking of ‘*quod quid est*’: “[every form], considered as to its nature as a species, is abstracted from the here and now, because of which we say that universals are everywhere and always.” *ST* 1.46.2: (*Unumquodque autem, secundum rationem suae speciei, abstrahit ab hic et nunc, propter quod dicitur quod universalia sunt ubique et semper.*)

²⁰ In the next chapter I focus on the doctrine of “spiritual change” (*immutatio spiritualis*) as it is explored in *ST* 1.78.3. There the focus is on the distinction between things that do not have a share of cognitional being and those that do. Though even in the commentary on *De anima*, in the same discussion just quoted above, Thomas makes the point that plants do not sense because they have no principle or faculty of receiving forms (*species*) without matter. He writes, as noted earlier in this section, that plants, unlike animals, “take on and undergo modifications only in a material way.” *InDA* 2, lect 24.

²¹ Here I translate ‘*medium*’ as ‘half-way’ because this is how John Haldane translated it in his work, which I will present in the next section. It is likely that Haldane was following the Foster and Humphries translation of Thomas’s commentary, since they also use ‘half-way’ for ‘*medium*’ and Haldane cites their translation occasionally throughout his work. However, later I will opt for the more literal ‘medium’ since it does not convey what I take to be the misleading view that there is a *unique* grade of being between fully material and fully immaterial. Instead of this view I stress that there are *many* grades of immateriality, as is evident

immaterial being. For in the senses things have being without matter, but not without the individuating conditions of matter nor without a bodily organ. For sense is of particulars, whereas intellect is of universals [abstracted from matter]. And it is with respect to this twofold [grade of immaterial] being that the Philosopher says in Book 3 of this work [*De anima*] that the soul is in a way all things.²²

Since it is in virtue of immateriality that cognition permits the possession of the forms of other things, it is in virtue of immateriality that “the soul is in a way all things”. In cognition forms of other things may be possessed in a sensory way, and this is to have knowledge to some degree of particularity; or, forms of other things may be possessed in an intellectual way, and this is to have universal knowledge.²³ Thomas is teaching that for the knower to possess forms in these different ways is to possess forms with different grades of immateriality, an immateriality beginning in the sense and attaining ‘perfection’ or ‘completion’ in the intellect. This ‘twofold’ grade of immateriality serves here to distinguish forms in sensory and intellectual cognition.

Thus we see Thomas’s rationale for introducing the different modes of immaterial existence that have troubled John Haldane. Cognition involves the reception of formal natures according to the mode of the recipient. This means that the forms are received in the knower immaterially. When the issue is cognition of material things, the immateriality of cognition contrasts with the material way the form exists in the thing. Since the senses receive forms “in a material and bodily way” on account of the matter of the sense organs,

particularly in the case of sensible being (*esse sensible*). (I notice that Robert Pasnau has also translated ‘*medium*’ as “halfway” in his version: *A Commentary on Aristotle’s De anima*, Robert Pasnau, tr., (New Haven & London: Yale University Press, 1999), p. 152.)

²² *InDA* 2, lect 5: “*Huiusmodi autem immateriale esse, habet duos gradus in istis inferioribus. Nam quoddam est penitus immateriale, scilicet esse intelligibile. In intellectu enim res habent esse, et sine materia, et sine conditionibus materialibus individuantibus, et etiam absque organo corporali. Esse autem sensibile est medium inter utrumque. Nam in sensu res habet esse sine materia, non tamen absque conditionibus materialibus individuantibus, neque absque organo corporali. Est enim sensus particularium, intellectus vero universalium. Et quantum ad hoc duplex esse, dicit philosophus in tertio huius, quod anima est quodammodo omnia.*”

²³ I treat universal knowledge in more detail in due course, later in the thesis.

the sensible form exists differently from the perfectly immaterial intellectual form. So the sensible form is “more enmattered” than the intellectual form, and as such, the sensible form exists in a ‘*medium*’ state of immateriality.

§2.2: *General Account of Sensory Cognition*

What can be seen from the foregoing is that Thomas does not speak of phantasms in his discussion of the ‘medium’ immateriality, but seems to predicate it of sensory cognition as such. In the next few pages, I introduce Thomas’s doctrine of sensory cognition to arrive at the production of the phantasm. The details here will be broad in the interest of keeping focus on phantasms; I turn to examine other parts of the doctrine in later chapters.

The doctrine of medium immateriality shows that Thomas sees sense and intellect as having distinct modes of being, but also, he understands them as distinct powers of the human soul.²⁴ A ‘power’ of the soul, says Thomas, “is nothing other than a proximate principle of operation”.²⁵ By “proximate principle” Thomas means that a power is located within an agent and is a certain cause of some action or function. By “operation” Thomas means a specific sort of action that both begins and terminates or is completed within the acting agent. For example, the action of cutting proceeds from the one using the blade into the thing being cut, and so this action is said to be “transitive”. Cognition, for Thomas, is not like a transitive action. Rather, cognition is said to be an “intransitive” action.²⁶ For example, a lamp glows or illumines, which action of illuminating begins and remains within the

²⁴ Because they are distinct powers he sometimes refers to sense alone as the ‘sensitive soul’, e.g., *ST* 1.77.1 *ad* 7; 77.3; 77.4; 78.2; 78.4.

²⁵ *ST* 1.78.4: “*proximum principium operationis animae.*”

²⁶ E.g., *DV* 8.6, where Thomas teaches that cognition is what he calls an “intransitive action”, such that it begins and remains within the agent.

lamp.²⁷ Because to know is to possess a form in a certain mode of being, and this possession both begins and completes or terminates the action that remains in the one knowing, cognition is said to be an intransitive operation, being entirely immanent.

Sensory cognition specifically is, for Thomas, a passive or receptive power. Sense thus requires something outside of it to act upon it or ‘trigger’ it into operation, namely, the extramental sensible thing. Thomas thus calls the sense a special sort of passive ‘potency’, which in more contemporary parlance might be called a “capacity”.²⁸ Sense is a power that is ‘on-the-ready’, awaiting movement from a state of readiness, or “potency”, to a state of functioning or acting, a state Thomas calls being “in act” or “perfected”. When in potency, the senses require some external activating cause to effect their actualization. The external cause is the extramental material thing.

Thus sense is presented as a power capable of receiving another form, which form activates or “perfects” it, at which time the senses are actually performing their proper operation or activity. This activity consists in possessing the form of some thing. The form existing in cognition, then, is the principle of activation for sensory and intellectual cognitive operations. This is what is meant by calling the form a determinant of cognition: when the form ‘white’ exists in the senses, the senses are actually sensing a white thing, and, when the

²⁷ The light subsequently is cast out onto things, but the first action of coming to be lit up is the intransitive action or ‘operation’ on which to focus the attention here. The very action of cutting is necessarily to proceed out to another, whereas the action of illuminating or glowing is something that takes place within a being capable of that action; the light’s casting out is a secondary effect.

²⁸ The doctrine of potency comes from Aristotle’s *Metaphysics* IX. There Aristotle tells us that ‘potency’ (*dunamis* in the Latin) is a term used in several ways. Its primary meaning is the “active” sense, that is, the “principle of change in another, or in the same thing, as other”. Its secondary meaning is the “passive” sense of power, best translated as ‘receptivity’ or ‘passivity’, or a “principle within a thing by which it is changeable by some other thing”.

form ‘man’ exists in the intellect, the intellect is actually understanding what it is to be a man.²⁹

Thomas understands sensation as being entirely at the service of the intellect.³⁰ This is because the goal of the senses is to know, which goal is accomplished in a more perfect or noble way by the intellect, all for the purpose of serving the knowing human being. Nevertheless, the senses achieve a mode of knowledge of material things.

For example, animals and humans have needs for nourishment and shelter, and insofar as they are ordered to seeking these things, they seek not only what is present but often also what is absent. Thomas notices that these abilities, seeking what is present and seeking what is absent, indicate the activity of different powers of sensation. To seek what is present the sensor must receive the form of the present thing, which power Thomas calls ‘*reception*’, and to seek what is absent the sensor must not only receive the form of the thing on at least one occasion but also must retain that form as a guide to seeking, which power Thomas calls ‘*retention*’.³¹ Reception is a passive apprehension of the sensible form, which occurs so that the animal may be aware of its present surrounding environment. Retention is a conserving of the apprehended species, which occurs so that the animal will have a motive goal to seek something absent, such as food.

²⁹ In chapters four and five, on intellect, I will have occasion to present a more detailed account of what Thomas means by cognitive forms being principles of actualization. In chapter four, for example, I will look at what Thomas means in passages such as *DV* 11.1 *ad* 10: “Intelligible forms are both likenesses of things and forms perfecting the intellect.” (*Formae enim intelligibiles, ex quibus sapientia consistit, et sunt rerum similitudines, et sunt formae perficientes intellectum.*), and *SCG* 2.98: “the cognitive power is made actually cognitive through some species.” (*potentia cognoscitiva fit actu cognoscens per speciem aliquam*)

³⁰ *ST* 1.77.7: “We see that the senses are for the sake of the intelligence (*propter intellectum*), and not the converse.” And cf. *ST* 1.84.4: “it seems that the body is necessary for the intellective soul most of all for the soul’s proper operation, which is to understand (*intelligere*), since for its own existence it does not depend on the body.” This latter point about the soul’s existence (or subsistence) is discussed at *ST* 1.75.6.

³¹ *ST* 1.78.4

As these are different operations, they are ordered to different powers or faculties. Reception is an operation of the five “external senses” and some of the “internal senses”. By ‘external senses’ Thomas means the five senses of sight, hearing, touch, smell and taste. These are distinguished from the so-called internal senses, which Thomas identifies as the “common sense”, the “imagination” or “phantasy” (*phantasia*), the “memory”, and the “cogitative power”.³² The external senses, the common sense and the cogitative power are ordered to receiving various aspects of sensible form, and the imagination and memory are ordered to retaining various aspects of sensible form.

By “various aspects” I mean diverse informational content acquired from the sensory environment, but this will be discussed in the next chapter, where I treat all the senses in more detail. Presently want to focus on the imagination as productive of the imagistic mental items Thomas calls “phantasms”, and we have now arrived at the point of their production in sensory cognition. Material things impinge upon our sense organs and actualize the sensitive capacity for reception of form. The sensible form, having informed or “programmed” the senses,³³ incites the operation of imagination, which is “a treasury of forms received by the senses”.³⁴ In imagination the forms are retained as phantasms, the sensory items that intellect will use in order to understand.

As I noted in the previous chapter, Thomas believes that in all thinking, humans require the phantasms. The imagination, then, is a sense power of central importance to

³² E.g., *ST* 1.78.4. Also see *InDA* 2, lect 13.

³³ I borrow this felicitous expression from Fr. Dewan, who uses it in connection with the intelligible species. See Lawrence Dewan, “St. Thomas and Pre-Conceptual Intellection”, *Études maritainienne* 11 (1995), pp. 220-233. Also see his “St. Thomas, Ideas, and Immediate Knowledge”, *Dialogue* 18 (1979), pp. 392-404.

³⁴ *ST* 1.78.4: “*est enim phantasia sive imaginatio quasi thesaurus quidam formarum per sensum acceptarum.*” Thomas goes on to say that memory is also ordered to retention, which is also a “treasury” of forms, but these forms are the “upgraded” *intentiones*, the informational aspects of being, about which much more is said below.

human knowledge.³⁵ Once the phantasm has been produced, the intellect engages it by performing operations directly concerning or oriented to the phantasm. There are two distinct operations of the intellect concerning the phantasms, and so the phantasms play a dual role with respect to intellectual cognition.

First, the intellect engages the phantasm in order to abstract the intelligible form or species.³⁶ This first action is itself a two-pronged movement, involving an action called ‘illumination’ and an action called ‘abstraction’. Illumination takes its name from the casting of light upon a thing to render it visible, and Thomas thinks intellect performs an analogous action on the phantasm to render it intelligible. Abstraction is named for the action of extracting the intelligible and universal form from the more particular conditions of the phantasm.

To discuss these parts of this first phantasm-oriented intellectual movement, we must introduce Thomas’s distinction between two powers of the human intellect. He identifies these two powers insofar as he observes two distinct operations in our intellectual life. The “possible intellect” is that power of the intellect that is able to be impressed upon or “informed” by cognitive or intelligible species, analogous to the way the sense is able to be informed by the sensible species. It is so named because it can receive any form, and so is ‘potentially all things’. The “agent intellect” is that power of intellect which actively renders the phantasm suitable for presentation to the possible intellect. This is accomplished by the first phantasm-oriented intellectual action, and it is the agent intellect that performs both the illuminative and abstractive movements.

³⁵ *ST* 1.84.7: “In the present state of life in which our intellect is united to a passible body (*quo passibili corpori*), it is impossible for our intellect to understand anything actually, except by turning to the phantasms. [...] Thus it is clear that for the intellect to understand actually, not only when it grasps new knowledge, but also when it makes use of (*utendo*) knowledge already acquired, there is need for the act of the imagination (*actus imaginationis*) and of the other powers [that make use of corporeal organs].”

³⁶ E.g., *ST* 1.85.1 *ad* 3.

The agent intellect “illuminates” to render the sensible images “more apt” for intellectual consideration.³⁷ In this way, illumination is, as it were, the preparatory action. The agent intellect then performs the operation called abstraction upon the suitably prepared phantasm. Abstraction results in both the production of an item called the ‘intelligible species’ and that item’s coincident presentation to, or being *en rapport* with, the possible intellect.

When the formal nature is presented to the possible intellect, Thomas speaks of this as the nature becoming the form of the possible intellect:

To understand, then, we first require our possible intellect, which is receptive of intelligible species. Second, we need the agent intellect, which renders things actually intelligible. [...] For thus the intellect actually understands a thing when the species of the thing is made the form of the possible intellect. This is why we say that the intellect in act is the intellectual item in act.³⁸

Just as the form of Peter becomes the form of the marble, so the form of, say, humanity, becomes the form of the possible intellect. And just as when Peter-form is in the marble there is an actual statue of Peter, so it is that when humanity is in the intellect there is actual understanding of what it is to be human; an intellect ‘informed’ is an intellect understanding. Accordingly, I understand when my intellect possesses the formal nature abstracted from the phantasm.

Once in possession of this suitably intellectual item, the intellect performs the second of the two intellectual operations concerning the phantasms. This operation is called ‘conversion’. Once the intellect is possessed of the abstracted intelligible species, the

³⁷ This pertains to Aquinas’s doctrine that the object of the human intellect is a nature existing in matter.

³⁸ *Compendium theologiae*, Textum Taurini 1954 editum, c 83: *Sic igitur ad intelligendum primo necessarius est nobis intellectus possibilis, qui est receptivus specierum intelligibilium; secundo intellectus agens qui facit intelligibilia actu. [...] Sic enim actu intelligit res, cum species rei facta fuerit forma intellectus possibilis: propter quod dicitur quod intellectus in actu est intellectum in actu.* For translation I have consulted the English *Compendium of Theology*, Cyril Vollert, SJ, tr., (St. Louis and London: B. Herder Book Co., 1948), ch. 83

intellect³⁹ ‘converts’ or ‘returns’ to the phantasm in order to view the abstracted universal nature as existing in the particular.⁴⁰ This conversion action effectively ‘reconnects’ the intelligible species to a phantasmic image, which completes the broader operation of understanding. Thomas writes:

[The phantasms] are illuminated because, just as the sensitive part is made more powerful (*virtuosior*) from being conjoined with the intellect, so also the phantasms, by the power of the agent intellect, are rendered more apt (*redduntur habilia*) that intelligible notions (*intentiones*) be abstracted from them.⁴¹ [...Then] our intellect abstracts the intelligible forms from the phantasms, inasmuch as it considers the natures of things universally. Nevertheless, it understands these natures in the phantasms, because it cannot understand those things whose forms it abstracts save by turning itself towards the phantasms.⁴²

Intellectual engagement with the phantasms requires illumination, abstraction, and conversion. Thomas presents these actions as working together to effect the necessary rendering of the phantasm —the high-level product of the senses— suitable for a relationship with the intellect.

Intellectual engagement with the phantasm is the culminating event of a process that begins with an extramental material thing activating the senses. Knowledge of material things requires the existence in the intellect of a formal nature previously existing, in a different way, in the senses and existing first, in still a different way, in a material thing.⁴³

³⁹ As I read Aquinas, this conversion is an operation of the ‘whole’ intellect, as it were; that is, not just the agent, nor the possible, but both working in tandem.

⁴⁰ *ST* 1.84.7.

⁴¹ *ST* 1.85.1 *ad* 4.

⁴² *ST* 1.85.1 *ad* 5; cf. *ST* 1.84.7: “it is necessary for intellect actually to understand (*actu intelligat*) its own proper object that it turn to the phantasms, so as to view (*speculatur*) the universal nature as existing in the particular.” NB: The universal nature as existing in a material particular is the proper object of the human intellect. Cf. *ST* 1.85.1.

⁴³ This ‘requirement’ is only for knowledge of material things gained in the usual way, i.e. by the usual sensory engagement with the material environment. It is not necessarily required, however, because knowledge occurs just in case the knower possesses the cognitive form of the thing known (cf. *ST* 1.14.1), and God could bring about the existence in a knower of a cognitive form of a material thing without prior sensory stimulation. (As an

Sense is a cause of this knowing in virtue of the form that is received and initiates production of the phantasms. The phantasms are not sufficiently able to modify the intellect, so the intellect actively engages them in such a way as to bring what is intelligible in them from potency to act, illuminating them and then abstracting from them the intelligible formal nature. This nature becomes the form of the possible intellect, which converts or returns to the phantasms so as to understand the nature as existing in some particular material thing.

Thus Thomas presents the production and role of the phantasm vis-à-vis intellectual cognition. In closing this section I note that the intellect understands the nature as existing in some particular material thing, but it does not know the particularity of the thing it understands. This is because the mode of knowing for intellect is immaterial, and so it cannot know materiality as such. The senses provide the material conditions by which the human knows materiality, and the intellect can have a certain appreciation of these conditions. Thomas speaks of this as the intellect knowing a material particular “indirectly”.

In the final section I present this doctrine in order to show the role of the phantasm in our knowledge of material things. I show that sense and intellect are both different modes of knowing, and that they must work together to furnish the human knower with knowledge of the material thing. I present the phantasm as the product of an operation at a transitional stage in the passage of the formal likeness from the external senses to the intellect. The stage is transitional because neither the production nor even the use of phantasms is the completion or end stage of singular reference to material things. This will complete my defense of Thomas against Haldane’s charge that the doctrine of immateriality in the senses must be abandoned because it does not allow the phantasm to secure this reference.

aside, though, it seems to me that since a human must use imagination in all thinking, for Thomas, not even God could bring it about that a human knows a material particular without any recourse to the senses.)

§2.3: *Phantasms and Reference to Material Things*

In this final section I argue that while Haldane is correct to think that reference to material things must involve materiality, it is incorrect to think it is the business of the phantasm to achieve this referential function. Haldane's worry is that if the phantasm is described as immaterial, then it cannot provide direct reference to a material particular. Though I will liberate the phantasm from this role, and so deflect Haldane's charge that we must abandon sensory immaterialism, it must be said nonetheless that the senses are entirely responsible for securing reference to material things. In the next chapter I turn to a positive argument for and defense of Thomas's sensory immaterialism.

As I read St. Thomas, sensation secures two sorts of reference, what he calls "direct" and "indirect" reference. Indirect reference to a material particular may occur at any time a material particular is not present and even for this the intellect must be at work in conjunction with the senses.

The principal doctrine at work here is the conversion doctrine presented at the end of the last section. To know material things, Thomas says, our intellect must "convert" or "turn toward" the phantasms so as to view the abstracted nature as existing in a particular thing. This is because the proper object of our intellect is the essence or quiddity existing in a material thing. In conversion, Thomas teaches, the intellect achieves indirect reference to material particulars. Conversion is a reflexive process involving the intellect "looking back" upon the sensory event. This allows intellectual knowledge "to view the universal nature existing in the particular thing". Thomas writes:

Now the proper object of the human intellect, which is conjoined to a body, is the quiddity or nature existing in corporeal matter. In virtue of these natures of visible things it ascends to some sort of knowledge of invisible things. Now it is a special feature (*ratio*) of such a nature that it exist in some

individual, which [individual] is not without corporeal matter, just as it is a special feature of the nature of stone to be in *this* stone, and as it is a feature of the nature of horse to be in *this* horse, and so on. Hence, the nature of stone, or of any other material thing, cannot be known completely and truly except according as it is known existing in the particular thing. Now, we apprehend particulars through sense and imagination. And thus it is necessary, in order that the intellect actually understand its proper object, that it turn toward the phantasm so as to view the universal nature existing in the particular thing.⁴⁴

The proper object of the intellect is an essence of a material thing. An essence considered as such is general, which is to say it applies to many particular things. To know an essence “as existing in the particular thing”, then, requires some knowledge of material conditions.⁴⁵

These material conditions cannot be provided by, nor are they directly available to, the fully immaterial intellect; anything existing in the intellect exists according to the mode of the intellect, which is immaterial and so not determined to any particulars. The material conditions of the nature understood by the intellect, then, are given by the senses. Intellect turns to the phantasms, which are sensory products and so to some degree enmattered, and these provide certain material conditions for understanding the known essence as being instantiated in a material thing.

This picture leads Thomas to speak of intellectual reference to material particulars as “indirect”. Our intellect does not have knowledge of the material singular object “directly

⁴⁴ *ST 1.84.7: “Intellectus autem humani, qui est coniunctus corpori, proprium obiectum est quidditas sive natura in materia corporali existens; et per huiusmodi naturas visibilium rerum etiam in invisibilium rerum aliqualem cognitionem ascendit. De ratione autem huius naturae est, quod in aliquo individuo existat, quod non est absque materia corporali, sicut de ratione naturae lapidis est quod sit in hoc lapide, et de ratione naturae equi quod sit in hoc equo, et sic de aliis. Unde natura lapidis, vel cuiuscumque materialis rei, cognosci non potest complete et vere, nisi secundum quod cognoscitur ut in particulari existens. Particulare autem apprehendimus per sensum et imaginationem. Et ideo necesse est ad hoc quod intellectus actu intelligat suum obiectum proprium, quod convertat se ad phantasmata, ut speculetur naturam universalem in particulari existentem.”*

⁴⁵ I consider this doctrine in detail in chapter five.

and primarily”, says Thomas, but rather by a sort of reflection, which is the intellect’s “turn” or “conversion” to the phantasms.⁴⁶

Intellect can only ever achieve this indirect reference in virtue of its engagement with the phantasms. The phantasm provides the individuating material conditions by which intellect has indirect knowledge of material things. For instance, in his Commentary on *De anima* he tells us “phantasms are likenesses of particulars whereas intellections are universals abstracted from individuating conditions.”⁴⁷ Later on he writes:

For [intellect] knows the specific nature, or what the thing is, by extending itself directly out to it, but it knows the singular thing by a sort of reflection, insofar as it returns to the phantasms from which it abstracted the intelligible species.⁴⁸

Thus Thomas teaches that the intellect directly engages a nature or essence and indirectly engages the singular thing. Thomas references this *De anima* text again in his *Summa theologiae* where he presents the same doctrine as follows:

The reason for [our intellect having no direct knowledge of singular material things] is that the principle of singularity in material things is individual matter,⁴⁹ whereas our intellect, as was already said,⁵⁰ understands by abstracting the intelligible species from such matter. Now what is abstracted from individual matter is the universal. Hence our intellect knows directly the universal only. But indirectly, and as it were by a

⁴⁶ See, e.g., *ST* 1.86.1, quoted below.

⁴⁷ *InDA* 3, lect 13: “Aristotle asks in what way the first intellections (i.e. the understandings of indivisibles) are different from phantasms. And he answers that they do not occur without phantasms. All the same, they are not phantasms, because phantasms are likenesses of particulars whereas intellections are universals abstracted from individuating conditions. Thus phantasms are indivisibles potentially and not actually.” (*inquirat in quo differant primi intellectus, idest intelligentiae indivisibilium, cum non sint phantasmata. Et respondet, quod non sunt sine phantasmatis, sed tamen non sunt phantasmata, quia phantasmata sunt similitudines particularium, intellecta autem sunt universalia ab individuantes conditionibus abstracta: unde phantasmata sunt indivisibilia in potentia, et non in actu.*)

⁴⁸ *InDA* 3, lect 8: “*Cognoscit enim naturam speciei, sive quod quid est, directe extendendo seipsum, ipsum autem singulare per quamdam reflexionem, in quantum redit super phantasmata, a quibus species intelligibiles abstrahuntur.*” Cf. *ST* 1.85.1: “*Cognoscere vero id quod est in materia individuali, non prout est in tali materia, est abstrahere formam a materia individuali, quam repraesentant phantasmata.*”

⁴⁹ What Thomas means by ‘individual matter’ need not detain us here. A full discussion comes in the following chapter.

⁵⁰ In *ST* 1.85.1.

kind of reflection, it can know the singular, because, as we have said,⁵¹ even after abstracting the intelligible species, the intellect, in order to understand, needs to turn to the phantasms in which it understands the species, as is said in *De anima* 3. Therefore intellect directly understands the universal through the intelligible species, and indirectly understands the singulars, of which phantasms are likenesses.⁵²

Thomas believes that the senses are suited to know material particulars in virtue of the senses being “enmattered”, i.e. cognitive operations making use of bodily organs. Intellect, on the other hand, is unsuited to know material particulars in virtue of it being immaterial and operative independently of a bodily organ. As such, intellect must rely on a collaboration with the senses for its knowledge of material things. This collaboration occurs at the point of contact with the phantasm, from which intellect abstracts the immaterial species and to which it returns to view this species as a nature existing in the particular.

Thomas thinks that the intellect “needs to turn to the phantasms in order to understand”. By this he means that intellectual conversion to phantasms is necessary in any thinking whatsoever, including examples where the referent is not a present material thing.⁵³ When Thomas identifies the cognitive powers of reception and retention, he shows us that both intellect and imagination can operate in the absence of material things: neither the operation of the intellect nor of the imagination requires an extramental material thing to be present at the time of the operation.⁵⁴

⁵¹ In *ST* 1.84.7, quoted above.

⁵² *ST* 1.86.1: “*Cuius ratio est, quia principium singularitatis in rebus materialibus est materia individualis, intellectus autem noster, sicut supra dictum est, intelligit abstrahendo speciem intelligibilem ab huiusmodi materia. Quod autem a materia individuali abstrahitur, est universale. Unde intellectus noster directe non est cognoscitivus nisi universalium. Indirecte autem, et quasi per quandam reflexionem, potest cognoscere singulare, quia, sicut supra dictum est, etiam postquam species intelligibiles abstraxit, non potest secundum eas actu intelligere nisi convertendo se ad phantasmata, in quibus species intelligibiles intelligit, ut dicitur in III de anima. Sic igitur ipsum universale per speciem intelligibilem directe intelligit; indirecte autem singularia, quorum sunt phantasmata.*” My bracketed insertions.

⁵³ E.g., in the simple consideration of natures in first abstraction; in recalling absent things.

⁵⁴ *InDA* 3, lect. 15. Cf. *SCG* 1.53: “the intellect understands a present thing and an absent thing indifferently, and in this the intellect and the imagination are alike.” (*intellectus intelligit indifferenter rem absentem et*

If intellect needs phantasms in any thinking whatsoever, even in the absence of material particulars, then this suggests that the phantasm plays a role other than providing the intellect with reference to a present extramental material thing. There are three ways to show this.

First, the mere operation of imagination and the other internal senses (responsible for *phantasmata*) can occur independently of direct sensation of material particulars. This is evident from Thomas's distinction between sensing what is present and sensing what is absent.⁵⁵ 'Sensing' is said primarily of sensing what is present, insofar as there is direct sensation of a present material thing; the passive sense capacity is ignited or triggered to activity by the sensible thing. 'Sensing' is said secondarily of sensing what is absent, insofar as the senses are making use of already-received sensible forms in order to produce phantasms for the considering intellect. Conversion to phantasms occurs both when sense is operative in the presence or absence of a sensible thing, and as such, conversion permits intellectual and imaginary cognition without having a direct encounter with a material thing. Thus phantasms are not intended to secure conceptual reference to material things.

Second, conversion to phantasms is not the last step in the most complete knowledge proper to humans, what Thomas calls "intellection". Intellection is the human knower knowing its proper object, the essence of a material thing, as existing in a present individual. According to Thomas, the final step to bring about intellection is intellectual "judgment", whereby the intellect judges that the nature it is actually apprehending exists in a present

praesentem, in quo cum intellectu imaginatio convenit). As I note in chapter 1, Eleonore Stump disagrees that Aquinas meant phantasms are required in all human thinking, but this is not the place for an analysis of this claim. See the sections on sensory cognition in her *Aquinas* (London and New York: Routledge, 2003/05).

⁵⁵ As discussed above, and also see *InDA* 3, lect 2: "Each sense organ is receptive of sensible species without matter [...]. And this is the reason why the sensations and imaginations in virtue of which animals sense, i.e. 'appearances', occur in us when the sensible things are absent." (*unumquodque organum sensus est susceptivum speciei sensibilis sine materia, ut dictum est. Et ista est ratio, quare abeuntibus sensibilibus, fiunt in nobis sensationes et phantasiae, id est apparitiones, secundum quas aliquo modo sentiunt animalia.*)

particular thing.⁵⁶ This judgment requires the external sensation to be actually operating, i.e. to be actually sensing a present material thing. Thus intellection requires the sensorium and the intellect working collaboratively in the event of a direct encounter with a present material individual, since only under these conditions can intellect judge that a nature exists in *this* thing. In this way the intellect knows a universal nature as existing in this material particular, e.g., humanity in this man. Conversion to phantasms is just the penultimate step towards complete intellection, and as such, it is not intended to secure reference to material things.

There is a third reason why the phantasm is not the item suited to secure reference to material things, and this can be shown by examining what Thomas means by “direct” reference. The senses achieve both indirect and direct reference to material things, but only the senses achieve direct reference. Indeed, indirect reference is established only after and as a consequence of “direct” reference. Direct reference occurs in virtue of the immediate activation of the senses as a result of the presence of a material thing. The immediacy is important, since this “direct” reference is secured in virtue of the sensible form existing in the matter of the sense organs in the present moment, or as Thomas says, under the conditions of the here and now (*hic et nunc*).⁵⁷

The reason sense knowledge is of material things directly, i.e. “materially and concretely”, is because forms in the human sensorium exist under the material conditions of

⁵⁶ This doctrine of *iudicium intellectus* appears in *ST* 1.84.8, just after the conversion doctrine in 1.84.7. Not only the doctrines themselves but also the order of the articles shows that intellection is incomplete at the production of the phantasms, and requires further engagement with sensible reality.

⁵⁷ cf. *De sensu et sensato* 1.1: “Now the sense power differs from intellect and reason because intellect or reason is of universals, which are everywhere and always, but the sense power is of individuals, which are here and now. And so sense, according to its proper nature is apprehensive only of what is present. But if there is a power of the sensitive part that extends to something not present, this is according to participation by likeness in reason or intellect.” (*Differt autem sensus ab intellectu et ratione; quia intellectus vel ratio est universalium, quae sunt ubique et semper; sensus autem est singularium quae sunt hic et nunc. Et ideo sensus secundum suam propriam rationem non est cognoscitivus nisi praesentium. Quod autem sit aliqua virtus sensitivae partis, se extendens ad alia quae non sunt praesentia, hoc est secundum similitudinariam participationem rationis vel intellectus.*); *ST* 1.75.6: “Indeed the senses do not know the act of being except under the conditions ‘here’ and ‘now’.” (*Sensus autem non cognoscit esse nisi sub hic et nunc*)

the “here” and “now”. Clearly, then, it is the materiality of the human sensorium that is the reason for direct reference, and Haldane recognizes and emphasises this point. What seems unrecognized in Haldane’s presentation is that all cognition operates at some remove from materiality. Accordingly, the matter of sensation permits the direct contact with the material present, but it serves no other purpose in the realm of the cognitive. All of the various cognitive items, including the phantasms, exist at various removes from material conditions. Since the phantasm is to some degree removed from materiality, it is not sufficient to establish direct reference to a material thing. Thus the phantasms as such would not establish singular reference. This is Haldane’s very point: an immaterial item cannot secure reference to an individual. But since it is not the business of the phantasm to do this, we may not on these grounds conclude that the phantasm must be construed as fully material.

It must be said that it is not only direct contact with material things but also even the phantasms that occur under the conditions of ‘*hic et nunc*’. For example, Thomas writes: “our own intellectual operation takes place by abstraction from the ‘here and now’, except accidentally on the part of the phantasms [...]”⁵⁸ Since intellect can know individuals only insofar as it turns to use the phantasms, the phantasms must have some material individuation, which individuation Thomas here calls the ‘here and now’. Indeed, not even only the phantasms but all sensory cognition, insofar as it involves forms received “not without material conditions”, occurs under the material conditions of ‘here’ and ‘now’. Finally, Thomas says all sensation, to the extent that it is “enmattered”, is under the material conditions of the ‘here and now’. That is to say, just in case the senses are active and

⁵⁸ ST 1.107.4: “*nostra intellectualis operatio est per abstractionem ab hic et nunc, nisi per accidens ex parte phantasmatum.*”

operating, the individual matter of sense cognition gives a ‘hereness’ and ‘nowness’ to that which is sensed.

Accordingly, I do not deny that the phantasm is somewhat under the conditions of *hic et nunc*. Just as there are grades of freedom from matter as we ascend to intellectual cognition, so there must be grades of determination to material conditions as we descend through the senses. This amounts to different grades of determination to the ‘here’ and ‘now’. This gradation of immateriality as we proceed through levels of knowledge proper to various stages of cognition seems to be precisely why Thomas assigned a medium grade of immateriality to sensory cognition as such, including phantasms.

Rather, the emphasis here must be on a distinction between absence and presence in sensation, and a corresponding distinction between grades of the material conditions of *hic et nunc*. Direct reference must be achieved only from the brute material contact when the sensible thing is present as distinct from when it is absent. The direct *hic and nunc* comes from a certain direct ignition and activation of the senses.

The “enmatteredness” of the phantasm stands between intellectual cognition and direct sensation, and so too does the phantasm’s range of reference. The phantasm can provide knowledge of more than one particular (insofar as it is a likeness of a number of particulars within certain imagistic parameters) but it is not a likeness such as can be participated by infinite particulars (insofar as it has imagistic parameters limiting it only to certain instances of the nature it represents). Rather, on the one hand, insofar as the phantasm is determined by certain material conditions, it is limited in terms of what it may present. On the other hand, insofar as it is a likeness not determined to any one material particular, it is applicable to many individuals.

The phantasm, after all, is meant to determine thought to certain particular conditions. Since it enjoys a grade of immateriality, the phantasm cannot determine thought to a particular material thing. This share in immateriality with material conditions prompts Thomas to assign to sensation a medium grade of immateriality. This medium grade should have its own mode of knowing proper to it, fashioning the knower with a certain mode of knowledge between universality and particularity.

What suggests itself is that the phantasm refers our universal concept to what Thomas calls a “vague individual” (*individuum vagum*).⁵⁹ The vague individual is so named because it is determined to certain particular conditions, but not to any one particular thing.⁶⁰ As such, the vague individual stands between a universal nature and an individual material thing. We see the use of such a notion in indeterminate terms like ‘some’. Thomas presents this doctrine as follows:

The vague individual (*individuum vagum*), such as ‘some man’, signifies the common nature with the determinate mode of existence of singular things, that is, something self-subsisting as distinct from others. But the name of a designated singular thing signifies that which distinguishes the determinate thing, just as the name ‘Socrates’ signifies this flesh and this bone. [... Again,] the term ‘some man’ signifies the nature, or the individual on the part of its nature, with the mode of existence of singular things.⁶¹

⁵⁹ This is Cardinal Cajetan’s and John of St. Thomas’s reading of the doctrine of phantasms. See Lawrence Dewan, “Cajetan on St. Thomas on Conversion to the Phantasms”, unpublished paper. Also, see Jorge J. E. Gracia and John Kronen, “John of Saint Thomas”, in *Individuation in Scholasticism, The Later Middle Ages and the Counter-Reformation, 1150-1650*, Jorge J. E. Gracia, ed., (Albany, SUNY Press, 1994), pp. 511-533. Gracia and Kronen reference John of Saint Thomas’s *Cursus philosophicus Thomisticus secundum exactam, veram, genuinam Aristotelis et Doctoris Angelici mentem*, B. Reiser, ed., 3 vols. (Turin: Marietti, 1933), vol. 1, p. 424b.

⁶⁰ ‘vagum’ from ‘vagus’: roving, wandering; cf. the sense of “homelessness” and “indeterminacy” in the English cognates ‘vagabond’ and ‘vagary’, respectively.

⁶¹ *ST* 1.30.4: “*individuum vagum, ut aliquis homo, significat naturam communem cum determinato modo existendi qui competit singularibus, ut scilicet sit per se subsistens distinctum ab aliis. Sed in nomine singularis designati, significatur determinatum distinguens, sicut in nomine Socratis haec caro et hoc os [...] aliquis homo significat naturam, vel individuum ex parte naturae, cum modo existendi qui competit singularibus [...].*”

The vague individual has an aspect of being common and also an aspect of existing in singular conditions. ‘Some man’, for example, signifies the common nature ‘humanity’ existing as determined to some or other individual, e.g., Peter or Paul, but not to a specific individual, e.g., *this* man Peter. The vague individual is thus understood as existing with individual conditions, but not with the same conditions of ‘here’ and ‘now’ unique to sensing a present material thing.

Vague individuality introduces a mode of individuating conditions distinct from both universality and from material particularity. The vague individual exists with certain determinate features but not as any specific individual. Thomas calls this mode of being a “singular under a certain indetermination”. Speaking of the logical notion, he writes:

Sometimes something is either attributed to or removed from the universal in view of the particular. To designate this in affirmative enunciations, the word ‘some’ or ‘a certain one’, has been devised. By this word we designate that the predicate is attributed to the universal subject by reason of the particular. Now ‘some’, or ‘a certain one’, does not signify the form of any singular determinately, rather, it designates the singular under a certain indetermination. The singular so designated is therefore the vague individual. In negative enunciations there is no designated word, but ‘not all’ can be used. So just as ‘no’ removes universally, since it signifies the same thing as if we were to say ‘not any’ (i.e. ‘not some’), so also ‘not all’ removes particularly inasmuch as it excludes universal affirmation.⁶²

Logically, the “vague individual” is singular but not determined to any particular. The terms ‘some’ and ‘not all’ each prescind from universality and indicate individuality, though they

⁶² *Expositio Peryermeneias*, 1.1 10 n.13: “*Quandoque autem attribuitur universali aliquid vel removetur ab eo ratione particularis; et ad hoc designandum, in affirmativis quidem adinventum est haec dictio, aliquis vel quidam, per quam designatur quod praedicatum attribuitur subiecto universali ratione ipsius particularis; sed quia non determinate significat formam alicuius singularis, sub quadam indeterminatione singulare designat; unde et dicitur individuum vagum. In negativis autem non est aliqua dictio posita, sed possumus accipere, non omnis; ut sicut, nullus, universaliter removet, eo quod significat quasi diceretur, non ullus, idest, non aliquis, ita etiam, non omnis, particulariter removeat, in quantum excludit universalem affirmationem.*” Translation taken from Jean T. Oesterle’s edition of Thomas Aquinas, *Aristotle on Interpretation, Commentary by St. Thomas and Cajetan*, (Milwaukee: Marquette University Press, 1962), p. 83, §13.

do not refer to a specific individual. Accordingly, the target of the vague individual is the common nature determined to some degree of particularity. This is what Thomas means when he says that the vague individual attributes or removes some predicate from a universal subject “in view of” or “by reason of” the particular.

The logical notion corresponds to an event in sense perception: the phantasm in the imagination is just such a vague individual. The intellect achieves some universal likeness, e.g., ‘humanity’, and the imagination provides imagery—the phantasms—for the intellect’s use in considering this nature as existing in material conditions. The phantasm can be any number of specific images, such as, e.g., the image of Peter or the image of Paul. It may even be a blending of some of the sensible features of Peter and some of Paul. All the phantasm need provide is material conditions in which the nature is understood to exist, and these conditions themselves need not be determined or contracted to any individual, e.g., Peter.

Instances of vague individuality are familiar enough, as in the following example.⁶³ Suppose I fly to a conference in China. I am tired from the trip and nervous about delivering a paper. When I arrive I am hurried to a conference room filled with Chinese philosophers. I am ushered up to the podium where I promptly black out and wake up in the infirmary. When a nurse asks me about the conference, I remember nothing except that I was in a room with some Chinese people, which is to say, at least one Chinese person.

Considering this situation in terms of Thomas’s view, we say that memory and imagination provide the phantasm used in my intellectual understanding that I was in a room with at least one Chinese person. Since I am understanding what is absent, I do not know the person in question under the conditions of *hic et nunc*, but I rather I know with a certain

⁶³ Though it would be an apt name for this example, I’m afraid John Searle’s own example used to illustrate a very different point has gained far too much recognition for me to refer to my example as ‘The Chinese Room’.

“indetermination”. I have no definite image of a person in mind, but rather a vague image, which perhaps might be an amalgam of brief sensory presentations of various persons in the conference room, and certain details of this image I am sure of and can speak about intelligibly. In this and similar cases, the phantasm is a sensory image of people in the room, out of which I can form a further, vaguer image of a single Chinese philosopher. As such, the imagination provides material conditions, but my knowledge is not of any particular person. Through the phantasm, intellect is determined to the common nature ‘Chinese philosopher’ existing in a singular mode of being, though I do not know any particular Chinese philosopher. The phantasm thus serves the knower as a certain “indetermination” to a vague individual.

The indetermination or vagueness of the phantasm seems to be a reasonable approach to Thomas’s doctrine that the phantasm enjoys a ‘medium’ or ‘half-way’ grade of immateriality. This is the problematic doctrine for John Haldane, who believes that the medium grade of immateriality is a special feature of the phantasms. On the contrary, Thomas’s presentation of the external and internal senses draws attention to a many-levelled or graded immateriality in sense cognition. That is, the medium grade of immateriality between material and immaterial being applies not merely to the phantasm but to all sensible being (*esse sensibile*) in the human sensorium. Immaterial being admits of grades insofar as matter is more and more removed from the situation, and insofar as matter is removed from the situation the human attains a more and more amplified range of knowledge.⁶⁴

⁶⁴ I explore this idea in detail in chapter 4. Cf. *ST* 1.84.2: “material things known must needs exist in the knower, not materially, but immaterially. The reason of this is, because the act of knowledge extends to things outside the knower: for we know things even that are external to us. Now by matter the form of a thing is determined to some one thing. From this it is clear that cognizance is in inverse proportion to materiality [...] the more immaterially a thing receives the form of the thing known, the more perfect is its knowledge. Therefore the intellect which abstracts the species not only from matter, but also from the individuating

This is why I prefer to preserve Aquinas's term 'medium' instead of following Haldane's translation of '*medium*' as 'half-way'. The latter suggests that there is a unique state of immateriality between completely immaterial and completely material. 'Medium' permits the nature of sensory cognition to enjoy graded immateriality, where this immateriality mediates between perfect materiality in things and perfect immateriality in intellectual cognition.⁶⁵

Indeed, Thomas sees that role of the phantasm —as providing knowledge of vague individuals— depends on the gradation of immaterial being in the movement from sense to intellect. He writes:

Nothing may pass from one extreme to the other except through the middle (*medium*). Now the nature of a form in the imagination, which form is without matter but not without material conditions, stands between the nature of a form which is in matter, and the nature of a form which is in the intellect by abstraction from matter and from material conditions.⁶⁶

This text stresses how Thomas understood the phantasm is a likeness standing at a further medium grade of immaterial being between the likeness in the sense and the likeness in the intellect. Contra Haldane, then, Thomas is not speaking of one single "half-way" point of being in the sense between things and thoughts. He is, rather, speaking of grades of

conditions of matter, has more perfect knowledge than the senses, which receive the form of the thing known, without matter indeed, but subject to material conditions."

⁶⁵ Paul Hoffman, writing in reply to Haldane, Cohen and others, emphasizes this same point about the grades of immateriality, in his "St. Thomas Aquinas on the Halfway State of Sensible Being", *The Philosophical Review* 99 (1990), pp. 73-92. I notice that Hoffman, however, thinks that the *De anima* 2, lect 12 passage on medium immateriality "provides conclusive evidence that [Aquinas] thinks materiality and immateriality admit of degrees. Forms are received neither wholly immaterially nor wholly materially by the senses," (p. 85) and thus that Haldane is simply making a "false claim". (p. 86) I do not think this passage by itself allays Haldane's interpretive worries, and so I think the correct approach is to argue for reading Thomas as holding the view that there must grades of immateriality throughout human cognition.

⁶⁶ *ST* 1.55.2 *ad* 2: "*de extremo ad extremum non pervenitur nisi per medium. Esse autem formae in imaginatione, quod est quidem sine materia, non tamen sine materialibus conditionibus, medium est inter esse formae quae est in materia, et esse formae quae est in intellectu per abstractionem a materia et a conditionibus materialibus.*"

immateriality throughout various levels of cognition, each affording a certain kind of knowledge.

The various levels of knowledge ultimately furnish the human knower with knowledge of the material particular, which knowledge is emerging from the discussion as a many-layered cognitive event. Intellection requires the active cooperation of sense and intellect to bring about both indirect and direct reference as modes of knowing standing at the polar points of cognition. As such, intellect and sense are both at the service of the knowing human, as powers of the human fashioning him with knowledge each according to its own capacity.

Accordingly, what is properly said ‘to know’ is the whole human being, and intellect and sense are the means by which the human knows. That is, ‘to know’ is said primarily of the whole knowing being, and only secondarily of the cognitive powers, which in the case of the human are intellect and sense. Thomas writes:

Man has a prior knowledge of singulars by imagination and sense. Consequently, he can apply his universal intellectual knowledge to a particular. For, properly speaking, it is neither the intellect nor the sense that knows, but man that knows through both, as is clear from *De anima* 1.⁶⁷

Sense and intellect each have a unique sort of object (respectively, sensible form and intelligible form), and these each indicate different modes of knowing for the human. So Thomas writes: “by one faculty we know the universal and immaterial, and by another we know singular and material things”.⁶⁸ The ‘we’ indicates that it is the human who knows, in one way by sense, in another way intellect, and in another way by both at once. When sense and intellect are both at once operating this is tantamount to human intellection.

⁶⁷ *DV* 2.6 ad 3.

⁶⁸ *ST* 1.14.11: “*per aliam potentiam cognoscamus universalia et immaterialia, et per aliam singularia et materialia.*”

Though Thomas sees intellect and sense as distinct modes of knowing, he also understands them as “continuous”, which allows them to cooperate in fashioning the human with knowledge.⁶⁹ This continuity highlights the role of grades of immateriality in cognition of material particulars. Thomas says that insofar as the sensitive part is at the boundaries of the mind,⁷⁰ the mind can reflect on its own activity of thinking or considering and recognize that its activity depends on a sort of sensory ignition:

the mind knows singulars through a certain kind of reflection, as when the mind, in knowing its object, which is some universal nature, returns to knowledge of its own act, then to the species which is the principle of its act, and, finally, to the phantasm from which it has abstracted the species. In this way, it achieves some knowledge of singulars.⁷¹

Thomas seems to be saying that by returning to understand its own act of knowing, intellect understands that its knowledge of things is gained by a process involving sensory contact with a material particular.

Accordingly, the “indirectness” of intellect’s knowledge of material things seems to be a kind of knowing that (and by what means) it knows. This reflexive knowledge seems to be just what Thomas means by the “reflection” of the mind in knowing the material singular.⁷² Direct reference to material particulars is one kind of knowledge, but it is not

⁶⁹ DV 10.5: “the mind connects to singulars indirectly, insofar as it is continuous with the sensitive powers, which deal with particulars.” *“mens per accidens singularibus se immiscet, in quantum continuatur viribus sensitivis, quae circa particularia versantur.”*

⁷⁰ DV 10.5: “[...] *in quantum motus sensitivae partis terminatur ad mentem [...].*”

⁷¹ DV 10.5: *“mens singulare cognoscit per quamdam reflexionem, prout scilicet mens cognoscendo obiectum suum, quod est aliqua natura universalis, redit in cognitionem sui actus, et ulterius in speciem quae est sui actus principium, et ulterius in phantasma a quo species est abstracta; et sic aliquam cognitionem de singulari accipit.”*

⁷² Compare a passage discussing the mode of knowing of the separated soul from *Quaestiones de anima* 20, *ad contrarium* 1: “When the soul is joined to the body, it does not know singulars by its intellect directly, but by a certain reflection; that is, inasmuch as it apprehends its intelligible item, it turns back to consider its own action and the intelligible species (which is the principle of its operation) and the origin of its species. Hence, in this way it proceeds to consider phantasms, and the singulars of which they are the phantasms. But this reflection can be completed only with the cooperation of the cogitative power and imagination, which are not present in the separated soul. Hence the separated soul does not know singulars in this way.” (*anima coniuncta corpori*

achieved by phantasms. It is rather achieved through the efficient causality of the present material thing acting on the senses. Once the senses have been so activated and acquire the presence of sensible form, most subsequent cognition could go on without the external thing. It is the conjunction of the presence of the extramental thing with the intellect's recognition of its activation being dependent on initial triggering that affords the indirect intellectual knowledge of the material things.

§2.4: *Conclusion*

If the presentation and argument in this chapter is correct, then the phantasm does not discharge the function of securing reference to material things in Thomas's theory of knowledge. Such reference is rather a many-levelled cognitive event requiring the cooperation of both sense and intellect culminating in the completed situation for the human knower that Thomas calls intellection. The medium immateriality in question, furthermore, is not one 'half-way' point of being enjoyed by the phantasm and standing between material things and immaterial thoughts. Rather, Thomas thinks medium immateriality applies to all sense cognition, and this immateriality is present in degrees or grades throughout various cognitive acts. Once the phantasm is presented aright, it becomes clear that we may not follow John Haldane in rejecting the doctrine of medium immateriality in the senses on the grounds that it does not permit the phantasm to secure reference.

But once the reading of the phantasm is straightened out, it might be argued that the doctrine of medium immateriality is problematic in itself. John Haldane, after all, is

per intellectum cognoscit singulare, non quidem directe, sed per quamdam reflexionem; in quantum scilicet ex hoc quod apprehendit suum intelligibile, revertitur ad considerandum suum actum et speciem intelligibilem quae est principium suae operationis, et eius speciei originem. Et sic venit in considerationem phantasmatum et singularium, quorum sunt phantasmata. Sed haec reflexio compleri non potest nisi per adiunctionem virtutis cogitativae et imaginativae, quae non sunt in anima separata. Unde per modum istum anima separata singularia non cognoscit.)

concerned not so much with getting Thomas right, but with defending a coherent philosophical view. Thomas's view that every act of cognition needs involve immateriality and his picture of grades of immateriality, then, may be rejected as bad philosophy on other grounds.

Accordingly, in the next chapter I present and defend the doctrine of medium immateriality and I argue that there is reason for John Haldane to preserve the doctrine. Completely material senses would cease to be cognitive in the way both Thomas and Haldane understand the term: as possessing the form of another thing. This possessing of form in a cognitive way requires immateriality as distinct from materiality in order to preserve the distinction between cognizant and non-cognizant beings. I examine medium immateriality through a presentation of the doctrine of intentional being in the medium and the senses. By the end of the next chapter I will have shown that the notion of grades of immateriality is not Thomas's "vain attempt" to secure reference, but rather is a keystone of the doctrine of knowledge that Haldane himself wishes to defend. This will prepare us to discuss the role of the cogitative power in the apprehension of common natures (chapter four), and then to see how Thomas can face Haldane's original objections *via* Thomas's solution to the problem of universals (chapter five), before turning to examine and suggest a modification to Professor Haldane's presentation of the relationship of the mind and world (chapters six and seven).

Chapter 3: Sensory Cognition and Immateriality

In this chapter I argue that John Haldane must give up his view that sensation is entirely material, and I offer a reading of the troublesome doctrine of ‘*medium*’ sensory immateriality that first prompted Haldane to adopt his particular brand of sensory materialism. First I argue that the senses cannot be entirely material since change or modification in an entirely material thing cannot distinguish itself from any non-cognitive material change. I suggest that without a doctrine of immaterial reception and assimilation of form, a theory of cognition either must give up a premise both Haldane and Thomas accept or it cannot count sensation as a form of knowledge. Second, I show how Thomas presents the doctrine of ‘*medium*’ immateriality in the context of what he calls “spiritual or intentional being”. I argue that this is a coherent doctrine, and can be presented in a Thomist philosophy of mind.

In the first section I argue that without immateriality understood as permeating through all of cognition, there is no distinction between things that know and things that do not, i.e. cognizant and non-cognizant beings. Thus for Haldane to stay consistent with his view that cognition involves the possession of the form of another, then even sensory cognition must involve immateriality.

In the second section I begin my defense of Thomas’s doctrine of ‘*medium*’ immateriality in the senses. I show how Thomas employs a certain “spiritual or intentional” being in his discussion of cognition, and how this can be understood with attention to the presence of cognitive powers.

In the final section, I suggest that while attention to cognitive powers is needed to appreciate ‘*medium*’ immateriality, this must be supplemented by other aspects of Thomas’s complete theory, namely, the doctrine of the *per accidens* existence of intentional being. This

section introduces the notion of an intentional or informational mode of being, particularly as it pertains to the role of the cogitative power. Then I address some difficulties with certain readings of this doctrine. Specifically, the doctrine of intentional being does not itself answer the question of the distinction between cognizant and non-cognizant beings, since intentional being can exist in non-cognizant media. This may not be a philosophical worry, say, for panpsychists, but it seems not to be a consequence that a Thomist would want to bear. The distinction between cognizant and non-cognizant beings, then, must come from another part of the thomist's doctrine. I address this later in the thesis.

The final section also prepares the way for a discussion of the cogitative power in chapter four. There I will have completed my three-chapter case against Haldane's sensory materialism, aiming to clear Thomas of the charge of a "vain attempt" to give a coherent account of sense perception as somehow a cause of intellectual and universal concepts. The previous chapter established that we may not abandon grades of immateriality in sensory cognition based on the failure of phantasms to secure individual reference; the present chapter argues that sensory immateriality must be retained in Haldane's 'thomist' theory of knowledge, and the significance of the doctrine for cognition; the next chapter shows how the cogitative power, a power at the highest level of sensory cognition, figures and functions within this picture of sensation as partial cause of intellectual concept-formation. This will complete my critique of Haldane on sensation, by showing that sensation must not be entirely material, and by offering a reasonable reading of immateriality in the senses.

§3.1: *Sensory Materialism and Thomistic Cognition*

In this section I argue that there is reason for Haldane to preserve the doctrine of immateriality in sensation since without it he looks to be inconsistent. First, Haldane accepts

both Thomas's teaching that the senses are a form of knowledge, and, that all knowledge involves the cognitive possession of the form of another thing. Second, sensory cognition, for Haldane, can be accounted for purely materialistically. This is to say that sensation can occur entirely as a result of a certain material configuration of material organs. My aim in this section is to suggest that these views are incompatible, and Haldane must give up one of them. I suggest that Haldane wishes to preserve the first, and so must give up sensory materialism.

We saw in chapter one Haldane's case for preferring Thomas as saying that sensation is an entirely material process. If the phantasm—the sensory item from which concepts are formed—is in any way immaterial, then it cannot provide conceptual reference to extramental material particulars. For sensation to discharge this role, and since Thomas is ambiguous as to whether the phantasm is material, Haldane says sensation is material. In chapter two I argued that it is not the business of the phantasm to secure reference to material individuals, and so their failure to achieve this is no reason to reject Thomas's doctrine of immateriality in the senses. Indeed, the actual role of the phantasms more suggests the need for sensory immateriality.

Haldane has always adopted sensory materialism in his presentation of a thomist theory of knowledge.¹ In a recent paper Haldane quotes Thomas to lend support to sensory materialism. I quoted part of the same passage from *Summa theologiae* in the previous chapter. Haldane quotes Thomas as follows:

¹ E.g., Haldane's view that "sensation is a physical process having physical products", in "Aquinas on Sense Perception", p. 239, cited in here in chapter one, §1.2. As for the difference in meaning between 'material' and 'physical', Haldane seems mostly to use the terms interchangeably. Myles Burnyeat has also noticed this about Haldane, in his "Aquinas on Spiritual Change", p. 151 fn. 51. Given the context of Haldane's discussion, and the nature of his concern with Aquinas, I take his use of 'physical' in this passage to mean 'material'.

For even in sensible things it is to be observed that the form is otherwise in one sensible than in another: for instance, whiteness may be of great intensity in one, and of less intensity in another: in one we find whiteness with sweetness, in another without sweetness. In the same way the sensible form is conditioned differently in the thing which is external to the soul, and in the senses which receive the forms of sensible things without receiving matter, such as the colour of gold without receiving gold.²

Haldane comments on this passage:

Being ‘conditioned differently’ (*alio modo est in re et in sensu*) is compatible with being material in both instances, and for Aquinas the reception of a sensible form in the sense faculty was a material process, be it that the particular matter in which the form was received into the sense was not that of the subject in which it originated.³

Haldane has used the English Dominican translation of ‘conditioned differently’ for Thomas’s ‘*alio modo est in re quae est extra animam, et alio modo in sensu*’. This is a loose translation, but it is not necessarily misleading. When I presented this passage in chapter two, I translated the phrase more literally: “the sensible form exists in one way in the extramental thing, and in another way in the senses.” Nevertheless, the “way” in question here certainly refers to the way the form in the thing and the form in the sense differ as to material conditions. Thomas himself says that forms can exist in these different ways on account of a difference of “material disposition” between the agent giving form and the patient receiving form.⁴ There is nothing wrong, it seems to me, with the expression that they are ‘conditioned differently’.

² *ST* 1.84.1, quoted in Haldane, “The Metaphysics of Intellect(ion)”, p 48. Haldane is using the Fathers of the English Dominican Province translation, second and revised edition, 1920.

³ Haldane, “The Metaphysics of Intellect(ion)”, p. 48.

⁴ *InDA* 2, lect 24: *Quandoque vero forma recipitur in patiente secundum alium modum essendi, quam sit in agente; quia dispositio materialis patientis ad recipiendum, non est similis dispositioni materiali, quae est in agente.*

However, neither the passage nor the expression indicates that Thomas endorses sensory materialism. Thomas is here illustrating his point that what is received is received according to the mode of the receiver. If my presentation in the last chapter of cognition as such is correct, then Thomas thought that such reception in cognition, which includes sensation, required immateriality. While Thomas says the sensible form stands between pure materiality and perfect immateriality, and so is somewhat material, it is also somewhat immaterial. The senses acquire and possess form differently from the way form exists in the extramental thing and the way form subsequently exists in the fully immaterial intellect. Accordingly, they need their possessed form to have a corresponding '*medium*' mode of existence.

Indeed, this '*medium*' mode of being is what Haldane will not accept. But if he is to retain a broadly Thomistic theory of cognition according to which knowledge involves the possession of the form of a thing known, then he must allow immateriality in sensory cognition. By positing sensory materialism, Haldane is unable to explain how sensation is a form of knowledge. This is because sensory materialism is unable to distinguish between cognizant and non-cognizant beings. To say that two material things are conditioned differently does not yet give a criterion of cognizance. A rock is conditioned differently than a tree, for instance, yet neither, for the Thomist, is cognizant.

But the case of sensation is very different from rocks and trees. Even though the sensible form is 'received in another way' from the way in which it exists in the thing, and so is 'conditioned differently' than the thing, the form in the sense is conditioned in such a way that it achieves knowledge of the thing. Thomas speaks of this difference in terms of the materiality of the thing and the immateriality of the sense. Sensory materialism, on the other hand, does not explain how the matter of sense knows while the matter of the sensed thing

does not. It says that the matter in sense is ‘conditioned differently’; but Thomas has the advantage of giving some lengthy detail as to what this entails.

It is common to both Haldane and Thomas, at least, that cognitive presence of form must be a radically different sort of formal existence than what we find in non-cognizant things. Otherwise, it would be not a cognitive formal determination but rather a material or natural determination.⁵ But the problem with sensory materialism, at least on an allegedly thomistic theory of knowledge, is that any material change in a supposed sensory organ would be merely natural change: a certain quantity of matter acquiring a new formal determination. In a word, sensory materialism makes a doctrine of sensory cognition impossible to distinguish from cases of natural formal reception.

Pointing out this consequence of sensory materialism may prompt Haldane to re-examine the view that the senses must be fully material. Admittedly, though, merely pointing it out does not resolve the problem he has with Thomas’s positing a special ‘*medium*’ mode of immaterial being in the senses to account for their degree of ‘enmatteredness’. My present task, then, is to present Thomas’s doctrine of ‘*medium*’ to show why it is required in order to maintain the Thomistic view that knowledge is the possession of the form of another as other and distinct from the cognizer.

One way that Thomas speaks of the difference in modes of being between the sensible form and the extramental thing is to say that in the sensible thing the form exists in a “natural” or material mode of being, while in the senses the form exists in a “spiritual or

⁵ Cf. e.g., *DV* 22.1 *ad* 2: Whereas cognition is by assimilation, likeness in the being of nature does not bring about cognition, but rather hinders it. For this reason the sense organs must be stripped of sensible species, so that they are able to receive them by way of the spiritual being (*esse spirituale*) which causes cognition. Hence those things which in no way receive anything except by way of material existence (*esse materiale*) can in no way know: (*cum cognitio sit per assimilationem, similitudo in esse naturae, non facit cognitionem, sed magis impedit; ratione cuius oportet organa sensuum a speciebus sensibilibus esse denudata, ut possint eas recipere secundum esse spirituale, quod cognitionem causat. Unde illa quae nullo modo possunt aliquid recipere nisi secundum esse materiale, nullo modo possunt cognoscere [...].*)

intentional” mode. Haldane is willing to accept Thomas’s doctrine of intentional being in intellectual cognition, as we saw in the first chapter, but he is not willing to accept it as existing in the senses. However, if I am correct that sensory materialism would rule out sensory knowledge on thomist grounds Haldane wishes to accept, then it is worth examining Thomas’s doctrine of intentional being in its full presentation.

In the following section, then, I present Thomas’s doctrine of intentional being as it pertains to sensation. The focus of my presentation will be showing how the doctrine of “spiritual and intentional” being introduces a new mode of existing. This mode of existence, I will argue, with Thomas, occurs in both the senses and in the medium between the sensor and the extramental thing. In later chapters, I will argue that intentional being also exists, in different ways, in the intellect and in things. I suggest Thomas accounts for this mode of existence as a *per accidens* existence, which is neither a fully material nor a cognitive mode of existence. I will speak of this as an ‘informational’ mode of existing. I turn now to Thomas’s presentation of the senses as capable of receiving this “spiritual or intentional” being.

§3.2: *Receiving Intentional Being*

When Thomas speaks of forms being “received” in both things and knowers, he is speaking of a certain kind of change or alteration (*immutatio*). When a tomato goes from green to red, for example, it is said to have received form (redness) and undergone a certain change (from green to red). Similarly, when a knower goes from not knowing the tomato to knowing the tomato, the knower receives a certain form and undergoes a certain change. Accordingly, for each of “natural” and “spiritual or intentional” modes of being, there is a difference between “natural change” and “intentional or spiritual change”.

Natural change occurs, Thomas says, when the form is received into the patient with the same mode of existence (*modum essendi*) as is in the agent, as when the patient has the same material disposition to receive form as the agent. In this kind of reception, “form is not received without matter”.⁶ The patient does not acquire numerically the same matter as the agent, but rather acquires the form organized materially in the same way as the agent. It is in this way, says Thomas, that air receives the influence of fire, and this is the manner of any other kind of natural passive reception of form. In natural change, an object undergoes some material modification of its shape or structure. For example, when a young tomato ripens it receives the form of red. By natural change, a new material instance of redness comes into being: the red in this tomato.

Another way a patient receives form is by a different mode of existence from that existing in the agent, as when “the material disposition of the patient is not similar to the material disposition of the agent”. In this kind of reception, “form is received by the patient without matter, insofar as the patient is assimilated to the agent in point of form and not in point of matter.”⁷ It is in this way that the sense receives form, says Thomas, “without matter”, where the form in the sense exists in a different mode than the form in the sensible thing. In the thing it has “natural” being or existence, and in the sense it has “spiritual or intentional” being (*esse intentionale et spirituale*).⁸

In this presentation, Thomas seems to use this “spiritual” reception of sensible form as that which distinguishes cognizant beings from non-cognizant beings. In commenting on Aristotle’s doctrine that sensation is a case of receiving forms without matter, Thomas notes

⁶ *InDA 2, lect 24: “non recipitur forma sine materia.”*

⁷ *InDA 2, lect 24: “ideo forma recipitur in patiente sine materia, inquantum patiens assimilatur agenti secundum formam, et non secundum materiam.”*

⁸ The doctrine outlined in the above paragraph is in *InDA 2, lect 24*.

that this is true of all cases of passive reception.⁹ Any ‘undergoing’ or passive change is not a sufficient condition for cognizance, says Thomas, otherwise all cases of natural change would be cases of cognizance. To illustrate his point, Thomas uses a sensory medium, the air: when air receives the form of fire, the air does not receive matter, but receives the form immaterially. Despite this reception the air is not cognitive.¹⁰ There must be something unique about “spiritual or intentional” reception in cognitive beings, then, to distinguish them from the non-cognitive medium, which receives form in a similar way. Now it looks as if the presence of spiritual or intentional being is the criterion of cognizance. That is, the presence (or absence) of this mode of being is marks the distinction between the cognizant and the non-cognizant.

But recent work on Thomas’s doctrine of spiritual or intentional change in the senses and the medium focuses on what appears to be an inconsistency among some of Thomas’s claims. In his commentary on Aristotle’s *De anima* Thomas claims that the medium between the senses and the sensible object is capable of undergoing “spiritual change” and thereby receiving intentional form.¹¹ Later on Thomas says that despite this spiritual change and the presence of intentional form, the medium is not aware or cognizant.¹² These claims are not by themselves incompatible, but they become problematic in the face of a third claim—a cornerstone of Thomas’s metaphysics of knowledge—that cognition occurs just in case of the presence of immaterial and intentional form.¹³ These three claims yield the contradiction that the medium is not cognizant despite meeting the criteria for cognizance: possessing spiritual or intentional form. Scholars either have tried to find readings of the texts that

⁹ *InDA* 2, lect 24 for this point and the quotations in the proceeding paragraph. Cf. A parallel text at *ST* 1.78.3

¹⁰ *InDA* 2, lect 24: “*Aer autem non sic patitur ut sentiat, quia non habet potentiam sensitivam.*”

¹¹ *InDA* 2, lect 14.

¹² *InDA* 2, lect 24.

¹³ *ST* 1.14.1.

dissolve the contradiction, or they have abandoned hope for Thomas's doctrine of spiritual change.

The worry supposes that the presence of spiritual or intentional being is the mark of the cognitive. Such an interpretation is further suggested by a passage on spiritual change in the *Summa theologiae*:

Now, for the operation of the senses, a spiritual change (*immutatio spiritualis*) is required, whereby an intention of the sensible form (*intentio formae sensibilis*) is produced in the sense organ. Otherwise, if a natural change alone were sufficient for the sense's action, all natural bodies would feel when they undergo alteration.¹⁴

This text does not say that spiritual change is the mark of the cognitive (since not all cognition involves change, e.g., divine cognition¹⁵), but it suggests that, whereas natural bodies undergo only natural change, the normal course of events for animal and human sensory cognition is that a spiritual change produces an intention of the sensible form in the sense organ. So the presence (or absence) of this intentional being seems to mark the distinction between the cognizant and the non-cognizant.

This reading finds further support in texts where Thomas stresses that cognizance just is the presence of immaterial or intentional form. For example, in *ST* 1.14.1 Thomas writes:

It is clear that the immateriality of a thing is the reason why it is cognitive, and that the mode of cognizance is according to the mode of immateriality. [...] the senses are cognitive because they are receptive of species without matter.

¹⁴ *ST* 1.78.3

¹⁵ Cf. *ST* 1.14.2, that God does not receive intelligible species, and *ST* 1.14.7, that God's knowledge is not discursive.

Martin Tweedale cited this and similar texts in the *Summa theologiae* as definitively showing that, for Thomas, immaterial presence of intentional form is sufficient for cognizance.¹⁶

Tweedale writes:

the natural reading of these passages is that the cognition of a form and the form's existing immaterially are really just the same thing. It may be that a clever interpreter can make a case that everything Aquinas said here is compatible with a view which holds that immaterial existence is merely a necessary but not a sufficient condition for cognition, but that interpretation seems very strained to me. Only a clever interpreter could show that immaterial presence of form was not sufficient for cognition, but the texts don't show it.¹⁷

This is a common reading of St Thomas. For example, only a few years before Tweedale's paper, Jean-Luc Solère, citing *ST* 1.14.1, wrote that for Thomas

the cognitive just is this particular mode of being that has the property of possessing, in addition to its own form, the form of those other things that it knows. It is this property that the scholastics called 'intentionality', [... and] this notion is sufficient to distinguish the physical and the mental.¹⁸

The sort of 'possession of form' Solère has in mind is form 'without matter', and he equates this with cognizance. The argument for this reading is that if possessing the form of another is sufficient for cognizance, and if possessing the form of another needs involve spiritual or immaterial being, then the presence of spiritual or immaterial being must be sufficient for cognizance.

¹⁶ Martin Tweedale, "Origins of the Medieval Theory That Sensation Is an Immaterial Reception of a Form", *Philosophical Topics* 20 (1992), pp. 215-231. The other texts are *ST* 1.78.3 and *ST* 1.84.2.

¹⁷ "Origins", pp. 217-18. The other passages were *ST* 1.78.3, and 1.84.2.

¹⁸ Jean-Luc Solère, «La notion d'intentionnalité chez Thomas d'Aquin», *Philosophie* 24 (1989), pp. 13-36, at 14. My translation. «L'intentionnalité thomiste est donc un concept descriptif [...] Ce concept opère un clivage absolu au sein de l'être, une distinction métaphysique fondamentale entre les êtres connaissant et les autres. Le connaissant est cet être particulier qui a la propriété de posséder, outre sa propre forme, la forme des êtres qu'il connaît. C'est cette propriété que les scolastiques nomment intentionnalité. [...] On voit que ceci suffit pour séparer [...] mode d'être physique et mode d'être psychique.», pp. 18-19.

An uncomfortable conclusion follows. Given that the medium (say, air) between a material thing and an intellect is capable of receiving spiritual being, we might be forced to conclude that, despite what Thomas says, the medium is a kind of cognitive being. This is, for example, the position of Robert Pasnau, who argues that Thomas does not suggest any difference between the way the medium and the human receive spiritual form, so even the air and the water must be, to some degree, cognizant.¹⁹ On the other hand, if we take seriously Thomas's explicit denial that the medium is cognizant, we might be forced to conclude that there is an irreconcilable contradiction in his doctrine. This is Tweedale's position, who argues that Aquinas's doctrine of spiritual change is hopelessly confused.²⁰

Another alternative is to be "clever interpreters", and try to make a case that immaterial presence of intentional form is only necessary and not sufficient for cognizance. Then one could argue that the medium can possess intentional being but is nevertheless non-cognizant because of the absence of some other condition, one that is present in cognizant beings. Tweedale, for one, has little hope for this strategy, since he does not think the texts warrant that reading. If this really was Thomas's view, says Tweedale, "it is really quite amazing that somewhere or other he does not allude to what else besides the immaterial existence of form is required for cognition."²¹

But Thomas does indicate that something else besides immaterial existence of form is required for cognition. For Thomas the mark of the cognitive is not simply the presence of spiritual form but rather also the presence of cognitive powers. This view has recently been

¹⁹ Robert Pasnau, *Theories of Cognition in the Later Middle Ages* (Cambridge, 1997), pp. 36-39, 47-57.

²⁰ Though in a more recent paper, Tweedale says that he and Pasnau share the same general view that for Aquinas immaterial intentional form is the sufficient criterion of cognizance, and that despite his general reluctance to accept the view, Pasnau's proposal that the medium is cognizant is consistent with their view on presence of immaterial intentional form. See Tweedale, "Representation in Scholastic Epistemology" in *Representation and Objects of Thought in Medieval Philosophy*, Henrik Lagerlund, ed., (Burlington, VT: Ashgate Publishing Company, 2007), pp. 63-80, at pp. 70-71, and see note 22.

²¹ "Origins", p. 218.

presented by Jörg Tellkamp,²² who argues that immaterial or spiritual presence of form is only a necessary and not a sufficient condition for cognizance. The other necessary and jointly sufficient condition is the presence of a cognitive power whose function is to receive sensible or intelligible being. On this view, intentional being in the medium is not sufficient to allow that the medium is cognizant, since the medium lacks the requisite cognitive power. I call this the ‘cognitive power model’ of cognizance.

The first move in this approach is to qualify what Thomas means by the doctrine of *ST* 1.14.1 and elsewhere that “the mode of cognizance is according to the mode of immateriality.” First, Tellkamp rejects Tweedale’s and Solère’s view that immaterial presence of form is the sole distinguishing feature of cognizance. Instead of seeing a contradiction between (i) Thomas’s claim that intentions exist in the medium and (ii) Thomas’s denial that the medium is cognizant, Tellkamp thinks these jointly show that Thomas did not think spiritual or intentional being “falls exclusively into the realm of the mental.”²³ In other words, intentional being can exist extramentally or non-cognitively.

If this is correct, then Thomas is teaching that a form or species enjoys both natural and intentional being in the extramental medium.²⁴ That is, Thomas held that intentional being is a real aspect or mode of being of naturally existing forms. As such, it is an ‘informational aspect’ or mode of being accompanying the form’s natural or material existence.²⁵ Tellkamp presents this idea as follows:

²² Jörg Alejandro Tellkamp, “Aquinas on Intentions in the Medium and in the Mind”, *Intelligence and the Philosophy of Mind*, Proceedings of the American Catholic Philosophical Association 80, Michael Baur, ed., (Virginia: Philosophy Documentation Center, 2006), pp. 275-289.

²³ “Aquinas on Intentions”, p. 277.

²⁴ Tellkamp thinks Thomas held “that the intentional being of the species has a mind independent existence in the medium and that it has to be distinguished from the natural being of those species.” “Aquinas on Intentions”, p. 279.

²⁵ A note on my rendering ‘*intentio*’, when said of the extramental, as ‘informational aspect’: With respect to the relationship of the mind and the world, it seems acceptable to translate ‘*intentio*’ as “message” or “signal”.

The natural existence of sensible forms seems to indicate that, e.g., a sound has a physical component insofar as it is transmitted through sound waves. Yet at the same time the sound transmits some sort of ‘information’ that points to relevant features of the physical object it stems from. Thus, when a person hears someone speak, those two aspects, the merely physical and the intentional, are involved. While the physical aspects lead to a corresponding change in the sense organ, it is only the intentional being of the species that leads to a cognitive grasp of what is being said.²⁶

The view here, it seems to me, is that intentional being is somehow responsible for being cognizant or aware of certain information, but the presence of intentional being is not sufficient to indicate cognizance as such. That is, intentional being specifies awareness, but it does not itself count as awareness. Something else is required.

Tellkamp’s proposal aims to be faithful to Thomas’s view that presence of intentional being is a feature of cognizance. But it also draws attention to the very reason Thomas gives for denying that the medium feels or experiences: the medium has no sensory-cognitive power, no “power that is capable of taking on species without matter”.²⁷ Cognizance requires the presence of a cognitive power in addition to a material or natural change,²⁸ which power

The connotation in this context is “information” or “knowability”, and the interpretation of *esse intentionale* in the medium as “message” or “signal” is consistent with these connotations. For example, Fr. Dewan writes: “In [the present] context of sensibles and sense, [*intentio*] means the message sent from the sensible to the sense. It is misleading to put emphasis on the notion of tendency in the etymology of “*intentio*”.” See Lawrence Dewan, OP, “St. Albert, the Sensibles, and Spiritual Being”, in *Albertus Magnus and the Sciences*, James A. Weisheipl, OP, ed., (Toronto: Pontifical Institute of Mediaeval Studies, 1980), pp. 291-320, at p. 293, n6. Or, cf. Deborah L. Black: “In the technical terminology of the Arabic philosophers, an ‘intention’ (*ma‘nan*)—literally a ‘meaning’ or an ‘idea’—is a form or essence insofar as it is apprehended by any cognitive faculty and serves as an object for that faculty.” See her “Psychology: soul and intellect”, *Cambridge Companion to Arabic Philosophy* (Cambridge, 2005), pp. 308-236, at p. 311. Finally, this treatment of intentional being is a pillar of Eleonore Stump’s “cognitive science-informed” reading and treatment of Thomas’s theory of cognition. See especially her *Aquinas* (London and New York: Routledge, 2003/05), especially chapters 6 and 7. Also, see Stump, “Aquinas’s Account of the Mechanisms of Intellective Cognition”, in *Revue internationale de philosophie* 52 (1998), pp. 287-307.

²⁶ “Aquinas on Intentions”, p. 279-80.

²⁷ *InDA* 2, lect 24.

²⁸ Though sometimes not even including a natural change, for Thomas, as in the case of sight. But some of Thomas’s texts on sight seem to contradict one another on this point. It cannot occupy our attention here, but the relevant texts are *ST* and *InDA*. See *ST* 1.75.3: “Sensation and the consequent operations of the sensitive soul are clearly accompanied with some change in the body; just as in seeing the pupil of the eye is affected by

has the function of receiving or exploiting intentional form. Because the cognitive powers are, in Tellkamp's phrase, "the proper recipients for intentions", the specific receptive nature is the criterion we need to distinguish between the cognizant and non-cognizant.²⁹

The cognitive power model proposes that intentional being is a sort of information transmitted and available to a proper receptor—a cognitive power—and as such produces a spiritual or immaterial effect, namely, the activation of this power.³⁰ The model allows that intentional being is present in the medium, noting that it is not there "picked up" or "received" because the medium does not have the proper receptive nature.³¹ Tellkamp elaborates on this:

The natural as well as the intentional being of a sensible form have a corresponding effect on a patient, but only if it is able to actually receive those forms. When a material thing receives a form according to its natural mode of being, a natural, i.e., physical change is the consequence. When something receives form according to its intentional being, an intentional change is the consequence. Both, natural and intentional being, bring about natural and intentional change in the patient respectively.

the species of color, and it is the same with the other senses." (*Sentire vero, et consequentes operationes animae sensitivae, manifeste accidunt cum aliqua corporis immutatione; sicut in videndo immutatur pupilla per speciem coloris; et idem apparet in aliis*); Again, in *ST* 1.12.4, Thomas says that the sense of sight "cannot be raised up to immateriality" for the reason that "it is entirely material". (*sensus visus, quia omnino materialis est, nullo modo elevari potest ad aliquid immateriale.*) Compare the *ST* texts with *InDA* 2, lect 14: "it is apparent from its manner of alteration (*immutationis*) that the sense of sight is more spiritual (*spiritualior*). For in no other sense is there a spiritual alteration without a natural one (*Nam in quolibet alio sensu non est immutatio spiritualis, sine naturali*). [...] The alteration of sight is solely a spiritual alteration. (*in immutatione visus est sola immutatio spiritualis*)".

²⁹ "Aquinas on Intentions", p. 284.

³⁰ This activity is immaterial insofar as a cognitive power in the senses is *quaedam deficiens participatio intellectus*, and insofar as the operation or power of the sense organ is, as it were, the form of the organ. Aquinas says in *InDA* 2, lect 24: "Now a sense organ, say the eye, shares the same being with the power itself, though it differs in essence or definition, the power being, as it were, the form of the organ." (*Organum enim sensus, cum potentia ipsa, utputa oculus, est idem subiecto, sed esse aliud est, quia ratione differt potentia a corpore. Potentia enim est quasi forma organi, ut supra traditum est. Potentia enim est quasi-forma organi.*) Cf. *InDA* 2, lect 2: "Just as the eye is composed of a pupil as its matter, and the power of vision as its form, so an animal is composed of soul as its form and body as its matter." (*Sed sicut oculus est aliquid compositum ex pupilla sicut materia, et visu sicut forma, ita animal est compositum ex anima sicut forma et ex corpore sicut materia.*)

³¹ "Aquinas on Intentions", p. 280.

Unlike the medium, the cognitive power is able to exploit the intentional mode of being of the thing, and so the cognitive agent receives the informational aspect of the natural form.

This model can make helpful use of familiar examples of distorted reception. When weather interrupts satellite signals, the medium between transmitter and receiver is disrupted, the device is not able to fulfill its function perfectly, and the available (or potential) information is not realized or displayed in the receiver. Or, there may be a problem with the receiver. When the eye develops astigmatism, this distorts the reception of the visible thing. The power of sight, making use of a corporeal organ, cannot fully exploit the sensible information in the sensible thing. Any sort of material distortion of the sense organ will affect the ability of the sense power properly and fully to harvest the range of sensible being for which it is designed.

The cognitive power model tries to capture what is correct about the view that the presence of intentional being is certainly a feature of cognizance. But it also draws attention to the very reason Thomas gives for denying that the medium feels or experiences: the medium has no sensory-cognitive power, no “power that is capable of taking on species without matter”.³² Cognizance thus requires the presence of a cognitive power which power has the function of receiving or exploiting intentional form. Because the cognitive powers are, in Tellkamp’s phrase, “the proper recipients for intentions”, their specific receptive nature is the criterion we need to distinguish between the cognizant and non-cognizant.³³ And so, contrary to Tweedale’s and Solère’s view that presence of intentional being is sufficient for cognizance, Tellkamp proposes that for Thomas “a being is cognitive if and

³² *InDA 2*, lect 24.

³³ “Aquinas on Intentions”, p. 284.

only if it can receive the intentional being of a form without the matter *and* when it possesses a corresponding functioning cognitive power.”³⁴

It is worth briefly addressing Tweedale’s claim that the texts do not warrant the reading that anything more than immaterial presence of intentional being is required for cognition. It seems to me that in *ST* 1.14.1 Thomas is not giving a criterion of cognition, but merely stating that the more something is cognizant, the less it is contracted to material conditions.³⁵ This is not the same as positing a ‘hard break’ between the cognizant and non-cognizant. There is nothing in *ST* 1.14.1 that equates immateriality and cognition, nor anything that expressly states that intentional being is impossible without cognition.³⁶ Given the alternative proposal of cognitive powers as a criterion of cognizance, I do not think these are clever interpretations so much as natural readings of the texts.

The receptive power model permits a certain spiritual and intentional being to exist in the non-cognizant medium, as Thomas teaches. It remains to describe what this mode of existing might look like, and whether it is a necessary and defensible feature of a thomistic theory of cognition. In so doing, I suggest that the receptive power model needs to be supplemented by another of Thomas’s doctrines. In the next section I present how attention

³⁴ “Aquinas on Intentions”, pp. 280-81, my emphasis.

³⁵ Gabriele De Anna makes the same argument in his “Aquinas on Sensible Forms and Semimaterialism”, at p. 61: “since in the context of the article this claim is only intended to show that the more cognitive something is, the more forms of other things it may have in itself, and thus, the least constrained by matter it is.” Curiously, though, De Anna ends by suggesting that ‘intentional existence’ might properly be said only of a species existing in a cognitive power, and “only analogically” in the medium and the external sense organs. (p. 62) This is curious because to my knowledge Aquinas does not speak of intentional form existing in the medium “only analogically”. The view that cognitive powers actualize the intentional aspect of being present in the medium would give better reason to speak of the intentional existence of form in the medium as in a kind of potentiality, or, as Thomas says, in a *per accidens* mode of being. See the continued discussion below.

³⁶ In addition to De Anna’s challenge to the 1.14.1 text, I would add that in *ST* 1.78.3 Aquinas says only that the senses require spiritual change, not that spiritual change is all that is required for cognizance, nor that the medium cannot undergo it. And in *ST* 1.84.2, Aquinas says only that cognizance is in inverse proportion to materiality, not that immateriality is the sole criterion for cognizance. These texts all give reason to say that the immaterial presence of intentional form is necessary to mark the distinction between cognitive and non-cognitive creatures, but the texts do not show that it is sufficient.

to the doctrine of *per accidens* sensibles completes the account of spiritual and intentional being and provides an alternative to charging Thomas with inconsistency.

§3.3: *Intentional Being and per accidens Existence*

The foregoing supposes that intentional being can exist in the extramental medium without constituting a case of cognitive awareness. The cognitive power model is meant precisely to account for how there can be spiritual or intentional being in non-cognizant things. According to the cognitive power model, cognitive awareness occurs just in case intentional being is received or exploited by an appropriate cognitive power. This allows that intentional being can exist in non-cognizant modes, and the presence of the power is said to distinguish the cognizant from the non-cognizant. That is, the model allows that intentional being exists in a non-detected way in non-cognizant beings.

It remains to find an account in St Thomas of this non-detected intentional mode of being. The cognitive power model, if it is convincingly to distinguish intentional being in the medium from intentional being in the cognizer, needs an account not only of the presence of cognitive powers, but also of the mode of existence unique to intentional being in non-cognizant media and things. At the close of his article, Tellkamp suggested that a comprehensive account of Thomas's theory of cognition should show "the ontological presuppositions that answer the question as to why the cognitive powers are the proper recipients that grasp intentions."³⁷ As I see it, this answer would amount to an account, (i) in Thomas's terms, that (ii) allows for the non-cognizant presence of intentional being in the medium, and (iii) explains why the cognitive powers mark the break between cognizance and non-cognizance, and is not just an insistence on that break.

³⁷ "Aquinas on Intentions", p. 280.

The first two parts of this account, and at least some of the ontological presuppositions, can be found in Thomas's doctrine of the *per accidens* object of sense.³⁸ As if gesturing toward this realization, Tellkamp ends his paper with a call for further research on the nature of the cogitative power as the focal point for better understanding how sensory information is detected. There has been some work done on this point, most recently by Anthony Lisska, concerning the cogitative power as regards the doctrine of *per accidens* objects of sense.³⁹

By an "object of sense" Thomas means that aspect of being that a sensory power detects or apprehends, or in other words, that toward which a sense power is primarily directed. So, for example, the object of sight, for Thomas, is colour, and the object of hearing is sound, and so on. The objects distinguish the powers, which is to say that a sense power is distinct from another sense power just in case those powers detect or apprehend different aspects of being.⁴⁰ So insofar as sight detects colour, and hearing detects sound, Thomas says each of sight and hearing has a unique or "proper" sensible object upon which it bears.

Thomas calls the proper object of a sense power the sensible object "*per se*", which is to say that it directly alters or modifies the senses. The *per se* sensible, as it were, partly

³⁸ See *ST* 1.17.2 and *InDA* 2, lect 13.

³⁹ Anthony J. Lisska, "A Look at Inner Sense in Aquinas: A Long-Neglected Faculty Psychology", *Intelligence and the Philosophy of Mind*, Proceedings of the American Catholic Philosophical Association 80, Michael Baur, ed., (Virginia: Philosophy Documentation Center, 2006), pp. 1-19, at pp. 5-6. Lisska's and Tellkamp's papers were delivered at the same conference on philosophy of mind, at the American Catholic Philosophical Association meeting in Granville, Ohio, 2006. Lisska is reading this doctrine in Thomas following Klubertanz's magisterial study: George P. Klubertanz, *The Discursive Power: Sources and Doctrine of the Vis Cogitativa According to St. Thomas Aquinas* (Ohio: Messenger Press, 1952). A few years before Lisska, Deborah Black also wrote about the cogitative power as being receptive of the otherwise *per accidens* mode of being. See Deborah Black, "Imagination and Estimation: Arabic Paradigms and Western Transformations", *Topoi* 19 (2000), pp. 59-75. Black explores Thomas's relating the doctrine of the *per accidens* sensibles to the cogitative power, saying that Thomas followed Averroes and St. Albert on this point. (p. 67) Black's paper is not referenced in Lisska's more recent study.

⁴⁰ E.g., cf. *ST* 1.78.3: "*Accipienda est ergo ratio numeri et distinctionis exteriorum sensuum, secundum illud quod proprie et per se ad sensum pertinet. Est autem sensus quaedam potentia passiva, quae nata est immutari ab exteriori sensibili. Exterius ergo immutativum est quod per se a sensu percipitur, et secundum cuius diversitatem sensitivae potentiae distinguuntur.*"

‘switches on’ the sense power in question, as colour switches on sight. This directness of action on the sense by the *per se* sensible thing is a result of the sense standing naturally disposed to detect or apprehend that sensible thing.⁴¹ That is, the sense takes this thing as its proper object, as sight takes colour and hearing takes sound.⁴² By contrast, to be sensible “*per accidens*” is to be a sensible form present in the sense power, but not directly detected or apprehended by that power. The *per accidens* sensible form exists in the sense in such a way that the sense is affected only “indirectly” or *per accidens*.

The *per se* / *per accidens* distinction plays a role in Thomas’s general view of how extramental information ascends to the intellect via the senses. While fully intellectual or conceptual knowledge is not present in the sense as such, this knowledge “preexists” there in a certain way such that the higher sensory powers and eventually intellect can exploit it.⁴³ In the context of sense perception the term ‘*per accidens*’ expresses the way the information (i) exists in the senses, but at the same time (ii) remains unexploited by the power. This information exists in the outer or external levels of sense for the sake of being received by higher levels of sense. As such, *per accidens* sensibles are the direct or immediate object of “some other power”, namely, higher sensory powers, such as the so-called ‘common sense’ and the cogitative power. These are responsible for harvesting various levels of *per accidens* sensible information.⁴⁴

⁴¹ This ‘natural disposition’ of the sense faculty to its sensible object is how I am treating Thomas’s expression “*per se habitudinem ad sensum*”, from *InDA* 2, lect 13.

⁴² Cf. “On Aquinas’s view, the proper sensible of each sense is what that sense takes in primarily and what cannot be taken in by another sense.” Eleonore Stump, *Aquinas* (London and New York: Routledge, 2003/05), p. 247.

⁴³ This also is partly how to understand Thomas’s doctrine that the universal notion is even in the sense, “in a way”. Cf. *InPostA* 2.20: “*sensus est quadammodo etiam ipsius universalis [...] Et exinde est quod tali acceptione sensus praeexistente, anima intellectiva potest considerare hominem in utroque.*”

⁴⁴ *InDA* 2, lect 13.

Lisska says the fact that “the [*per accidens*] object of sense *neither immediately nor directly* affects the external senses [...] introduces the concept of an ‘*intentio non-sensata*,’ which is an important, albeit continuously overlooked, principle in Aquinas’s philosophy of perception.”⁴⁵ The ‘*intentio non-sensata*’ or ‘uncognized informational aspect’, is present in the sense *per accidens*, and is “known through the intentional activity of the *vis cogitativa*” or cogitative power.⁴⁶

My suggestion is that for Thomas the mode of existence of intentional being in non-cognizant media and things is tantamount to a mode of existing *per accidens*. Just as ‘*intentiones non-sensatae*’ exist in the lower-levels of sense, so do ‘*intentiones non-sensatae*’ exist in material conditions external to and separate from the sensory organs. When Thomas says that the medium is not cognizant, but yet there exists intentional being, he is indicating that merely natural material existence is insufficient for cognizance. Matter, to any degree, is a block to cognition.

The doctrine of *per accidens* sensibles presents us with a distinction of modes of intentional being, i.e. ways intentional being might be present. It preserves Thomas’s view that immaterial presence of form is necessary for cognitive awareness, and shows that a certain kind of immaterial presence, *per accidens* presence, is not sufficient. Further, it is consonant with Thomas’s view that a cognitive power is what partly marks the distinction between the cognizant knower and non-cognizant medium. The notion of an *intentio non-sensata* or undetected aspect is a ready-to-hand notion in Thomas’s natural psychology, and it suggests how Thomas both envisioned and accounted for intentional being as existing in

⁴⁵ “A Look at Inner Sense”, p. 6. Lisska is following the Foster and Humphries translation of ‘*per accidens*’ as ‘incidental’, in their *Aristotle’s De Anima in the version of William of Moerbeke and the Commentary of St. Thomas Aquinas*, K. Foster and S. Humphries, trs., (New Haven: Yale University Press, 1954).

⁴⁶ “A Look at Inner Sense”, p. 16.

non-cognizant things. Finally, this is neither an *ad hoc* reading nor a ‘clever interpretation’, but is rather a reading taken from Thomas’s own presentation.

Earlier I said that one of the features of a convincing presentation of Thomas’s doctrine of spiritual and intentional being in the medium should be an explanation of the break between cognizance and non-cognizance. According to the model, the presence of the cognitive power is said to distinguish the cognizant from the non-cognizant. There is no power in the medium, so the medium is not cognizant. But why, then, does Thomas speak of the medium as undergoing *spiritual change* as opposed to merely natural change? The model suggests that the change undergone in the knower is accompanied by a special cognitive power, rendering intentional aspects of being immaterial and thus cognitive. But Thomas thinks the spiritual change in the medium does not differ in kind from the spiritual change in the senses: each produces intentional being. Thomas writes:

By ‘natural change’ I mean what happens when a quality is received by a patient according to the natural mode of the patient’s own being, just as when anything is cooled, or heated, or moved in space. By ‘spiritual change’ I mean what happens when the species of an object is received in the sense organ or in the medium in an intentional mode, and not by its natural form.⁴⁷

Change in the power-less medium is the same as change in the sensory organs. One would think to find Thomas saying that the change in the medium and the senses are different sorts of change, citing that sensory-change is cognitive and media-change is not. But Thomas does not distinguish between these. It is unclear, then, why we may draw the ‘cognizance

⁴⁷ *InDA 2, lect 14: “Nam in quolibet alio sensu non est immutatio spiritualis, sine naturali. Dico autem immutationem naturalem prout qualitas recipitur in patiente secundum esse naturae, sicut cum aliquid in frigidatur vel calefit aut movetur secundum locum. Immutatio vero spiritualis est secundum quod species recipitur in organo sensus aut in medio per modum intentionis, et non per modum naturalis formae.”*

criterion' at the level of the senses and not extend it into worldly media.⁴⁸ In other words, it looks now as if it is merely an insistence rather than an argument that there is a hard break at the boundary of the senses being between the cognizant and the non-cognizant.⁴⁹

To avoid the conclusion that the medium is cognizant, one must present an argument that the spiritual reception of form in the senses is somehow different from the spiritual reception of form in the medium. This would mean establishing that there is no cognitive power in the medium, but it would also mean describing 'cognitive power' differently from 'the ability to possess the form of another in an immaterial and intentional way'. I suspect this would involve the interpretive or exegetical exercise of reading 'spiritual change' as meaning something different from the immateriality required for cognition. That is, Thomas's "reception without matter" cannot mean the same thing as "immateriality". This account might be given in terms of intentional being existing somehow imperfectly extramentally and perfectly in the knower, since cognition is a kind of perfection. This would be yet a further distinction between ways intentional being might be present. Later in the thesis I explore this further doctrine of intentional being, perfect and imperfect, showing where it can be found in St Thomas and how it figures in solving the present problem.⁵⁰

⁴⁸ Also, this is the text that suggests to Pasnau that the difference between cognizance in the medium and humans is only of quantitative degree and not of kind. Cf. Pasnau, *Theories of Cognition*, pp. 47-57.

⁴⁹ Pasnau is not convinced that the presence of a power is Aquinas's criteria for cognition. Shortly after De Anna's paper appeared, Pasnau and John O'Callaghan had an important exchange on this matter. To discuss it here would lead me too far afield. See John P. O'Callaghan, "Aquinas, Cognitive Theory, and Analogy: A Propos of Robert Pasnau's *Theories of Cognition in the Later Middle Ages*", *American Catholic Philosophical Quarterly* 76 (2002), pp. 451-82, and Pasnau's reply in the same volume, "What is Cognition? A Reply to Some Critics", pp. 483-90.

⁵⁰ SCG 2.50: "The forms of sensible things have a more perfect mode of existence in the intellect than in sensible things, for in the intellect they are simpler and extend to more things; thus, through the one intelligible form of man, the intellect knows all men. Now, a form existing perfectly in matter makes a thing to be actually such, such as to be fire, or coloured: if, however, the form does not have that effect, then the form is in that thing imperfectly, as the form of colour in the air carrying it [...]" (*Formae rerum sensibilium perfectius esse habent in intellectu quam in rebus sensibilibus: sunt enim simpliciores et ad plura se extendentes; per unam enim formam hominis intelligibilem omnes homines intellectus cognoscit. Forma autem perfecte in materia*

The present reading of Thomas on spiritual change allows intentional being to exist in material conditions, such as in the medium and the senses, without these indicating cases of cognizance. The apparent contradiction between Thomas's texts is dissolved: Thomas does not contradict his view that immaterial possession of form is the condition for cognizance when he speaks about spiritual change in the medium. The cognitive power model benefits from attention to *per accidens* mode of existence. The medium and senses similarly receive intentional form, but because the medium lacks any power whatsoever to exploit sensible or intelligible form, it is not cognizant. The remaining worry is that there seems to be no good reason to posit the hard break between mind and world at the boundary of senses, and so Thomas's denial that the medium is cognizant, while not inconsistent, might simply be an insistence rather than an argument. I will return to the question of the distinction between cognizant and non-cognizant beings in the final chapter of the thesis.

What has been established even at this stage is that intentional being is not sufficient for cognizance. I will recall this in the final chapter, where I argue that there is an interpretive or exegetical problem for reading 'intentional' as meaning something *uniquely immaterial*, i.e. treating 'intentional' as synonymous with the 'immateriality' that is required for cognition as such. My focus, then, from here to the end of the thesis, is on various modes of intentional existence. I look in the next chapter at the cogitative power as that which perceives a certain grade of intentional existence. In the subsequent and penultimate chapter I look at the intentional/natural distinction that John Haldane employs to distinguish mind and world in conjunction with his identity thesis. In the final chapter I look at the way intentional existence must enjoy immaterial existence in order to be cognitive. Zeroing on the criteria of

existens facit esse actu tale, scilicet vel ignem, vel coloratum: si autem non faciat aliquid esse tale, est imperfecte in illo, sicut forma coloris in aere ut in deferente [...].)

cognition is all with a view to highlighting the role of immateriality in cognition in order to show the difficulties with John Haldane's appropriation of St Thomas.

§3.4: *Conclusion*

The discussion in this chapter shows that the way Haldane presents sensation makes it unable to be a form of knowledge. Thomas and Haldane both assert that knowledge is the immaterial presence of the form of another in a being with cognitive powers. If sensation is an entirely material affair, there is no way to distinguish their reception of form from natural change, which means that there is no way to distinguish between the cognizant and the non-cognizant. Change or modification in an entirely material object without a doctrine of immaterial reception and assimilation of form would result in a merely natural change in the thing, and would not be sufficient for sensation to be cognitive. Haldane must either give up the account of knowledge as immaterial possession of form or accept that sensation involves some degree of immateriality. Since it is precisely this account of knowledge as possession of form that Haldane believes is an essential component of any successful philosophy of mind, it seems far likelier that he would choose the latter.

It follows that if we wish to preserve the senses as providing knowledge, then we are compelled to consider Thomas's view that the senses have some share in immateriality. Thus the remaining discussion in this chapter defended Thomas's doctrine of "spiritual or intentional" being, and showed the role it plays in sensation. My reading stressed the presentation from chapter two of Thomas's hierarchical structure of human cognition as involving degrees or grades of immateriality.

If the forgoing presentation of the '*medium*' immateriality as *per accidens* existence is correct, then a further feature of the view that cognition requires immateriality is the

attendant doctrine of intentional being. I showed that the doctrine of intentional being in the medium, far from being an incoherent view, provides a useful and plausible account of how cognition engages extramental reality. I expand upon this account in the later chapters.

In chapter one we saw that Haldane has much less worry accepting Thomas's doctrine of intentional being (*esse intentionale*); in fact, Haldane thinks this is the most fundamental and important part of Thomas's theory of knowledge. It seems to me that Haldane can maintain this insight in combination with my presentation of Thomas's view that intentional being is an informational aspect or mode of being. In the final chapter of the thesis I show how Haldane and Thomas can reconcile by considering the proper distinction between the cognitive and the non-cognitive as pertaining to grades of intentional being. Haldane presents an account of nature as being "intrinsically intelligible" that I think is amenable to the reading of Thomas as defending *esse intentionale* in non-cognizant modes of existence.

Presently I turn to a detailed presentation of the cogitative power. In the presentation I will show that the cogitative is the focal point for answering Haldane's question about how sensation provides the basis for conceptual universals. The presentation of the cogitative power will both complete the case against Haldane's sensory materialism, and will set the stage for the two remaining tasks of the thesis: (i) to show how Thomas envisions universal concepts to emerge from sensory engagement with extramental reality (chapter five), and (ii) to show how intentional being figures in this picture, how it is different from Haldane's treatment of intentional being, and how the pictures can be reconciled (chapter six). Both tasks require a picture of the cogitative power as that feature of human cognition ready to harvest a certain sort of intentional being that has existence in both mental and extramental nature.

Chapter 4: From Sense to Intellect: The Role of the Cogitative Power

John Haldane suggested that it “might be one of our tasks for the next century” to give “a fully perspicuous philosophical account [...] of the nature and operations” of the cogitative power.¹ In the present chapter I examine the cogitative power vis-à-vis the conclusions reached in the last chapter regarding the doctrine of *per accidens* existence. I present the cogitative power as bringing together in a coherent picture the requirement for immateriality in the senses and the requirement for sensation to be a proximate cause of knowledge of material things.

The following chapter is by no means a treatment thorough enough to count as the definitive word on the cogitative power. Such a task would require answers to questions of its historical precedents and the differences between these and Thomas’s presentation,² and also the cogitative power’s relationship to practical reason and volition,³ as well as a more detailed consideration of its ‘interface’ with intellect.⁴ My hope is that the following account is as “perspicuous” as possible concerning the role of the cogitative power as a transition point from sensory to intellectual cognition.

¹ John Haldane, “Insight, Inference and Intellection”, in *Insight and Inference, Proceedings of the American Catholic Philosophical Association 75* (New York: Fordham University Press, 1999), at p. 43. He also calls for the same account of the active or agent intellect.

² A good, concise, and relatively recent article on this subject is Deborah Black’s, “Imagination and Estimation: Arabic Paradigms and Western Transformations”, *Topoi* 19 (2000), pp. 59-75.

³ Some work in English earlier in the twentieth century focuses more on practical reason, e.g., Rudolf Allers, “Evaluation of the Vis Cogitativa”, *New Scholasticism* 15 (1941), pp. 195-221; Julien Peghaire, “A Forgotten Sense, the Cogitative According to St. Thomas Aquinas”, *The Modern Schoolman* 20 (1943), pp. 210-229. George Klubertanz’s study, *The Discursive Power: Sources and Doctrine of the Vis Cogitativa According to St. Thomas Aquinas* (Ohio: Messenger Press, 1952), is still a must.

⁴ See Klubertanz (1952) and also George P. Klubertanz, “The Internal Senses in the Process of Cognition”, *The Modern Schoolman* 18 (1941), pp. 27-31; also Rudolf Allers, “Intellectual Cognition”, in *Essays in Thomism*, Robert E. Brennan, OP, ed., (New York: Sheed & Ward, 1942), pp. 39-62. Both Klubertanz and Allers give sustained accounts of the connection of intellect and sense through the cogitative power, although in my view much interpretation still needs to be done as to what Thomas means by the ‘*refluentia*’ of the intellect into the senses (*ST* 1.78.4 *ad* 5).

In the first section, I elaborate on the nature of sense objects and their relationship with the cogitative power. In the second section, I present Thomas's doctrine of experience (*experimentum*) as high-grade sensation at the level of the cogitative power. In the final section, I discuss Thomas's doctrine that even the universal nature is "in a way" (*quodammodo*) in the sense. The aim of the chapter is to clarify Thomas's view that the sense has a causal role in intellectual knowledge, and further to emphasise the way in which this is achieved in virtue of the immateriality of sensation. This presentation will complete my defense of Thomas's 'sensory immaterialism' so that it perhaps escapes the charge of being a vain attempt to have referential continuity between sense and intellect.

§4.1: *The Cogitative Power and per accidens Existence*

The cogitative power is one of the so-called "inner senses" in Thomas's cognitive psychology, and it is the point at which the sensory information is at its furthest remove from material particularity. I call this farthest remove from material conditions a "high-grade" of cognitive being, because at this stage sensation is suitably prepared for engagement with the immaterial intellect. The details of this engagement are not as clear in Thomas as one would like. But the general picture is one of a hierarchical ascent through levels of immateriality in cognition, levels that can be referred to at different sensory stages as *per se* and *per accidens* modes of being. This picture is central to the doctrine that sensation is a cause of intellectual concepts. The doctrine of the cogitative power, then, as that which ultimately exploits *per accidens* sensible information, is the focal point in viewing sensation as a cause of knowledge.

Within the distinction of *per se* and *per accidens* sensibles, Thomas further distinguishes between sorts of *per se* sensibles. Recall from the previous chapter that the *per*

se sensible directly alters or modifies the senses, and, as it were, ‘switches on’ the sense. This ‘directness’ of action on the sense by the *per se* sensible thing is a result of the sense being naturally disposed to receive the action of that sensible thing.⁵

The first of the two kinds of *per se* sensibles are called the ‘proper sensibles’, whose formal likeness is impressed or received in the external sense immediately and directly, as, for example, colour in the sense of sight. The proper sensibles are the direct and immediate object of the so-called external senses. These sensible things are five in number, one corresponding to each of the five senses, and each is perceived only by its corresponding sense. So, e.g., colour is the proper object of sight, odour is the proper object of smell, etc., and sight does not directly perceive odour, and smell does not directly perceive colour, etc.⁶

The second kind of *per se* sensibles are called the common sensibles, whose formal likeness is received directly not in the external senses, but in the “internal” sense that Thomas calls the “common sense”. This sense is so-called because it is the “common root and principle” of the external senses, and as such it allows sensation to distinguish between the various sorts of sensible species apprehended by external sense. For example, sight and smell together allow me to know that this sugar is white and sweet, but sight itself knows only the whiteness and smell itself knows only the sweetness. Because each external sense is occupied only with its proper object, each of them does not know anything about the others’ proper objects. But the common sense, as the root or terminus of the external senses, is able to distinguish between white and sweet and other sensible things. As such Thomas attributes

⁵ This ‘proper relational stance’ of the sense faculty to its object is how I am treating Thomas’s expression “*per se habitudinem ad sensum*”, from *InDA* 2, lect 13.

⁶ E.g., *ST* 1.78.3.

to common sense a kind of judgment, what he calls “judgment of distinction” (*discretionis iudicium*).⁷

In addition to its role of distinguishing between the external sensibles, the common sense also has a unique object of reception. The common sense receives certain discernable aspects (*intentiones*) of the sense powers themselves. Thomas gives the example of seeing that one sees. The external sense of sight can know its proper sensible species and nothing more. Thus, we must say that sight sees, but sight cannot see that it sees. This sort of reflexive knowing cannot be accomplished by a power that takes only one proper object and does no more. So Thomas says that this reflexive knowledge,

cannot be accomplished by the proper [external] sense, which knows only the sensible form by which it is modified (*immutatur*). In this modification the act of seeing is perfected [i.e., brought into full operation], and from it there follows another modification in the common sense, which perceives the seeing.⁸

The common sense can accomplish this rudimentary “judgment of distinction” between the proper objects of external sense because it takes as its own proper objects many more sensible aspects of nature and being than do the external senses. Whereas each external sense takes only one sensible, the common takes many.⁹ Finally, we must say that the reception of the common *per se* sensibles is direct but not immediate: it is direct because the common

⁷ *ST* 1.78.4 *ad* 2. A recent paper on the “synthesizing” nature of the common sense is from Stephen J. Laumakis, “The *Sensus Communis* Reconsidered”, *American Catholic Philosophical Quarterly* 82 (2008), pp. 431-443. In one place, Laumakis stresses, I think correctly, that the ‘judgment’ of the common sense is said only analogously or derivatively, since intellect alone judges in the proper meaning of the term. (p. 437) I note my apprehensiveness about Laumakis’s general conclusion, as he tends to view the common sense as playing roles I would much sooner attribute to the *vis cogitativa*.

⁸ *ST* 1.78.4

⁹ Cf. Eleonore Stump, “On Aquinas’s view, the proper sensible of each sense is what that sense takes in primarily and what cannot be taken in by another sense. [...] The *common* sensibles are those that more than one sense can take in: movement, rest, number, shape, size.” See her *Aquinas* (London and New York: Routledge, 2003/05), p. 247.

sense takes the common sensibles as proper objects, but it is not immediate because the common sensibles are mediated precisely through the external senses.

This leaves the *per accidens* sensible as being the direct object of neither the external nor the common sense. Rather, the *per accidens* sensible is the direct object of the animal “estimative power” (*vis aestimativa*), which power is ‘upgraded’ in humans, and so called the “cogitative power”. More will be said about this upgrade; for now, I note that these sorts of sensibles are “*per accidens*” because their likeness is received in sensation neither directly nor immediately. Rather, they are mediated through the external and common senses and are not the direct object of either of these. Accordingly, Thomas says the *per accidens* sensibles “make no difference to the modification of the senses”.¹⁰

For example, the sheep flees when it senses the wolf, not because the wolf is a coloured object, but because the wolf is a natural enemy. The sheep perceives this coloured object, as it were, under the aspect (*intentio*) of ‘natural enemy’ (*quasi inimicum naturae*). The aspect ‘natural enemy’ is a *per accidens* sensible knowable by neither the external nor the common sense. The *per accidens* sensibles get their name because are connected only incidentally, or *per accidens*, to the *per se* sensibles. Even though the *per accidens* aspects exist in the external and common senses “in a way” (*quodammodo*), those sense powers are not suited or ordered to detect and receive them; these aspects are *per accidens* with respect to the external and common sense.

The *per accidens* sensibles are the direct object of “some other power”,¹¹ says Thomas. This other power can be either intellect, as regards what is potentially *intelligible*, or the estimative power, as regards what is potentially *sensible*. In non-rational animals, says

¹⁰ *InDA* 2, lect 13.

¹¹ *InDA* 2, lect 13.

Thomas, this estimative power is tantamount to natural instinct. The sheep knows the wolf as its natural enemy by a combination of its nature and its experience of wolves while with the herd. When the aspect ‘enemy’ is perceived in the sense, the sheep responds accordingly. The colour of the wolf is not the aspect, neither is the shape: these are the *per se* sensible features and they are known by the lower sensory powers. But since there is nothing in colour or shape that connotes ‘danger’ or ‘beneficence’, these aspects must be perceived by a separate power. Although it is certainly not a concept or universal form, this aspect of ‘enemy’ is somehow naturally recognized by *instinctus*.¹²

This animal estimative power enjoys an upgrade, of sorts, in the human being. In humans, this estimative power is present, but it functions somewhat differently from animal natural instinct. It might be said that humans recognize and perceive certain aspects of our environment with a kind of “spontaneous awareness”.¹³ But this awareness is different from the instinctual awareness of animals. Thomas says this human awareness, instead of being a natural recognition of ‘enemy’ and similar aspects upon the activation of inner sense, is achieved “through a sort of comparison” (*collationem*):¹⁴

And so what in other animals is called the power of natural estimation, in humans is called the ‘cogitative power’, which through a sort of comparison discovers (*adinvenit*) these aspects. Thus it is also called ‘particular reason’ [...] since it

¹² Rudolf Allers: “This special power entails an appreciation of estimation of such properties [as good or evil, useful or harmful] and is, therefore, rightly called a ‘*vis aestimativa*’. The impressions arising from this power release certain activities on the part of the animal; these impressions urge the animal towards an appropriate behaviour and therefore are called *instinctus*. The term ‘instinct’, in Thomistic psychology, refers to the sensory data that release activity, being employed in a narrower sense than ‘instinct’ in modern psychology where it is used to indicate both awareness and response.” In his “Intellectual Cognition”, in *Essays in Thomism*, Robert E. Brennan, OP, ed., (New York: Sheed & Ward, 1942), pp. 39-62, at p. 48.

¹³ Cf. Klubertanz, “The Internal Senses in the Process of Cognition”, *Modern Schoolman* 18 (1941), pp. 27-31, at p. 29.

¹⁴ *ST* 1.78.4

makes comparisons of individual aspects, just as the universal reason makes comparisons of universal aspects.¹⁵

In animals these aspects are perceived and registered, as it were, automatically, whereas for humans, Thomas seems to say, the perception of aspects is not as automatic. Rather, humans “discover” these incidental sensible aspects after a process akin to comparing individual sensations. This activity of comparing is what suggests to Thomas that in humans this power should be called ‘cogitative’, or indeed, ‘thinking’, since it is analogous to the same discursive activity, the back-and-forth comparing of aspects, that we find in intellectual reasoning.

The reason we have just now attended to the workings of the cogitative power is because its activity of comparing aspects is part of Thomas’s doctrine of human experience (*experimentum*), out of which experience universal concepts are formed in the intellect. Before turning to look at Thomas’s description of concept-formation, let’s review the picture just presented. The external senses receive sensible species *per se*. The inner sense is activated by the presence of the sensible species in the external senses, whereby the common sense receives aspects not perceived by the external senses. The estimative power gleans even further aspects not perceived by the common sense. Both the estimative in animals and the cogitative in humans perceive the *per accidens* sensibles and deal with “particular” or “individual” cases or aspects.¹⁶ In animals these aspects are received automatically as by

¹⁵ *ST* 1.78.4: “*Et ideo quae in aliis animalibus dicitur aestimativa naturalis, in homine dicitur cogitativa, quae per collationem quandam huiusmodi intentiones adinvenit. Unde etiam dicitur ratio particularis [...] est enim collativa intentionum individualium, sicut ratio intellectiva intentionum universalium.*”

¹⁶ So if the *per accidens* is perceived in the universal, it is known by the intellect, and if in the particular, it is known by the cogitative power. The cogitative power is called ‘particular reason’ because it compares individual intentions, whereas intellect compares universal intentions. (Cf. *InDA* 2, lect 13) This may also indicate why Thomas sometimes speaks of a concept as an ‘*intentio*’, e.g., *SCG* 1.53. Thomas seems to have long-held his view of the *per accidens* sensible as being that which is somehow received in the sense but yet not cognitive, evidenced by this passage in his early *Commentary on the Sentences*, i.e. *In VI Sent.*, d. 49, q. 2, a. 2, ed. Parma, vol. VII, pt. 2, pp. 1201-02: “*Per accidens* that is sensed which does not affect the sense inasmuch as

natural instinct. Instinct exists to this degree in humans, but the upgraded human cogitative power is able to know even more aspects than the animal estimative, and this by a certain comparing of received aspects.

It would be good to have more detail on this ‘comparing’ than Thomas offers. Nevertheless, I will survey what detail he does provide in his discussion of human experience. The focus will be on the analogous relation between the comparing of the cogitative power and the “thinking” or ratiocination of the intellect and what different sort of aspects of being the cogitative is suited to perceive.

§4.2: *Experience and Commonality*

Experience, for Thomas, “seems to be nothing other than to grasp (*accipere*) something from many retained memories”.¹⁷ This is to say that experience arises from comparing many individual cases or situations. It culminates in a broader and more general knowledge of the unifying or common principle among the individual cases. Because it ascends to a general view of individuals, which is to say, it ascends to what is common among individuals, experience is (i) at a further remove from the determining particular conditions of materiality, and (ii) is at once the apex of sensory cognition and the foothills of

it is a sense, nor as it is this sense, but as joined to those things which of themselves affect the sense, as ‘Socrates’ and ‘the son of Diaries’, and ‘friend’, and other like things. These things are known in the universal by the intellect; in the particular, they are known by the discursive power in men, and by the estimative in other animals. Such things the exterior sense is said to sense, even though only *per accidens*, when from that which is sensed in itself, the apprehensive power, whose task it is to know them in themselves, immediately, without hesitation or reasoning knows them; as we see that someone lives from the fact that he speaks.” (*Per accidens autem sentitur illud quod non infert passionem sensui neque in quantum est sensus, neque in quantum est hic sensus; sed conjungitur his quae per se sensui inferunt passionem; sicut Socrates, et filius Diarii, et amicus, et alia hujusmodi: quae per se cognoscuntur in universali intellectu; in particulari autem in virtute cogitativa in homine, aestimativa autem in aliis animalibus. Hujusmodi autem tunc sensus exterior dicitur sentire, quamvis per accidens, quando ex eo quod per se sentitur, vis apprehensiva, cujus est illud cognitum per se cognoscere, statim sine dubitatione et discursu apprehendit; sicut videmus aliquem vivere ex hoc quod loquitur.*) This translation is from Klubertanz (1952), p. 175.

¹⁷ *In Post. Analy.* 2.20

intellectual cognition. Clearly, ‘experience’ is a technical term, for Thomas, and we must attend to how and where he places it in the context of the sensory-cognitive mechanisms we have been discussing.

Thomas’s account of experience is presented in terms of the two most general functions for which sense is suited: reception and retention. The external and common senses are ordered to reception, and the imagination is ordered to retention. Likewise, the estimative power receives aspects not received by the external and common senses, and the memory retains these aspects as received by the estimative and cogitative powers. In the case of the ‘upgraded’ human being, memory enjoys the additional power of “reminiscence”. Whereas animal memory, for Thomas, consists in “a sudden recollection of prior events”, human reminiscence “inquires syllogistically, as it were, into prior memories, according to individual aspects.”¹⁸ Again, the upgrade from animal to human seems to involve a power of quasi-ratiocination or cogitation at the sensory level (albeit a ‘high-grade’ sensory level). Human reminiscence, then, allows the human to learn or discover things from memories, by proceeding to discover conclusions syllogistically by a discursive activity guided by the cogitative power.

Because reminiscing gives rise to experience, experience requires thinking or reasoning about particulars, a sort of comparing one to another. Thomas’s example, at this point, is useful. He presents a medic seeing several men pass from sickness to health upon the medic’s administering a certain herbal remedy. The medic perceives, sensibly retains and then recalls first Socrates, then Plato, and then others, all becoming healthy upon receiving the herb. By comparing one to the other, by a gathering together and collating of the sensible species stored under the aspects of ‘sick’ and ‘healthy’, the medic acquires experience. This

¹⁸ *ST* 1.78.4

discovery is the activity of the medic's cogitative power. As such, the cogitative power is also called 'particular reason': it considers singular cases,¹⁹ such as the case that *this* herb cured *Socrates*, and that *this* herb cured *Plato*, and so on. The experience that arises from the comparison, is already at a remove from particularity, however, insofar as the medic must recognize that the herb samples administered to each patient are the same *kind* of herb.

Since "experience comes from the comparison of many singular memories" in this way, the cogitative power, working with memory, amasses a sort of collection of particular instances. Experience is gained when I come to know the collection itself, not just each case in its particularity.²⁰ In this way experience broadly ranges over multiple particular cases. Moreover, the range of experience increases as more individuals are perceived to be cured by the same herb. Thus the medic has experience of this herb curing both Socrates and Plato, and then Phaedo and Critias, and so on.

Even though this range increases with the additional perception of new instances, experience does not ascend to universal knowledge. The cogitative power deals solely with the singularity of the situation. Experience is always a concrete form of perception, insofar as the range of experience is determined to such-and-such cases.²¹ As Thomas describes this,

¹⁹ *In Meta* 1.1 (#15)

²⁰ Cf. Anthony Lisska: "this faculty enables one to perceive individuals as substantial wholes of a natural kind and not just as mere bundles of sensations", in his "A Look at Inner Sense in Aquinas: A Long-Neglected Faculty Psychology", *Intelligence and the Philosophy of Mind*, Proceedings of the American Catholic Philosophical Association 80, Michael Baur, ed., (Virginia: Philosophy Documentation Center, 2006), pp. 1-19, at p. 7.

²¹ Cf. Julien Peghaire: "These various observations concerning Plato, Socrates, Phaedo, Critias, were successively recorded in my memory, perhaps at widely different times. But now, I place them all together in my actual, present consciousness; I remember them. Then, going from one to the other, I note the concrete similarity of concrete symptoms in the case of each of my sick men; I note that the four doses of medicine which cured them show a similarity of concrete characteristics; I see [218] that the concrete effect in the four cases was the same. I have therefore a concrete knowledge of these singular instances under a common nature. Now this last named knowledge is what St. Thomas calls *experimentum*. He sees it as a *collatio*, that is to say, a gathering together, a collection of singular data going to make up a singular whole." See Julien Peghaire, "A Forgotten Sense, the Cogitative According to St. Thomas Aquinas", *The Modern Schoolman* 20 (1943), pp. 210-229, at pp. 217-18.

“as long as the physician only considers that this herb cured Socrates’s fever, *and* Plato’s, *and* many other particular humans, this is experience.”²² I stress the conjunctions to show that Thomas allows experience to amplify, as it were, so as to range over many particulars. Thomas’s caveat is that if the physician were to consider that this herb cures *all* people, or in some other way consider the universality of the situation, extending the specifics of these particular cases to a limitless range of future and further cases, then this would be to go beyond experience and enter the realm of concept formation, i.e. universal intellectual cognition. But experience, as sensory, is determined to a certain particularity. Thus, the increased *range* of sense experience (and Thomas seems not to place a definite limit on the range of increase) does not *yet* produce or ascend to the universal comprehension of the situation.²³ In other words, the increasing range of experience does not produce the universal concept so long as the perceiver remains only focused on or determined to the uniqueness or particularities of the situation.

At this point in the work of the cogitative power, we are on the threshold of the transition from sense experience to conceptual knowledge. Experience is acquired through the comparative, collating and gathering action of the cogitative power. But no amount of experience will make the jump to concepts of its own accord. No amount of materiality can ascend to immateriality without some higher power intervening. This is why Thomas teaches that experience is the highest achievement of the sensory cognition, and, that intellectual

²² *In Post. Analy.*, 2.20, my emphasis: “*Putā quamdiu medicus consideravit hanc herbam sanasse Socratem febrientem, et Platonem, et multos alios singulares homines, est experimentum.*”

²³ Thomas does not offer a specific time when experience becomes universal knowledge. This is wise if only because it is evident that different people are slower or quicker to understand inasmuch as they need more or fewer concrete examples. The general problem here is the sorities difficulty of determining how many sensible particulars are required to produce a universal concept, and Thomas sees no answer that covers all the cases. Note that this is not a difficulty of determining when I am justified in making an inductive inference, which is an epistemological problem. It is rather the ontological question of how many sensible items effect the birth or presence of the universal concept.

cognition requires the action of the higher, more noble intellectual power. Nevertheless, he tells us that during the acquisition of experience the intellectual reason is also at work:

Reason is not static in the experience of particulars, but from many experienced particulars it grasps (*accipit*) one common item, which is fixed (*firmatur*) in the soul, and it considers that item without considering the particulars, and this it takes as the beginning (*principium*) of art and science. For as long as the physician only considers that this herb cured Socrates's fever, and Plato's, and many other particular humans, this is experience; but when his consideration ascends to this, namely, considering absolutely that such a species of herb cures the fever, this is grasped as some rule (*regula*) of the medical art.²⁴

The grasping of the rule out of many particular instances is just what Aristotle means by the universal “coming to rest in the soul”, says Thomas, and this is tantamount to concept-formation. It is “at rest” (*quiescens*) insofar as the intellect considers it apart from the contingent particularities of the situation(s) from which it was borne. This conceptual universal is wholly abstracted from matter, and exists in the immaterial intellect. For this reason, it needs the action of the intellect to come down to fetch it, as it were, as it waits in sensory form in the cogitative power. This is achieved by the intellectual process of abstraction, to which I will turn in more detail in the following chapter. For now it is more important to look at what exactly is waiting prepared and ready in the sense.

§4.3: *Sensing the Universal and the Natura Communis*

The presence of the universal in the sense is essential to Thomas's theory of knowledge, and to the present consideration of the transition of informational aspects of

²⁴ *In Post Analy.*, 2.20: “Ratio autem non sistit in experimento particularium, sed ex multis particularibus in quibus expertus est, accipit unum commune, quod firmatur in anima, et considerat illud absque consideratione alicuius singularium; et hoc commune accipit ut principium artis et scientiae. Puta quamdiu medicus consideravit hanc herbam sanasse Socratem febrientem, et Platonem, et multos alios singulares homines, est experimentum; cum autem sua consideratio ad hoc ascendit quod talis species herbae sanat febrientem simpliciter, hoc accipitur ut quaedam regula artis medicinae.”

being from sensation to intellect. Cognition of material things has so far been presented as a hierarchical ascent of worldly information through grades of immateriality, and in this picture it is crucial that the seed of what is needed by the higher power is somehow situated in the lower power. This ultimately raises the question of the presence of the conceptual universal, in some form or another (*quodammodo*), in the senses as being a cause of that concept.

The key doctrine here is that the cogitative power is said to receive certain aspects not accessible to non-rational animals. These aspects, I will argue, are the *intentiones* existing *per accidens* or non-cognitively in extramental being, and that exist cognitively or ‘informationally’ in knowledge. The first place such aspects are detected is at the level of the animal estimative, the human cogitative. The cogitative, for Thomas, is naturally suited to detect aspects not just as simple as ‘dangerous’ and ‘useful’, but also even rudimentary kinds such as ‘man’ and ‘wood’. These rudimentary kinds are what he will call the “common nature” (*natura communis*) that must be present to sensory cognition in order that there be commonality of being between intellectual and sensory information. This is, I submit, the way to approach Thomas’s doctrine that sensing is even somehow of the universal.

Thomas teaches that the universal nature must somehow exist even at the lowest level of sense if there is to be an “adequation” or assimilation of mind to thing via a process of sensory cognition. Thus sense, in some way, is of the universal:

It is clear that the singular thing is what is sensed properly and *per se*, but nevertheless sensing is in a way of the universal itself (*sensus est quodammodo etiam ipsius universalis*). For sense knows Callias not merely insofar as he is Callias, but also insofar as he is this human (*hic homo*), and in the same way it knows Socrates insofar as he is this human. And by just this grasp preexisting in the sense (*tali acceptione sensus praeexistente*), the intellective soul can consider ‘human’ (*hominem*) in both. But if it were the case that sense

apprehended merely particularity, and in no way apprehended with that the universal nature in the particular, it would not be possible that from sense apprehension the knowledge of the universal nature would be caused in us.²⁵

Straight away, Thomas says that the singular or particular as such is the true province of sense. Sensation can in no way be of a nature considered as universal, simply because the senses make use of material organs and complete universality is attendant upon complete immateriality.²⁶ This is a flag for the coming discussion, reminding us that when we are considering sensation, it is always determined to individual material conditions. He then wants to move us into position to see what he means by sense being, in a way, of the universal.

Thomas's example of sensing the universal is for sense to know an individual man as a man. This is not merely to know a man as an extended object (by common sense), nor merely as a coloured object (by external sense), nor even merely as a 'this' (by the materiality of sensation). Thomas's thinking is that if sensory knowledge is to contribute at all to the subsequent development of intellectual concepts, then some part of the intentional aspect or informational content of the concept must be apprehended in the sense.²⁷

²⁵ *In Post. Analy.*, 2.20: "Manifestum est enim quod singulare sentitur proprie et per se, sed tamen sensus est quodammodo etiam ipsius universalis. Cognoscit enim Calliam non solum in quantum est Callias, sed etiam in quantum est hic homo, et similiter Socratem in quantum est hic homo. Et exinde est quod tali acceptione sensus praeexistente, anima intellectiva potest considerare hominem in utroque. Si autem ita esset quod sensus apprehenderet solum id quod est particularitatis, et nullo modo hoc apprehenderet universalem naturam in particulari, non esset possibile quod ex apprehensione sensus causaretur in nobis cognitio universalis."

²⁶ Thomas is explicit that the cogitative power is thoroughly sensitive in nature. Thomas takes his position from the fact that the cogitative power is limited to particularities and that it requires the use of a bodily organ (the brain), e.g., *SCG* 2.73 "For, since the cogitative power is operationally limited to particular things, it makes its judgments on the basis of particular intentions, and acts by means of a bodily organ, it is not above the generic level of the sensitive soul. [...] Moreover, the cogitative power, since it operates by means of an organ, is not that whereby we understand, for understanding is not the operation of an organ." (*Quia, cum virtus cogitativa habeat operationem solum circa particularia, quorum intentiones dividit et componit, et habeat organum corporale per quod agit, non transcendit genus animae sensitivae. [...] Virtus cogitativa, cum operetur per organum, non est id quo intelligimus: cum intelligere non sit operatio alicuius organi.*)

²⁷ So, just as for the sheep to sense the wolf as 'natural enemy' is to sense something of an informational nature, so for the human to sense a person as 'man' is to sense something of an informational nature, but much more so.

Thomas uses this same example of sensing a man as ‘man’ in his *De anima* commentary where he names the cogitative as that power by which the human perceives the *intentiones* or aspects of things, such as sensing a man as ‘this man’.²⁸ In the *Summa theologiae*, Thomas once again uses the example of sensing man as ‘man’ when he speaks about the way in which sensing can be of the universal. Once again he connects this achievement to the cogitative or estimative power, using the example of the sheep perceiving the wolf under the aspect of ‘enemy’, showing that this power is responsible for detecting information that is present in lower-level sensible form.

The difference between the sheep and the human, the estimative and the cogitative, is that the human is able to grasp the particulars under the aspect of a common nature. When I sense some individual thing, my senses at their various levels detect that to which they are properly ordered. Sight, for example, perceives the colour of the thing, and the common sense perceives the shape of the thing. At the level of the cogitative power, Thomas says, I perceive the thing under a common nature, so that I see the thing as, e.g., this ‘man’. Thomas says:

Note that the cogitative power differs from the estimative power. The former apprehends the individual thing as existing under a common nature (*sub natura communi*), and this because it is united (*unitur*) to intellect in one and the same subject. Hence it is aware of this man as this ‘man’, and this bit of wood as this bit of ‘wood’. The estimative power is not aware of an individual thing as existing in a common nature, but only in so far as this individual thing is the term or principle of some action or passion;²⁹ just as the ewe knows this lamb not insofar as it is this ‘lamb’, but insofar as it is ‘to

²⁸ *InDA* 2, lect 13.

²⁹ This is to say that animals do not perceive their environment as ordered by natures, but rather they perceive individual aspects according to natural appetite, which elicit responses and action. So as Thomas goes on to say, the sheep perceives its young as ‘to be given milk’. This is not to perceive the lamb under a common nature, but rather as the term of an specific action.

be given milk', and knows these plants insofar as they are food.³⁰

The estimative power is a natural instinct proper to each animal concerning their specific well-being, according to which animals are, e.g., naturally disposed to nurture their young and nourish themselves and flee their enemies and so on. The human cogitative power, by contrast, is ordered to a different purpose than the estimative, insofar as it is upgraded to discern many other aspects of nature. Humans, then, see not just 'dangerous' and 'useful', but also 'man' and 'wood' and other rudimentary kinds.

This difference for the human, says Thomas, is an effect of the cogitative being "united to intellect" in the human, which unity permits a sort of higher-grade ability.³¹ It is intellect that makes the estimative power "humanised rather than [uniquely] human",³² and so this upgraded power is denoted 'cogitative' or 'thinking'. This relationship between intellect and the cogitative power is the point of contact between intellect and sense,³³ and so it is the first focal point of Thomas's doctrine that the senses are *quaedam deficiens*

³⁰ *InDA* 2, lect 13: "Differententer tamen circa hoc se habet cogitativa, et aestimativa. Nam cogitativa apprehendit individuum, ut existens sub natura communi; quod contingit ei, in quantum unitur intellectivae in eodem subiecto; unde cognoscit hunc hominem prout est hic homo, et hoc lignum prout est hoc lignum. Aestimativa autem non apprehendit aliquod individuum, secundum quod est sub natura communi, sed solum secundum quod est terminus aut principium alicuius actionis vel passionis; sicut ovis cognoscit hunc agnum, non in quantum est hic agnus, sed in quantum est ab ea lactabilis; et hanc herbam, in quantum est eius cibus."

³¹ *DV* 15.1: "That which belongs to a higher nature cannot exist in a lower nature perfectly, but only according to a slight participation. Thus, in sensitive nature there is not reason, but only a participation of reason, insofar as brute animals have a kind of natural prudence."

³² Cyrille Michon, "Intentional Thoughts and Proto-Thoughts", in *Ancient and Medieval Theories of Intentionality*, Domink Perler, ed., (Leiden, Boston, Köln: Brill, 2001), pp. 325-42, at p. 337.

³³ *DV* 14.1 *ad* 9: "The cogitative power is that which is highest (*altissimum*) in the sensitive part, hence in some manner touches (*atingit quodammodo*) the intellective part in such a way as to participate in what is lowest (*infimum*) in the intellective part, namely, the discursiveness of reason." Cf. *ST* 1.78.4 *ad* 5, where Thomas speaks of the cogitative power's upgrade from the estimative as the result of an 'affinity' and 'proximity' (*per aliquam affinitatem et propinquitatem*) to intellectual reason. This participation, which makes the human an upgraded or nobler animal than the brutes, is *secundum quandam refluentiam*: "according to a certain overflow" of intellect. I notice that Cyrille Michon translates 'refluentia' as "influence": "for the estimative as well as for the memorative power [in humans], the influence (*refluentia*) of reason modifies the functioning of the estimation." See Cyrille Michon, "Intentional Thoughts and Proto-Thoughts", at p. 337.

participatio intellectus: “a certain faint participation in intellect”,³⁴ and, so, also in immateriality.

The language of this participation and of the “intellectual overflow” (*refluentia*) is worth its own study,³⁵ and a full examination of the doctrine and its implications is not possible here. What I wish again to note here is the hierarchy that Thomas envisions to be at work in human cognition, specifically, a hierarchy of grades of immateriality and grades of perfection or completion of cognitive acts or functions. We have seen the need to assert with Thomas that the senses have some share in immateriality in order to take on the form of another in virtue of which it can be knowledge. Now I stress with Thomas the need to assert that if the senses are in part a cause of intellectual knowledge, we must say that the nature sensed in the extramental thing is the basis for the nature known by the intellect,³⁶ such that the sense is somehow “of the universal”.

³⁴ *ST* 1.77.7.

³⁵ The doctrine that what is highest in lower things somehow participates in what is lowest in the higher things is a key doctrine in Thomas’s understanding of the hierarchy of creation. Our own cognitive make up has a similar hierarchical structure, cf. the passage quoted earlier from *DV* 14.1 *ad* 9. Thomas continues in that passage: “This is in accordance with Dionysius’s saying [in his *On the divine names*, book 7] that what is first in secondary things is conjoined to what is last in primary things. Hence, the cogitative power itself is also called ‘particular reason’, as is clear from the Commentator on *De anima* [Book 3]. This does not occur except in the human, in place of which brute animals have natural estimation. And so sometimes universal reason itself, which is in the intellectual part, because of the similarity of operation, is named ‘thinking’ (*cogitatione*).” The language of participation also stems from Thomas’s view that understanding belongs primarily to higher natures not determined to material bodies (e.g., God and the angels), and we participate in this understanding by way of intellect. See, for example, *DV* 15.1: “although the knowledge proper to the human soul takes place through the process of reasoning, nevertheless, it participates to some extent in that simple knowledge which exists in higher substances, and because of which they are said to have intellectual power.” Our intellect further participates in material sense by way of the cogitative power.

³⁶ Thomas also says that in humans “the universal reason moves through the medium of the particular reason” (*ST* 1.20.1 *ad* 1: in *nobis ratio universalis movet mediante ratione particulari*.) In addition, Thomas speaks of the intellect as needing the operation of the senses, specifically the cogitative power, insofar as intellect in some way receives its objects from the senses: *SCG* 3.84: “For, although the understanding is not a corporeal power, the operation of understanding cannot be accomplished in us without the operation of corporeal powers: that is, the imagination, the power of memory, and the cogitative power.” (*Licet enim intellectus non sit virtus corporea, tamen in nobis operatio intellectus compleri non potest sine operatione virtutum corporearum, quae sunt imaginatio et vis memorativa et cogitativa*.) Also: *ST* 1.115.4: “For the intellect, of necessity, receives from the inferior apprehensive powers: wherefore if the imaginative, cogitative, or memorative powers are disturbed, the action of the intellect is, of necessity, disturbed also.” (*Nam intellectus ex necessitate accipit ab inferioribus viribus apprehensivis, unde turbata vi imaginativa vel cogitativa vel memorativa, ex necessitate*

For Thomas, universals exist only without material conditions of any sort. Thus they cannot exist in the sense, since sense involves matter to varying degrees. There is a problem, then, with asserting that the sensory cogitative power apprehends any degree of commonality whatsoever. In the activation of the cogitative power by an informational aspect or *intentio*, the knower knows individuals as members of a kind, in virtue of the “common nature”.

The problem is that this seems to fly in the face of Thomas own doctrine that “to know the natures of sensible qualities is not from sense, but from intellect.”³⁷ The cogitative power is determined to particularity but is also perceptive of what is common. It is this very problem that prompts one recent commentator to speak of the cogitative power as “something of an embarrassment” to Thomas’s theory of cognition, “for it seems to be an ability that is somehow *in between* sense-perception and thought.”³⁸

If my analysis of the phantasm and defense of ‘*medium*’ immateriality is acceptable, then we already have a response to this. There are grades of immateriality permeating through sensory cognition, and the human has various levels of awareness characterized by broader ranges of inclusion for particular cases. This is just what Thomas describes in his doctrine of experience and the example of the medic. Further, if it is correct to read Thomas as holding the doctrine of *per accidens* existence of intentional being, then this seems like a good way to describe the existence of the universal in the sense. It is at the same time the fruition of the sensory powers and seed of the more universal concept. As such the universal in the sense might be termed a ‘proto-concept’ or ‘proto-thought’.³⁹

turbatur actio intellectus.) It is clear that Thomas thinks that intellect cannot do its job without the cooperation of the sense, especially the cogitative power.

³⁷ ST 1.78.3: “*Naturas autem sensibilibus qualitatibus cognoscere non est sensus, sed intellectus.*”

³⁸ Dorothea Frede, “Aquinas on *Phantasia*”, in *Ancient and Medieval Theories of Intentionality*, Dominik Perler, ed., (Leiden, Boston, Köln: Brill, 2001), pp. 155-183, at p. 170.

³⁹ Following Cyrille Michon, “Intentionality and Proto-Thoughts”, see esp. pp. 339-40.

The next step in getting a clear view of the doctrine of sensing the universal is to highlight that Thomas unequivocally denies that the universal as such can exist in sensation. However far removed from matter are the sensory powers, there is never going to be universality therein. This is clear enough from Thomas's discussion of the common nature in his commentary on *De anima*. There he writes that there are two ways to understand the term 'universal' in the context of this problem:

In one way, the common nature itself can be called 'universal' just insofar as it falls under the aspect of universality (*intentioni universalitatis*). The other way is in its own right (*secundum se*). Similarly, 'white' can be taken in two ways: either for that to which being white applies, or for white itself, according as it falls under whiteness in general.⁴⁰

Thomas is saying we might talk about the universal itself, abstracted from all things, as when we talk of 'whiteness' itself. On the other hand, the common nature can come under the aspect of universality when we talk of a white thing, where 'white' is a nature found in this thing and also common to many things. This is a way we might speak about the nature universally. Thomas continues:

Now a nature to which the notion of universality belongs, such as human nature, has two modes of being (*duplex esse*): one is material, according as it exists in natural matter (*materia naturali*); the other is immaterial, according as it exists in the intellect (*in intellectu*). Thus insofar as [the common nature] has existence in natural matter it is not able to come under the aspect of universality, since it is individuated by matter. Now, it can come under the aspect of universality according as it is abstracted from individual matter. [...] From this it is clear that we cannot attribute the aspect of universality to a common nature except according to its existence in intellect: for the common nature is one from many only insofar as it is understood without the principles by which one is divided into

⁴⁰ *InDA* 2, lect 12

many: thus universals considered as universals do not exist except in the soul.⁴¹

A common nature cannot exist except within individuating material conditions. For example, a human being has a nature in common with other humans. But human nature considered as universal exists nowhere except in the intellect where it is abstracted from matter. In the intellect human nature can come under the aspect of universality, as when we consider humanity as such, i.e. without considering it as residing in any man. The universal cannot exist but in the intellect, and so cannot exist *qua* universal in any degree of matter whatever, including existence in the sense. The universal just is gained by abstraction from material conditions, in which every sense power is rooted.⁴²

Even though it is entailed by the claim that the universal cannot exist *qua* universal in the sense, Thomas explicitly singles out the cogitative power in making the same point.

(Note that Thomas sometimes calls the cogitative power the ‘passive intellect’.⁴³):

Scientific knowledge, moreover, consists in the assimilation of the knower to the thing known. Now, the knower is assimilated to the thing known, as such, only with respect to universal species; for such are the objects of science. Now, *universal species cannot be in the passive intellect*, since it is a power using an organ, but only in the possible intellect. Therefore, scientific knowledge cannot reside in the passive intellect, but only in the possible intellect.⁴⁴

⁴¹ *InDA* 2, lect 12: “*Ista autem natura, cui advenit intentio universalitatis, puta natura hominis, habet duplex esse: unum quidem materiale, secundum quod est in materia naturali; aliud autem immateriale, secundum quod est in intellectu. Secundum igitur quod habet esse in materia naturali, non potest ei advenire intentio universalitatis, quia per materiam individuatur. Advenit igitur ei universalitatis intentio, secundum quod abstrahitur a materia individuali. [...] Sic igitur patet, quod naturae communi non potest attribui intentio universalitatis nisi secundum esse quod habet in intellectu: sic enim solum est unum de multis, prout intelligitur praeter principia, quibus unum in multa dividitur: unde relinquatur, quod universalia, secundum quod sunt universalia, non sunt nisi in anima.*”

⁴² *ST* 1-2.29.6

⁴³ cf. *ST* 1.79.2 *ad* 2; *SCG* 2.60; 2.73; *InDA* 2, lect.13.

⁴⁴ *SCG* 2.60, my emphasis: “*Scientiae assimilatio est scientis ad rem scitam. Rei autem scitae, inquantum est scita, non assimilatur sciens nisi secundum species universales: scientia enim de huiusmodi est. Species autem universales non possunt esse in intellectu passivo, cum sit potentia utens organo, sed solum in intellectu possibili. Scientia igitur non est in intellectu passivo, sed solum in intellectu possibili.*”

In this passage Thomas is explicit that universal species cannot be in the cogitative power or “passive intellect”, but rather can be only in the immaterial possible intellect.⁴⁵ His view is clearly that the universal as such exists nowhere in the sense, not even at the high-grade level of the cogitative power.

What this shows is that the notion of ‘being common’ must be taken differently from ‘being universal’. The common nature is always taken according to singularity, i.e. as existing in these or those individuals. It is thus somehow downgraded from or less than universality as such. The very fact that we speak of the nature being “common” indicates that we are taking it to be standing in relation to certain individuals, and so it is ordered to a certain particularity. As such, the common nature of the cogitative power parallels the phantasm insofar as it is inherently ordered to particularity. The universal *qua* universal, by contrast, is considered independently of any relation to individuals.

It would seem to be no accident that Thomas discusses the common nature in connection with the cogitative power. As a sense power, the cogitative power is ordered to singularity; even at the highest range of sensory experience the many cases involved are somehow considered according to the singularity of the situation. (We might see Thomas’s ‘conjunction of cases’ of the effective herbal remedy as the considering of a singular state of affairs with many particular components.) What must be stressed here is that an experiential situation, for all its complexity, is considered by the sensory cogitative power as limited and

⁴⁵ Concerning the mention of ‘scientific knowledge’ in the above quotation, which, for Thomas, occurs as the result of a syllogism: *SCG* 2.73, my emphasis: “It is with respect to the conclusions of a demonstration, moreover, that there is science. For a demonstration is ‘a syllogism productive of scientific knowledge’, as Aristotle says in *Posterior analytics* 1.2. Now, the conclusions of demonstrations are universals, and so, too, are their principles. Therefore, science will reside in that power which is cognizant of universals. But *passive intellect has no knowledge of universals, but only of particular aspects (intentiones)*. Hence it is not the subject of the habit of science.” (*Scientia est de conclusionibus demonstrationum: nam demonstratio est syllogismus faciens scire, ut Aristoteles dicit in I posteriorum. Conclusiones autem demonstrationum sunt universales, sicut et principia. Erit igitur in illa virtute quae est cognoscitiva universalium. Intellectus autem passivus non est cognoscitivus universalium, sed particularium intentionum. Non est igitur subiectum habitus scientiae.*)

singular. This is how the common nature differs from the universal, and it is why the common nature is sensed and the universal as such is not.

So, if the “*sub natura communi*” of the cogitative power is not a sensing of the universal *qua* universal, since the universal *qua* universal cannot exist in the cogitative power, then what sort of existence is it? In what way does the universal exist in the sense?

As I suggested, the *sub natura communi* of the cogitative power is an instance of the doctrine of *per accidens* sensible aspects (*intentiones*) known as a singular case. ‘Man’ and ‘wood’, as common natures, are informational (intentional) aspects accessible especially to humans. These particular aspects are not the same as the universal natures ‘Humanity’ and ‘Lignumanity’, but they are the seeds of these, “preexisting” in the sense. This preexistence of the universal in the sense must be described in terms of *per accidens* existence. The *per accidens* sensible is thus not unfavorably describable as “the intelligible in that which is sensed”,⁴⁶ or again, as a sort of “proto-concept”. This, it seems to me, is how we must understand Thomas’s doctrine that the universal somehow exists even at the lowest level of sense.

This reading agrees with and preserves both of Thomas’s main points I wished to highlight in this chapter, namely, (i) the senses as being causal of intellectual knowledge, and (ii) the hierarchical continuity of immateriality between our senses and intellect. As to (ii), we see that just as the seeds of knowledge in the intellect must exist as ‘seeds’ in the cogitative power, so must the ‘seeds’ of the aspects received by the cogitative power preexist in the common sense, and the ‘seeds’ of the aspects received by the common sense preexist in the external senses. The senses do not apprehend the universal as such, says Thomas, “but

⁴⁶ George P. Klubertanz, *The Discursive Power*, p. 196.

they apprehend something to which the character of universality is given by abstraction.”⁴⁷

This “something” that becomes universal in abstraction indicates the doctrine that the senses apprehend the universal “in a way” (*quoddammodo*). Thus this reading of Thomas keeps in line with (i), which is, I think, the very reason for introducing the doctrine of sensing of the universal: the external senses, somehow, contain the informational, intentional being exploited by the higher-order senses and eventually by the intellect.

I notice that it is not enough to say that the cogitative power is the site for the sensing of the universal. In order to be consistent with the foregoing discussion, whereby *intentiones* exist *per accidens* through the senses until being perceived by the cogitative power, then any given *intentio* (this “something to which the character of universality is given”) must also exist even at the level of the external sense. After all, the first grade or ‘level’ of immateriality in the hierarchy of cognition occurs at the level of the external senses. Even the external senses, then, should provide us with some minimal knowledge of kinds.

Thomas has seen a need for saying precisely this. Thus he says that sensing can be said “to bear on something universally” insofar as a sense power is not directed at any one individual thing as its proper object, but rather at a kind of being. So Thomas will say that the external senses (e.g., sight) can “bear on something universally”:

The sensitive powers [...] can bear on something universally. For we say that the object of sight is colour as a kind [of sense object], not because sight cognizes universal colour, but because sight cognizes colour not as being this particular colour, but simply insofar as it is colour (*simpliciter*). Accordingly hatred in the sensitive faculty can regard something universally, because something is hostile to an animal by reason of its common nature, and not merely as an

⁴⁷ *ST* 1-2.29.6 *ad* 1

individual. Take, for example, a wolf in regard to a sheep: the sheep hates the wolf in general.⁴⁸

Even the external senses, then, are not fully ordered to brute particularity, but rather to kinds of object: the sense is directed to a kind of being (e.g., colour). Sight, for example, takes not some individual colour as its proper object of apprehension, but rather colour generally. Sight will always see individual colours, but sight does not bear on any one individual coloured thing as opposed to some other coloured thing: it bears on both insofar as they are coloured. That is, sight receives colour, not because a thing is a particular colour, but because it is coloured. Similarly, even though it is individual wolves that the sheep hates, the sheep hates wolves generally, just as it is individual malefactors that we hate, though this hatred is of malefactors generally.

I understand Thomas to be saying that cognitive powers take certain features of the world as their proper objects; each power bears on specific aspects of the environment. But to say that sensing is “of the universal” must mean not only that the aspect ‘colour’ is a general feature of the environment (colours are many and varied). It must also mean that the sense perceives colours not as individual and discrete, but rather as a kind of being. This sensing things as a kind, I believe, is just what Thomas means when he insists that sense knows not merely that Callias is a ‘this’ but indeed that he is ‘this *man*’. Just as sight is disposed to register and perceive a kind of being, colour, so the human cogitative power is disposed to register and perceive many kinds of being, including, e.g., ‘man’.

⁴⁸ ST 1-2.29.6: “*potentia sensitive [...] ferri in aliquid universaliter. Sicut dicimus quod obiectum visus est color secundum genus, non quia visus cognoscat colorem universalem; sed quia quod color sit cognoscibilis a visu, non convenit colori in quantum est hic color, sed in quantum est color simpliciter. Sic ergo odium etiam sensitivae partis, potest respicere aliquid in universali, quia ex natura communi aliquid adversatur animali, et non solum ex eo quod est particularis, sicut lupus ovi. Unde ovis odit lupum generaliter.*”

By the analysis of the universal nature arising in sense cognition, the role of the cogitative power, the commencement of ‘experience’, and the subsequent birth of the universal in the intellect, we can see that cognition is of kinds. Kinds involve some remove from material particularity, which requires some degree of immateriality. We want to say that sense is a cause or source of our knowledge of material things; it is certainly the starting-point.⁴⁹ Sense, then, as a kind of knowledge, must be, to some degree, immaterial all the way down.⁵⁰

§4.4: *Conclusion*

The extended argument in chapters two, three and four shows that in order to maintain a thomist doctrine of sense knowledge the senses must be cognitive or immaterial ‘all the way down’, and as such they demand a share of the power of taking on forms in a way that is other than merely an instance of natural change. As Thomas presents it, the senses could not do this but for their being *quaedam deficiens participatio intellectus*, and so having some share of the immateriality necessary to take on the form of another as other.

⁴⁹ Though it is not the entire cause or source of our understanding. E.g., *ST* 1.84.6: “So according to [Aristotle’s] view, on the part of the phantasms the operation of the intellect is caused by the senses. But the phantasms are not sufficient to affect the possible intellect, as it is necessary that they be rendered actually intelligible by the agent intellect. Thus we may not say that the senses are the entire and complete cause of intellectual cognition, but rather that they are, in a way, the matter of the cause.” (*Secundum hoc ergo, ex parte phantasmatum intellectualis operatio a sensu causatur. Sed quia phantasmata non sufficiunt immutare intellectum possibilem, sed oportet quod fiant intelligibilia actu per intellectum agentem; non potest dici quod sensibilis cognitio sit totalis et perfecta causa intellectualis cognitionis, sed magis quodammodo est materia causae.*) Fr. Dewan has counselled me not to think that this “matter of the cause” means a “material cause”. Rather, Thomas is teaching that the efficient cause of intellectual cognition is analysable into a formal part (the contribution of the agent intellect) and a material part (the contribution of the senses). Cf. *DV* 1.11: “Our knowledge, taking its start from things, proceeds in this order. First, it begins in sense; second, it is completed in the intellect. As a consequence, sense is found to be in some way an intermediary between the intellect and things; for with reference to things, it is, as it were, an intellect, and with reference to intellect, it is, as it were, a thing.” (*cognitio nostra quae a rebus initium sumit, hoc ordine progreditur, ut primo incipiatur in sensu, et secundo perficiatur in intellectu; ut sic sensus inveniatur quodammodo medius inter intellectum et res: est enim, rebus comparatus, quasi intellectus; et intellectui comparatus, quasi res quaedam.*)

⁵⁰ This is in part why in the last chapter I reached the conclusion that the only knowledge of material individuals is achieved by active sense perception, by the ‘*hic et nunc*’ of direct material contact.

What I hope to have shown in these chapters is that introducing complete materiality at any of the stages of sensation is disastrous for a doctrine of sense cognition.

Before proceeding on to intellect, it is worth briefly reviewing the hierarchical picture of human knowledge thus far. The external senses receive the proper *per se* sensibles, and are limited to a certain function of receiving each their own proper sensible form. At a slightly higher level, the common sense apprehends certain aspects (*intentiones*) that are present in the sensible species proffered by the external senses. Here imagination retains the information of the common sensibles, and disposes it to the memory and the cogitative power. The cogitative power is at still a higher level than the common sense, evidenced by its greater range of reception; it receives aspects of the form in the imagination not received by the external nor the common sense. The cogitative power collates or compares these individual aspects, and this activity of comparing gives rise to experience. As a sense faculty, the cogitative power deals with material individuals, and so experience is determined somehow to situational specifics, just as when the budding physician knows that this herb cures this man, and this man, and so on. Finally, out of several experiences, the physician ceases to consider the particularities when he intellectually abstracts a general rule, e.g., ‘this sort of herb cures this sort of fever’. This abstraction leaves the particularities of the sensible and establishes knowledge in the intellect.

It is, then, by a series of ascending steps, and finally, a condescending gesture of the intellect, that the sensible becomes the intelligible. This intellectual gesture was reviewed in the second chapter, where I presented it as a two-pronged movement of the intellect toward the high-grade product of the human sensorium. In the next chapter I re-examine this intellectual action with a view to showing how Thomas conceives of the universal concept, the common nature in things, and how Thomas’s presentation (and, indeed, John Haldane’s

mind-world identity theory) can be acquitted of Haldane's original charge that for mind-world identity the nature in material things must exist therein as universal. In the penultimate chapter I will argue that Haldane's current presentation of mind-world identity has not fully freed itself from this early worry, and so is not fully adequate to account for an important feature of cognition. I close the thesis in the final chapter by suggesting how best to realign Haldane's presentation with the reading of Thomas's doctrines that I offer here, specifically the doctrine of the cognitive as such.

Chapter 5: Mind-World Identity and the Problem of Universals

In his early writing, Haldane advanced the view that for universal concepts to be identical with extramental natures, those natures must exist as universal. Thus he rejected Thomas Aquinas's position that concepts are universal and extramental natures are singular. In 2002 Haldane abandoned his view of *universalia in rebus* in favour of Thomas's own position. However, nowhere does Haldane explain why he has recanted. More importantly, he does not explain how Thomas's position can defend itself against Haldane's original worries and criticism, namely, that a universal concept cannot be 'one', in the appropriately Thomistic way, with a nature that is singular. In this chapter, then, I supply the detail missing from Haldane's present view. I examine Thomas's treatment of the question of universals and I suggest how this treatment can avoid Haldane's original worries and at the same time uphold what Haldane finds interesting about mind-world identity.

The bulk of the discussion concerns some ontological features of concepts and material natures. Concepts and natures correspond, in modes of being, to what John Haldane means by "mind" and "world", respectively, in his mind-world identity theory. The discussion here thus introduces the second thesis of Haldane's general presentation that I wish to engage. In chapter one I said that John Haldane must abandon two of the theses he defends in presenting his thomistic philosophy of mind: one pertaining to sensory cognition and the other to intellectual cognition. Chapters two through four concerned the thesis that sensation is entirely material, and I presented arguments to show why this can neither be a thesis of any properly thomistic philosophy of mind, nor a thesis that Haldane can accept within his broader thomistic framework of cognition as reception of form. Chapters five through seven, then, concern the issue of intellect, specifically, Haldane's thesis that "intentional being" is uniquely intellectual and so the distinction between mind and world is

given as the distinction between “intentional being” in the mind and “natural being” in the world.¹ I argue that this distinction must be presented differently from how Haldane has chosen to present it.

To see this requires an understanding of what Haldane means by “mind-world identity”, which requires an understanding of Haldane’s targets of attention in using the terms “mind” and “world”, i.e. concepts and natures. The two focal points of the present chapter, then, are, first, an examination of why Haldane might have changed his mind about what sorts of things concepts and extramental natures are, and, next, whether Thomas’s (and Haldane’s new) position is better suited to address Haldane’s early objections.

§5.1: *Mind-world identity and “universalia in rebus”*

In the previous chapter I completed my case showing that Thomas envisions a continuity between sense and intellect via the cogitative power, where a high-grade cognitive product—a phantasm with particular and informational conditions—awaits the required action of the agent intellect for the forming of the universal concept. In the present chapter I will look in some more detail at that moment in cognition when sense has reached its completion and intellect takes over. Particularly, I want to prepare the way for the next chapter’s focus on how this universal concept is a concept *of* some extramental nature, i.e. a focus on its status as a *representation* or “likeness” (*similitudo*). This is the issue that first concerned John Haldane vis-à-vis Thomas’s philosophy of mind, the question of intentionality: how does the universal concept in the mind represent, ‘hook onto’, or how is it

¹ I think I have already presented why this is not a workable distinction; if my account of intentional being in the medium and things is correct, then the intentional/natural distinction must be abandoned as marking the distinction between mind and world. But I have independent arguments to advance, picking up from the discussion of cognizance in chapter three, and, as I explain above, the order of presentation is necessary to present clearly all the issues involved. So the explicit treatment of the thesis on intellect comes in the seventh and final chapter.

is otherwise directed at, some extramental thing? Before we come to representation in the next chapter, then, here in the present chapter I focus on the extramental nature.

Haldane began by considering a doctrine of Thomas's I have already introduced and described: the "proper object" of the human intellect. Recall Thomas says: "the human intellect, which is conjoined with a body, has as its proper object quiddity or nature existing in corporeal matter."² This "quiddity" or "what-it-is-ness" is what Thomas also describes as the "nature" or "essence" of the thing. His doctrine is that the human intellect, because of its 'embodied situation', is suited to know other bodily natures. In fact, the natures it is suited to know are natures "existing in corporeal matter".

What Thomas means here is that the essence of a material thing "includes" the matter. A dog, for example, is a particular formal configuration of matter: what it is to be a dog includes having certain matter, which is to say that a dog is a material creature of a specific sort. A human being is a different particular formal configuration of matter, whose nature or essence likewise includes matter. This is to say, to be a dog or to be a human being in part requires being enmattered: to have, e.g., flesh and bone. So Thomas says, "it is clear that the essence [of material things] is comprised of both matter and form."³

It is precisely with respect to this teaching of Thomas that John Haldane formulated his original objection to, and deviation from, Thomas's teaching on the nature of universals. Haldane accepted that (i) purely intellectual (as opposed to sensory) cognition must be immaterial; (ii) in cognition of material things the formal concept in the mind is identical with the formal nature in the world, and; (iii) the essence of a material thing includes matter. Accordingly, Haldane held that "what is common to world and thought cannot be something

² *ST* 1.84.7: "*Intellectus autem humani, qui est coniunctus corpori, proprium obiectum est quidditas sive natura in materia corporali existens.*"

³ *DEE* 1: "*Patet ergo quod essentia comprehendit materiam et formam.*"

the existence of which necessarily involves the organisation of matter as does a Thomist essence”.⁴

In other words, if thought is immaterial, and if the concept is identical with a form in nature, then the concept cannot be identical with an essence that includes matter. This would result in an immaterial and universal form being identical to a material and particular nature. Haldane took this to be a very serious problem if not a contradiction: the universal is not determined to any particular; if it were, it would cease to be a universal, and it would instead be particular to some degree. Accordingly, Haldane reasoned that the extramental item with which a concept is identical must be merely the ‘form’ of a matter-form composite. The cognitive form is “identical to” or “isomorphic with” the natural form of the material substance, and not with any of its material particularities.⁵

From Thomas’s point of view, which I set out below, this by itself is not a troublesome position. This position sets the stage for Haldane’s departure from Thomas, because it highlights the precise focal point of Haldane’s early disagreement with Thomas: the question of the nature or status of the forms that are in the world and in the mind.

Haldane calls the forms in the mind “concepts”,⁶ and the extramental forms “natures”. Since concepts are immaterial and universal, and since they are supposed to be identical to natures (i.e. that of which they are concepts), the natures must exist in things as universal: *universalia in rebus*. So Haldane posited natures that exist extramentally and at the

⁴ John Haldane, “Forms of Thought” in *The Philosophy of Roderick Chisholm*, Lewis Hahn, ed., (Illinois: Open Court, 1997), pp. 149-170, at p. 161.

⁵ A detailed discussion of representation, identity and isomorphism is forthcoming in the next chapter.

⁶ In §5.3 I briefly discuss Haldane’s passing over Thomas’s distinction between the concept and the intelligible species. I explain that the distinction plays no very important role in the particular issues here that both Haldane and I are discussing.

same time universally. These natures are the formal features of reality with which concepts are identical: concepts are identical to universal forms that exist, as universal, in things.⁷

But after his initial and long-held view—nearly twenty years—, Haldane recanted and now sides with Thomas on the existence of universality as a feature only of intellectual being. In other words, Haldane now sides with Thomas that universality as such is no feature of extramental reality: it is a uniquely intellectual mode of being. However, Haldane nowhere tells us why he has changed his view. He has since carried on to defend mind-world identity in very much the same way as he presented it before,⁸ but with the important change that the extramental items with which concepts are identical are no longer thought to exist as universal in things.

So, within the context of the present discussion it remains unclear (i) how natures exist in things, and (ii) whether Thomas can meet Haldane's original criticism: if concepts in the intellect are meant to be in some way identical with real things, and if the concept is universal, then it seems that there must exist universality in things. Otherwise there looks to be no veridical adequation of mind to world: how can we say the universal concept is identical to something that is not universal? Haldane's change of mind notwithstanding, then, it remains to explain how Thomas can answer Haldane's original objection.

We must examine (i) and (ii) to see how both Haldane and Thomas can respond to a question that seems perfectly reasonable to put to their more-or-less-shared theory: if mind and world are somehow "united" or "identical" in the very act of knowing the world, then what exactly is it with which the knower is united or identical? If the answer is: naturally

⁷ See chapter 1 of the present thesis for the references to Haldane. Briefly, he floated these views in the 1983 paper on sense-perception, explored them again in his seminal paper on mind-world identity (1993), and fully defended them in his "Forms of Thought" (1997).

⁸ Indeed, within the same paper as his change of opinion. See chapter 1 of the present work, and Haldane's "A Thomist Metaphysics" (2000).

existing essential forms, and, if concepts are universal, then why is the thomist (indeed, Thomas himself) not committed to Haldane's original view that a concept's extramental counterpart exists as universal? How can Haldane still maintain his "identity thesis" while disavowing *universalia in rebus*?

In fact, there must be two main parts to a complete answer to this question. One part of the answer depends on what exactly Haldane and Thomas mean by the "identity" or "unity" of knower and known: I will come to this part in the next chapter. In this chapter I will address the other part of the answer, which depends on what Thomas (and now Haldane) claim about (i) the natures existing in things (§5.2) and (ii) how they can exist formally in the intellect (§5.3).

§5.2: Thoughts and Things: Natures Universal and Common

Thomas thinks everything that exists outside the mind is an individual. An extramental existent is some or other particular thing. Some of these things, of course, are the same kind of thing. Two dogs, for example, are each particular things, but they are also the same kind of thing: dogs. There is something that Fido and Rex have in common: although they are numerically distinct, we would say they are specifically or formally alike. Upon noticing this commonality, now we find that we are speaking about a few seemingly different notions: Fido, Rex, and that which Fido and Rex have in common — dog nature or dogness.

This is the commonplace observation that gives rise to the philosophical problem of universals. The problem concerns the status of the item common to individuals of the same kind, which, in the above example, is the item called "dogness". Is there one dogness shared by Fido and Rex? Since Fido and Rex are distinct dogs, is it even perhaps wrong to say that Fido and Rex "share" something called dogness? Are there two "dognesses" because there

are two dogs? Or is dogness something distinct from Fido and Rex? If so, is dogness an individual thing like Fido and Rex? Or is dogness not individual but somehow common or “universal” to all individual dogs? What would it mean to exist as “a universal”?

The early disagreement Haldane had with Thomas saw Haldane taking a stance on these questions. As we have seen, it differed from Thomas’s own stance on the same. Haldane ended up saying that the universal exists in individual material things with a universal mode of being. Using the example of dogness, Haldane’s early view was that Fido possesses dogness and Rex possesses dogness, and that the dogness of Fido and the dogness of Rex exists not as individual but as universal within each individual dog. The universal nature was the formal part of the individual dog, and this formal part was that with which dog-concepts, themselves universal, were formally identical. Concepts and formal natures were two modes of being of the same form: one in the mind, one in the world, both universal.

For St. Thomas, on the other hand, to exist as a material thing precludes any existence of universality in that thing. Matter, for Thomas, is the principle of individuation of material things. Matter is that which contracts or determines a formal nature to a particular and determinate state. A material thing, then, for Thomas, is an individual matter-form composite. It seems most tempting during this presentation of material things as ‘individualized’ or ‘enmattered’ forms to ask the question: what is the status of the formal nature?

Thomas’s answer may best be described as a rejection of the question. He seems to reason, as we will see, that the question wrongly supposes the nature of a material thing to be something that might have existence in itself. It does not. Rather, it is capable of existing in different modes, but there is no such thing as a nature that exists without some mode of being or instantiation, and which is the exemplar or prototype of the other ‘lesser’ or material

individual instances of that nature. Returning to our example of dogs, Thomas denies that “dogness” is the sort of entity that has existence by itself. Individual dogs exist in the world. Thoughts about dogness exists in minds. Dogness as such does not exist anywhere.

Thomas first came to this view by employing a distinction made by Avicenna that nothing about any formal nature itself entails its own existence in material or cognitive reality.⁹ In other words, it is not essential or necessary to any created nature that it exist. When it does exist, its existence is “accidental” to the essential or constitutive features of that formal nature. For example, while it is constitutive of human nature to be rational, it is not constitutive of human nature that it exist. If what exists is properly a human, what exists must be rational. But if what is under consideration is a human being, then what is under consideration need not exist.¹⁰

Thomas began with this Avicennian distinction, and in his early presentation of this view, existence is an accidental feature of any formal essence or nature and so is the mode of its existence. When the nature “dogness” exists individualized in matter, there exists a dog. When the nature “dogness” exists in the mind, there exists a universal concept of dogness.

In accepting that existence ‘accedes’ to natures, Thomas was defending an Avicennian line, though he would change his mind that individuality acceded to material

⁹ All formal natures, that is, apart from God’s nature. For a statement of the distinction in Avicenna see Ibn Sina, *Remarks and Admonitions* ‘Part 1: Logic’, Shams Inati, tr., (Toronto: PIMS, 1984), pp. 54-55 (‘Chapter 10: Remark: Concerning the constitutive essential’).

¹⁰ Avicenna did, however, assert that although an essence does not have necessary existence in a mind or in reality, nevertheless it does have a kind of existence proper to itself (*esse proprium*). See, e.g., Joseph Owens, “Common Nature: A Point of Comparison Between Thomistic and Scotistic Metaphysics”, *Medieval Studies* 19 (1957), pp. 1-14, esp. pp. 5-7 and p. 13. For another good and more recent comparison of Avicenna and Thomas, see Deborah Black, “Mental Existence in Thomas Aquinas and Avicenna”, *Medieval Studies* 61 (1999), pp. 45-79.

natures.¹¹ But even early on Thomas believed it was a mistake to think that a nature itself or as such has any special mode of existence:

It is false to say that the essence of man as such inasmuch as it is such has being in this singular, because if being in this singular belonged to man inasmuch as he is man, it would never be outside this singular [which is false, since human nature exists outside the singular in the mind]. Similarly, if it belongs to man inasmuch as it is man not to be in this singular, it would never be in it [which is false, since individual humans can and do exist].¹²

In this text from the early *De ente et essentia* Thomas presents the view of natures and the distinction between their mental and extramental modes of existence that he would keep throughout his career and with which Haldane now agrees. As Haldane puts it, this is the view that “a nature is not as such, or ‘in itself’, either particular or general, but rather particular-in-nature and general-in-the-mind”.¹³ Another way Haldane puts it is that “natures are many in things and one in the mind”.¹⁴

From this point Thomas is able to give an answer to the problem of universals. He tells us that “if someone should ask whether a nature [considered as such] can be called one or many, we should reply that it is neither, because both are outside the concept of humanity, and it can happen to be both.”¹⁵ Here Thomas seems to suggest that existence can “happen”

¹¹ Thomas changes his mind about existence (*esse*) being an *accident* of a material essence or nature in the sense of ‘existing’ as being an ‘add on’, as it were, to some otherwise ontologically ‘neutral’ essence. Whereas Avicenna thought that an essence *was* neutral or indifferent to modes of being, Thomas came to think that an essence does not actually exist anywhere differently from a cognitive or extramental mode. I.e., there is no essence which is itself neutral to existing in either a cognitive or natural mode of being—such a view is tantamount to Platonism, which Thomas rejects in favour of Aristotle’s doctrine that the essences of material things include both form *and* matter, and they have substantial existence in themselves.

¹² *DEE 2*: “*Falsum enim est dicere quod essentia hominis in quantum huiusmodi habeat esse in hoc singulari, quia si esse in hoc singulari conveniret homini in quantum est homo, nunquam esset extra hoc singulare. Similiter etiam si conveniret homini in quantum est homo non esse in hoc singulari, nunquam esset in eo.*” This is Fr. Dewan’s translation that he suggested to me. The bracketed insertions, for clarification, are my own.

¹³ “Mind-World Identity”, p. 36 note 18.

¹⁴ “A Thomist Metaphysics”, pp. 103-04.

¹⁵ *DEE 2*: “*Unde si quaeratur utrum ista natura sic considerata possit dici una vel plures, neutrum concedendum est, quia utrumque est extra intellectum humanitatis et utrumque potest sibi accidere.*”

(*accidit*) to *both* concepts and to things; i.e., a nature can happen to exist with universal being as a concept, and it can happen to exist with individuality as a material thing. But this doctrine underwent some change, as later in his career Thomas explicitly denies this Avicennian-sounding doctrine, saying that the substantial being of a thing is “not an accident, but rather the actuality of any existent form whatsoever”.¹⁶

But, as I say, what did not change is Thomas’s view that the *universal* mode of existence in intellectual being is something that happens to (*accidit*) a nature as a consequence of being intellectual,¹⁷ i.e. consequent upon intellectual abstraction. This is to say that in the intellect a nature enjoys a universal mode of existence. Neither does this doctrine does allow, with Avicenna, a nature to exist independently of its existence in minds or the world.¹⁸ Rather, in mind and world the same nature exists in different modes of being; and in a mind, it has a universal mode of being.

Here one might say there is still a difficulty in speaking of how members of a kind, two dogs, say, are really the same kind of thing. If universality is only a feature of our

¹⁶ *QQ* 12.5.1: “*Et sic dico quod esse substantiale rei non est accidens, sed actualitas cuiuslibet formae existentis [...]*.” This text is presented as Thomas’s mature position in Lawrence Dewan, *Form and Being* (Washington, D.C.: Catholic University of America Press, 2006), pp 202-4.

¹⁷ This is not merely an early way of thinking and speaking, for Thomas. Cf. *ST* 1.85.2 *ad* 2: “When we say ‘the intellect in act’, two things are conveyed, namely, the thing which is understood, and that which is itself understanding. And similarly in the expression ‘abstracted universal’, two things are conveyed, that is, the nature of the thing itself, and the abstracted or universal item. Therefore this nature itself which *becomes* (*accidit*) understood or abstracted, or considered universally, does not exist except in singulars; but that same nature which is understood or abstracted, or considered universally, is actually intelligible.” (*cum dicitur ‘intellectum in actu’, duo importantur, scilicet res quae intelligitur, et hoc quod est ipsum intelligi. Et similiter cum dicitur universale abstractum, duo intelliguntur, scilicet ipsa natura rei, et abstractio seu universalitas. Ipsa igitur natura cui accidit vel intelligi vel abstrahi, vel intentio universalitatis, non est nisi in singularibus; sed hoc ipsum quod est intelligi vel abstrahi, vel intentio universalitatis, est in intellectu.*)

¹⁸ Jorge Gracia speaks of the view that there is a nature independent of its instantiations as committing a “category mistake” in treating formal natures as the sorts of things that can enjoy existence in and of themselves. See Jorge J.E. Gracia, “Cutting the Gordian Knot of Ontology: Thomas’s Solution to the Problem of Universals”, in *Thomas Aquinas and His Legacy*, Studies in Philosophy and the History of Philosophy Series, David Gallagher, ed., (Washington, DC: Catholic University of America Press, 1994), pp. 16-36, at p. 28.

intellect, then how can it be said that the two individual dogs have anything in common in reality? What are we talking about when we ask about that which is held in common?

To ask this, for Thomas, is to slip back into the assumption that there is an item that can be spoken of meaningfully as having some existential status independently of its existence in individual dogs or in minds. It is to misunderstand that a nature exists in a certain mode, substantially or cognitively, but never independently of one of these. Concerning the material things in the world, their mode of being is material being (*esse materiale*) and in minds their natures have immaterial being (*esse immateriale*). Thomas thus explains the difference between, first, the universal in the intellect and, second, the nature as having real commonality in things, as follows:

Such an item [i.e. the essential nature], though in function of the consideration of the intellect it is something one apart from the many, nevertheless according to its being in all singulars it is something one and the same, not numerically, as though the numerically same humanity were in all humans, but as regards the aspect of the species: for just as this white item is similar to that white item, as to whiteness, but not as though there were numerically one whiteness existing in both, so also Socrates is similar to Plato as to humanity, but not that there is numerically one humanity existing in both.¹⁹

The nature in things of the same kind is the very same nature, but we know this only “as regards the aspect of the [intellectual] species”. That is, only when considered as an intellectual nature, abstracted from all individuating conditions, does the nature have commonality. The commonality among things is not due to numerical sameness of the nature in each, but rather to formal sameness. We are able to know this sameness or commonality as

¹⁹ *Expositio Posteriorum Analyticorum*, 2.20, n.11: “*Quod etsi secundum considerationem intellectus sit unum praeter multa, tamen secundum esse est in omnibus singularibus unum et idem, non quidem numero, quasi sit eadem humanitas numero omnium hominum, sed secundum rationem speciei. Sicut enim hoc album est simile illi albo in albedine, non quasi una numero albedine existente in utroque, ita etiam Socrates est similis Platoni in humanitate, non quasi una humanitate numero in utroque existente.*”

being really present in things in function of the universal nature of the intellectual species. In the previous chapter I showed that for Thomas the notion of ‘being universal’ must be taken differently from ‘being common’: the common nature or ‘being common’ is always spoken of as existing in these or those individuals.²⁰ In notion it is ordered to particularity, standing in relation to particulars. By contrast, the universal as such is considered independently of any relation to individuals: it can have no being, as universal, in any individual.

But surely this is the real problem, someone might say, for the realism Haldane and like-minded Thomists wish to defend: if we know that commonality exists among things by reasoning from the mode of existence the form has in our intellect, then how can we be certain that this mode of existence fashions us with knowledge of how things exist in nature? It is not satisfying, for the realist, to say that we know there is commonality in *reality* because of the nature of the item in our *intellect*.

This is the sort of problem that Thomas might, again, reject as being confused. The problem supposes Thomas’s claim to be that we somehow make an inference from the nature of our concepts to the nature of things. But this is not Thomas’s claim. Throughout his presentation of human cognition, Thomas posits cognitive faculties suited to or designed for reception of informational being. On such a view there is no difficulty for a knower in determining when he is justified in making an inductive inference from the content of his mental life to a claim about the nature of extramental reality. Rather, extramental reality serves to help inform the knower with the same natures existing there; all Thomas says is that in the knower these natures exist according to a different mode of being. This is the doctrine

²⁰ Cf. *ST* 1.7.1: “form is made finite by matter, inasmuch as form, considered in itself, is common to many; but when received in matter, the form is determined to this one particular thing.” (*Forma vero finitur per materiam, in quantum forma, in se considerata, communis est ad multa, sed per hoc quod recipitur in materia, fit forma determinate huius rei.*)

that in knowing, the knower becomes “unified with” or “assimilated to” the form of the thing known.²¹ We recognize formal sameness among extramental individuals not by inference but by assimilation.²²

This assimilation of a cognitive species that directs the cognizer to know a thing is an important part of Thomas’s doctrine of unity of knower and known. Haldane derives his identity thesis from St. Thomas’s manner of speaking, and so it is at this stage of “assimilation” that Haldane speaks of the “identity” of mind and world, thought and thing. The intellectual item that is the form or nature existing mentally is identical to or unified with the thing known. The intellectual mechanism by which this takes place is the action I spoke of at the close of the last chapter as a “condescending gesture”, and in chapter two I described it as a “two-pronged action” of the intellect upon the senses: intellectual abstraction. In the next section I focus on the point at which knower and known become ‘unified’ vis-à-vis the role of abstraction. I will have occasion to speak of the importance of the ‘*similitude*’ or ‘likeness’ of “assimilation” in the next chapter.

§5.3: *Intellectual Abstraction*

Before examining abstraction in its detail I wish briefly to address a terminological point. John Haldane often calls the intelligible species the “concept”, and, generally, for his purposes, uses the terms ‘intelligible species’ and ‘concept’ interchangeably.²³ Thomas, on

²¹ See e.g., *ST* 1.84.2, where Thomas notes that all the ancient philosophers (*antiqui philosophi*) held in common the principle that “like is known by like” (*simile simili cognoscitur*). *DV* 8.5: “*omnis cognitio est per assimilationem cognoscentis ad scitum*”.

²² Indeed, this seems to be one of the important roles of the “identity thesis” for John Haldane: it avoids the problem of induction. See his “Insight, Inference and Intellection”, in *Insight and Inference*, Proceedings of the American Catholic Philosophical Association, Michael Baur, ed., (New York: ACPA, 2000), pp. 31-45.

²³ E.g., Haldane says that Aquinas “is well aware that the concepts (*intelligible species*) cannot be particular instances of the form that have been somehow translated into the mind. Rather, they are what make it possible for an instance of *F* to be thought of as such, i.e., they are abstracted *universals*”, in his “Aquinas on the Active

the other hand, does not equate concepts and intelligible species. For Thomas, the species is the ‘programming principle’, as it were, for the production of a distinct cognitive item. Thomas calls the ‘*conceptus*’, ‘*intentio intellecta*’, or ‘*verbum*’, i.e. the concept.²⁴ In this regard Thomas distinguishes intelligible species and concept in parallel fashion to the way he distinguishes sensible species and phantasms.²⁵

I bring this up here just to say I will follow John Haldane in eliding Thomas’s distinction between the concept and the intelligible species. Although the distinction between species and concept is very important in other respects,²⁶ it is not strictly relevant here, since the present points of interest are those features that both concept and species have in common: both are *immaterial*, *universal*, and (as is discussed in the next chapter) they are both *likenesses* or *representations* of the thing known.²⁷ Both serve to permit consideration

Intellect”, *Philosophy* 67 (1992), p. 208. Again, in “Life of Signs”, Haldane distinguishes Ockham’s theory of cognition from Aquinas’ by saying that Ockham, unlike Aquinas, wanted “a theory of how a thought (*conceptus*) can have content, *without* appealing to conceptual universals (*species intelligibilis*)” 1994, p. 460).

²⁴ See *SCG* 1.53 and 4.11; *De potentia* 9.5; also cf. e.g., *ST* 1.34.1: “first and principally, the interior concept of the mind is called a word; secondarily, the vocal sound itself, signifying the interior concept, is called a word; and thirdly, the imagination of the vocal sound is called a word.” (*Sic igitur primo et principaliter interior mentis conceptus verbum dicitur, secundario vero, ipsa vox interioris conceptus significativa, tertio vero, ipsa imaginatio vocis verbum dicitur.*) Finally, see *ST* 1.85.2 *ad* 3 where Thomas distinguishes between the reception of the intelligible species in the possible intellect and the subsequent formation of a “definition or division or composition, which is signified by the spoken word”.

²⁵ Eleonore Stump speaks of the concept or “intellected intention” as the completed product of intellection, drawing a parallel between the phantasm as product of the sensorium and the concept as product of the intellectual faculty. Complete intellection, she says, involves “four different subsystems”: “the reception of the sensible *species*; their processing into phantasms; the abstraction of intelligible *species*; and their processing into intellected intentions.” See her *Aquinas* (London and New York: Routledge, 2003), p. 269.

²⁶ See Lawrence Dewan, “St. Thomas and Pre-Conceptual Intellection”, *Études maritainiennes-Maritain Studies* 11 (1995): 220-233. This is also a source for the idiom of the species as ‘programming’ the knower both to produce the concept and cognitively to access the natures of things.

²⁷ Also, both species and concept are primarily not themselves known (neither are primarily an *id quod*) but rather primarily that by which things are known (each is primarily an *id quo*). However, this issue begins to raise important differences between them. For example, although the way in which the species is an ‘*id quo*’ and the way in which the concept is an ‘*id quo*’ are different. Fr. Dewan has directed my attention to *QQ* 5.5.2 *ad* 1: “The intellect understands “*by something*” in two ways: in one way, formally, and thus it understands *by* the intelligible species by which it is made to be in act; in the other way, as *by* an instrument which it uses in order to understand something else: and in this way the intellect understands *by* the word, because it forms the word with a view to understanding the thing.” (Dewan’s translation and emphases: “*Ad primum ergo dicendum, quod intellectus intelligit aliquid dupliciter: uno modo formaliter, et sic intelligit specie intelligibili qua fit in*

of a thing's essence or nature, which consideration involves intellectual abstraction. When Thomas himself is concerned only with these features of the aspect of "likeness" of any "intellectual item" as such, he also can be found to elide the distinction between species and concept.²⁸ Accordingly, my concern here is with the nature and function of the item that Haldane calls a 'concept' and which is the same item Thomas calls the 'intelligible species', and I will refer to the 'coming-to-be' of this item in the intellect as 'concept formation'.

Thomas teaches that concept formation requires an action of intellect. Intellect descends to or acts upon the lower cognitive realm of sensation in order to engage the complete product of the sensorium—the phantasm—and from it extract and fashion the intelligible nature. This condescending movement of intellect to sense indicates that the order of causation in cognition reverses, as it were, at the apex of sense and the foothills of intellect. The phantasm is the likeness of particular conditions,²⁹ and exists, like sensible species, in corporeal organs.³⁰ On account of their degree of materiality, however slight, phantasms do not have the ability directly to engage with the immaterial intellect. Thus the sensorium terminates its operations at the production of phantasms. The intellect now acts

actu; alio modo sicut instrumento quo utitur ad aliud intelligendum: et hoc modo intellectus verbo intelligit, quia format verbum ad hoc quod intelligat rem.")

²⁸ E.g., *DV* 7.1 ad 14: "For the letters contained in a book are only signs of words, and these, in turn, are signs of intelligible items, which are likenesses of things." (*Continentur enim in libro figurae, quae sunt signa vocum, quae sunt signa intellectuum, qui sunt similitudines rerum.*); *ST* 1.85.8 ad 3: "*similitudo per quam intelligimus, est species cogniti in cognoscente.*"; *SCG* 1.46, n. 5: "*Species intelligibilis similitudo est alicuius intellecti.*" And see especially *SCG* 1.53 n 4, where Thomas discusses both the item called 'intelligible species' and the item called 'concept' in terms of their each being likenesses of the understood thing: "*Per hoc enim quod species intelligibilis quae est forma intellectus et intelligendi principium, est similitudo rei exterioris, sequitur quod intellectus intentionem formet illi rei similem: quia quale est unumquodque, talia operatur. Et ex hoc quod intentio intellecta est similis alicui rei, sequitur quod intellectus, formando huiusmodi intentionem, rem illam intelligat.*" Cf. *ST* 1.27.2: "the concept of the intellect (*conceptio intellectus*) is a likeness of the thing understood." (*conceptio intellectus est similitudo rei intellectae.*)

²⁹ Cf., e.g., *ST* 1.79.4 ad 4; 1.84.7 ad 2

³⁰ Cf., e.g., *ST* 1.85.1 ad 3

upon this high-grade sensory product, making what is only “potentially intelligible” in the phantasm become “actually intelligible”.³¹

For Thomas, the natures of things are not actually intelligible precisely because they are enmattered: “The intelligible in act is not something existing in the nature of things, speaking about the nature of sensible things, which do not subsist outside of matter.”³²

Accordingly, the action of the intellect is said to occur entirely because the movement from any degree of materiality to immateriality requires the action of a higher causal agent: the material sensory product (phantasm) is causally impotent to affect the immaterial intellect.³³

This is what is meant in saying that the order of cognitive causation reverses:³⁴ the intellect now condescends to act upon the product of the completed sensory act. Presenting this according to the analogy of ‘matter-form composite’: the high-level sensory product acts as

³¹ SCG 2.59 (1365): “The species of a thing, insofar as it is in the phantasms, is not actually intelligible: for the species is not actually one with the intellect in this way [i.e. not in the way the species is in the phantasm], but this rather insofar as the species is abstracted from the phantasms.” (*Species igitur rei, secundum quod est in phantasmatis, non est intelligibilis actu: non enim sic est unum cum intellectu in actu sed secundum quod est a phantasmatis abstracta.*)

³² ST 1.79.3.ad 3: “Intelligibile autem in actu non est aliquid existens in rerum natura, quantum ad naturam rerum sensibilium, quae non subsistunt praeter materiam.”

³³ ST 1.54.4: “The necessity for admitting a possible intellect in us is derived from the fact that we understand sometimes only in potentiality, and not actually; hence there must exist some power, which stands in potentiality to intelligible things previous to the act of understanding, but which becomes actuated by them when it knows them, and still more when it reflects upon them. And this power is called the possible intellect. The necessity for admitting an agent intellect is because the natures of material things, which we understand, do not exist outside the soul as immaterial and actually intelligible, but are only potentially intelligible so long as they are outside the soul; and so it is necessary that there should be some power, which can render such natures actually intelligible: and this power in us is called the agent intellect.” (*necessitas ponendi intellectum possibilem in nobis, fuit propter hoc, quod nos invenimus quandoque intelligentes in potentia et non in actu, unde oportet esse quandam virtutem, quae sit in potentia ad intelligibilia ante ipsum intelligere, sed reducitur in actum eorum cum fit sciens, et ulterius cum fit considerans. Et haec virtus vocatur intellectus possibilis. Necessitas autem ponendi intellectum agentem fuit, quia naturae rerum materialium, quas nos intelligimus, non subsistunt extra animam immateriales et intelligibiles in actu, sed sunt solum intelligibiles in potentia, extra animam existentes, et ideo oportuit esse aliquam virtutem, quae faceret illas naturas intelligibiles actu. Et haec virtus dicitur intellectus agens in nobis.*)

³⁴ Cf. Eleonore Stump: “after the phantasms have been produced, the order of causation in the cognitive process is reversed. Phantasms do not act with efficient causation on the intellect. On the contrary, the intellect acts with efficient causation on the phantasms in the process Aquinas calls ‘abstraction’.” *Aquinas* (London and New York: Routledge, 2003), pp. 263-64, citing ST 1.85.1 co. and ad 1 for the doctrine of abstraction. Stump continues: “In fact, according to Aquinas, the phantasms, lodged in a corporeal organ, could not act on the immaterial intellect, because, as he says frequently, ‘nothing corporeal can make an impression (*imprimere*) on an incorporeal thing’.”, p. 264, citing ST 1.84.6.

the matter, the agent intellect as form, and together this is the efficient cause of the informing of the possible intellect.³⁵

In chapter two I described the “two-pronged movement” of the agent intellect toward the phantasm. More specifically, the agent intellect performs two actions on the phantasm.³⁶ The first action of the agent intellect, called ‘illumination’, renders the phantasm more apt for the second intellectual action called ‘abstraction’. This second action, abstraction, results in both the production of an item called the ‘intelligible species’ and that item’s coincident presentation to, or being *en rapport* with, the possible intellect. At this stage, consequent upon illumination and abstraction, the possible intellect is said to have been brought into act, or to be actualized.³⁷ It is in this state of actualization that thought and thing are “one”.

“Abstraction” is the process by which we consider of an individual thing’s essence or nature, or of certain aspects of that thing, independently of consideration of the individual thing itself. As an example Thomas says that nothing prevents us from considering the colour of an apple without considering the apple itself. Upon seeing a green apple, then, I might think of the colour green independently of its existence in the individual apple that occasioned the thought. A similar process occurs when intellect considers the essential nature of a material thing. Thomas writes:

³⁵ Cf. *ST* 1.84.6, also cited in chapter one: “it cannot be said that sense cognition is the entire and complete cause of intellectual cognition, but rather that it is in a way the material cause.” (*non potest dici quod sensibilis cognitio sit totalis et perfecta causa intellectualis cognitionis, sed magis quodammodo est materia causae.*)

³⁶ For references in Thomas, see the discussion in chapter two. But also, cf. *ST* 1.87.1: the active intellect “not only actuates the intelligible things themselves, but also, by their instrumentality, actuates the possible intellect.”

³⁷ *SCG* 1.46: “The intelligible species is the formal principle of intellectual operation, just as the form of any agent is the principle of its own operation. [...] The intellect is made to be actually understanding by the intelligible species, just as the sense actually senses by the sensible species. Thus in comparison the intelligible species is to the intellect as act is to potency.” (*Species enim intelligibilis principium formale est intellectualis operationis: sicut forma cuiuslibet agentis principium est propriae operationis. [...] Per speciem intelligibilem fit intellectus intelligens actu: sicut per speciem sensibilem sensus actu sentiens. Comparatur igitur species intelligibilis ad intellectum sicut actus ad potentiam.*)

Those things that are part of the nature (*ratio*) of any species of a material thing, such as a stone or a human being or a horse, can be considered apart from the individual principles, which are not part of the nature of the species. And this is to abstract the universal from the particular, or the intelligible species from the phantasms, i.e., considering the nature (*natura*) of a species without considering the individual principles represented through the phantasms.³⁸

So, when I think of ‘humanity’, for instance, I consider the essential nature ‘humanity’ independently of thinking of this or that particular human being, say, Peter or Paul. This is to think not of Peter or Paul or any other human, but rather of that which Peter and Paul and every other human have in common: ‘humanity’.

Thomas further describes abstraction as the intellect removing forms from matter.³⁹ The “individual principles” from which I abstract an essential nature is what Thomas calls the “individual” or “designated” matter of this or that material thing. For example, when I abstract ‘humanity’ from its individuating conditions I abstract from the matter that individuates or designates the man Paul as distinct from the man Peter.

Thomas describes individual matter as matter “existing under definite dimensions and considered as singular”;⁴⁰ it is our rather familiar and everyday notion of material stuff. Accordingly, a form existing in individual matter is an individual naturally existing material thing.⁴¹ Peter, for example, is comprised partly of matter existing under definite dimensions, e.g., Peter’s flesh and Peter’s bones, insofar as Peter’s flesh and bones are constitutive of Peter the individual human.

³⁸ ST 1.85.1 ad 1: “*nihil prohibet colorem intelligi, nihil intelligendo de pomo. Similiter dico quod ea quae pertinent ad rationem speciei cuiuslibet rei materialis, puta lapidis aut hominis aut equi, possunt considerari sine principiis individualibus, quae non sunt de ratione speciei. Et hoc est abstrahere universale a particulari, vel speciem intelligibilem a phantasmatis, considerare scilicet naturam speciei absque consideratione individualium principiorum, quae per phantasmata repraesentantur.*”

³⁹ Cf. the doctrine of ST 1.85.1.

⁴⁰ DV 10.5.

⁴¹ ST 1.3.2: “*formae quae sunt receptibiles in materia individuantur per materiam [...].*”

Abstraction from individual matter is what marks the distinction between the modes of existence a form may enjoy. Thomas says: “to cognize what is in individual matter, though not precisely in the same manner that it exists in such matter, is to abstract a form from individual matter, which the phantasms represent.”⁴² So, a form in abstraction from individual matter is for the form to exist differently from the way it exists in individual matter. The distinction is between existence materially and immaterially. Thus, the form or nature in the world exists with individual matter, and the form or nature in the mind does not.

This is the entry-point for Haldane’s early problem as to how the form in the mind can be adequate to, or be identical with, or represent, or in whatever way apprise the knower of the thing known in a veridical realist way. If natures in the world include matter, and natures in the mind do not, then mental forms are not adequate to know things as they really exist. Such a view must somehow account for how the knower can understand the matter that is constitutive of extramental natures.

Thomas does not think that matter comes to exist in the mind of the thinker at all, but he does think that the very essence that “includes matter” comes to exist mentally. The present problem is allayed by a simple appeal to what is meant here by “includes”. Thomas draws a distinction between ways matter is included in the nature of a thing. This distinction corresponds to the distinction already at work between mental and extramental modes of formal existence: Thomas distinguishes “individual matter” from what he calls “common matter”. Whereas individual matter is *this* individual flesh and *these* individual bones (e.g., this individual Peter’s flesh and bone), common matter is, in Thomas’s example, flesh and bone “taken generally”. By ‘taken generally’ Thomas means that “the common” as such

⁴² *ST* 1.85.1: “Cognoscere vero id quod est in materia individuali, non prout est in tali materia, est abstrahere formam a materia individuali, quam repraesentant phantasmata.”

pertains to the consideration of a knower. The claim, then, is that the conception or definition ‘humanity’ must include ‘flesh’ and ‘bones’ taken as matter common to all human beings.

Since it is part of human nature (i.e. part of the essential definition of “human”) to have flesh and bones, the intellectual species must include these. So Thomas writes:

The intellect therefore abstracts the species of a natural thing from the *individual* sensible matter, but not from the *common* sensible matter. For example, it abstracts the species of a human being from ‘*this* flesh and *these* bones’, which do not belong to the species as such, but rather are parts of an individual and need not be considered in the species (as is said in *Metaphysics* VII). But the species of a human being cannot be abstracted by the intellect from ‘flesh and bones’ [considered as belonging to what it means to be human].⁴³

When I think of ‘humanity’, then, if I am to be thinking of human nature as it really is, I cannot understand it as such apart from the notions ‘flesh’ and ‘bones’.⁴⁴ Flesh and bones are matter common to all humans, and as such, they are included in the essential definition of ‘human’.

⁴³ ST 1.85.1 ad 2: “*Intellectus igitur abstrahit speciem rei naturalis a materia sensibili individuali, non autem a materia sensibili communi. Sicut speciem hominis abstrahit ab his carnibus et his ossibus, quae non sunt de ratione speciei, sed sunt partes individui, ut dicitur in VII Metaphys.; et ideo sine eis considerari potest. Sed species hominis non potest abstrahi per intellectum a carnibus et ossibus.*” My brackets and emphasis.

⁴⁴ Note the abstraction involved here is from matter, but matter qualified according to what is proper or essential to the thing known. For example, when someone is thinking of ‘humanity’, he may not be thinking especially of flesh or bones. Indeed, he might even say he is thinking of ‘humanity’ in a sense that does not include flesh and bone. This latter case would be to have abstracted some further aspect of being a human from the species ‘human’ (say, ‘rationality’), and so he might be thinking of ‘humanity’ precisely inasmuch as it includes ‘rationality’. This conception, though, would not properly be ‘humanity’: in this case, to say or to judge that ‘rational’ is ‘human’ would be a case of what Thomas calls “understanding a thing otherwise than as it is”, and so it would be a kind of error or falsity of intellect (cf. ST 1.85.1 ad 1). At the same time, since falsehood pertains only to judgment (cf. ST 1.17.2) and not to the intellect’s considering a nature in itself, then for our thinker merely to consider ‘humanity’ inasmuch as it contains ‘rationality’ is no falsehood, no more than to abstract ‘rational’ from ‘human’ and thus consider ‘rationality’ as such is no falsehood. As long as there is no judgment that the nature being considered (e.g. ‘rationality’) is essentially the nature from which it was abstracted (e.g., ‘humanity’), then this sort of abstraction is not erroneous; indeed, we do this sort of thing very often. In these cases, the notion being thought of might be called ‘human’ metaphorically or analogically (Cf. ST 1.13.9), but as long as it is not judged to be ‘humanity’ properly or essentially, there is no falsehood. Again, Thomas’s point is that knowledge of the essential nature of a thing is due to abstraction from matter qualified according to what is proper or essential to the thing known.

Cognition of material things never permits nor requires abstraction from common matter.⁴⁵ In the *Summa theologiae*'s *ex professo* discussion of abstraction concerning material things Thomas again phrases the presentation in terms of removal of "individual" matter:

The things which belong to the species of a material thing (such as a stone, or a man, or a horse) can be thought of apart from the individuating principles which do not belong to the notion of the species. This is what we mean by abstracting the universal from the particular, or the intelligible species from the phantasm: it is to consider the nature of the species apart from its individuating principles represented by the phantasms.⁴⁶

When Thomas says abstraction is "from the singular" he has in mind that a species may be abstracted from individual matter. In this way, a species may be considered universally, such that it could apply to any number of individuals. Thus Thomas tells us:

[E]very form existing in a single subject, by which it is individualized, is common to many either in reality or in notion. So, e.g., whereas human nature is common to many in reality and in notion, the nature of the sun is not common to many in reality, but only in notion. For the nature of the sun can be understood as existing in many subjects. This is because the mind understands the nature of any species by abstraction from the singular. Hence to be in one singular subject or in many is outside the notion of the nature of the species. So, given the idea of a species, it can be understood as existing in many. But the singular, from the fact that it is singular, is divided off from all others. Hence every name imposed to signify any singular thing is incommunicable both in reality and notion; for the plurality of this individual thing cannot be,

⁴⁵ It is possible to think of things that, unlike material things and natural kinds, do not have common matter in their definition. Thomas's example of such a thing is a mathematical species, e.g., 'cubicity' or cube-nature. Thomas introduces further distinctions between "sensible" and "intelligible" matter to describe our cognition of such entities. My topic of human cognition of material things limits my discussion to the distinction between "individual" and "common", which distinction is, I think, all that is needed to show why neither Thomas nor Haldane are now plagued by Haldane's old view that natures must exist as universal extramentally.

⁴⁶ *ST* 1.85.1 *ad* 1: "*ea quae pertinent ad rationem speciei cuiuslibet rei materialis, puta lapidis aut hominis aut equi, possunt considerari sine principiis individualibus, quae non sunt de ratione speciei. Et hoc est abstrahere universale a particulari, vel speciem intelligibilem a phantasmatis, considerare scilicet naturam speciei absque consideratione individualium principiorum, quae per phantasmata repraesentantur.*"

nor can it be conceived in notion. Hence no name signifying any individual thing is properly communicable to many, but only according to likeness, such as, for instance, a person can be called ‘Achilles’ metaphorically, insofar as he may possess something of the properties of Achilles, such as strength.⁴⁷

An abstracted species can be understood to exist in many precisely because it is abstracted from individual matter. For example, ‘human’ applies to Peter and Paul and Plato and Socrates just because ‘human’ is abstracted from the notion of being determined to any particularity outside of its own formal nature, which particularity is, after all, “outside the notion of the nature of the species”. Again, Thomas’s doctrine is that only “common matter” is a constitutive part of any material nature. Any human being certainly exists in “individual matter”; but what is considered common to all human beings does not. In the same way, the abstracted species ‘Solarity’ may be considered as being possibly in many individuals even though there is actually only one Sun.

So Thomas thinks the matter included in the nature that comes to exist in the mind is included in *notion* (‘common’) and not in natural (‘individual’) existence. The species of a material thing “includes matter” insofar as the complete definition of that kind of thing includes matter, just as the complete definition of a human must include the notion of flesh and bone. If we return, then, to Thomas’s claim that the proper object of the human intellect is a nature existing in matter, we can find Thomas teaching this doctrine in conjunction with

⁴⁷ ST 1.13.9: “*omnis forma in supposito singulari existens, per quod individuatur, communis est multis, vel secundum rem vel secundum rationem saltem, sicut natura humana communis est multis secundum rem et rationem, natura autem solis non est communis multis secundum rem, sed secundum rationem tantum; potest enim natura solis intelligi ut in pluribus suppositis existens. Et hoc ideo, quia intellectus intelligit naturam cuiuslibet speciei per abstractionem a singulari, unde esse in uno supposito singulari vel in pluribus, est praeter intellectum naturae speciei, unde, servato intellectu naturae speciei, potest intelligi ut in pluribus existens. Sed singulare, ex hoc ipso quod est singulare, est divisum ab omnibus aliis. Unde omne nomen impositum ad significandum aliquod singulare, est incommunicabile et re et ratione, non enim potest nec in apprehensione cadere pluralitas huius individui. Unde nullum nomen significans aliquod individuum, est communicabile multis proprie, sed solum secundum similitudinem; sicut aliquis metaphoricè potest dici Achilles, inquantum habet aliquid de proprietatibus Achillis, scilicet fortitudinem.*”

his claim that what is proper is for intellect to know natures *not* as existing in individual matter, but rather as abstracted from such matter, and so as including matter in notion.⁴⁸

Thomas's vocabulary to express this point perhaps sounds odd to the uninitiated: the concept 'includes' "common matter" but is abstracted from "individual matter". But it is, after all, just another way of expressing the much-reviewed doctrine that the thing known exists in the knower according to the mode of the knower and not according to the mode of the thing. And for Thomas, the fundamental difference between these modes of being is the difference between immateriality and materiality. Matter is not included in the concept in the way it is included in the thing. Now I turn to show precisely how Thomas says the human knows the matter of the thing and how Haldane can accommodate Thomas's doctrine.

§5.4: *Identity Theory and Modes of Being*

It seems to me that Haldane's identity theory can accommodate the same distinctions we see St. Thomas making in these discussions of abstraction and meanings of 'matter'. For Haldane, the formal nature is one item able to exist in different modes, such that the different modes of existence are different modes of being one and the same form. So when I think of a dog, my dog-thought is identical to the formal principle that makes a dog to be a dog.⁴⁹ The difference between thought and thing is that when the formal principle exists in thought a

⁴⁸ *ST* 1.85.1: "it is proper to [human intellect] to know a form existing individually in corporeal matter, but not as existing in this individual matter. But to know what is in individual matter, not as existing in such matter, is to abstract the form from individual matter which is represented by the phantasms." (*proprium eius est cognoscere formam in materia quidem corporali individualiter existentem, non tamen prout est in tali materia. Cognoscere vero id quod est in materia individuali, non prout est in tali materia, est abstrahere formam a materia individuali, quam repraesentant phantasmata.*) Cf. also *ST* 1.12.4 for a good presentation of modes of being and the natural object of the human knower.

⁴⁹ Of course, if my discussion of sensory cognition is correct, then it is not only "thought" that requires a new mode of being, but also even sensory cognition. That is, cognition as such requires a distinct mode of being (and, as we have seen, grades or modes of being within cognitive being itself). Thomas seems to have this in mind in his presentation of the new mode of being of intellectual knowledge, as Fr. Dewan has pointed out to me: In *ST* 1.84.1 Thomas begins with different modes or "intensities" of whiteness in extramental things, then moves to sensory cognition, then moves to intellectual cognition.

dog does not come to exist in my mind. So when I think of Fido, says Haldane, I “exemplify” dogness, though I do not “instantiate” it.⁵⁰

‘Exemplification’ is a uniquely representational mode of existing; it is a kind of existence that does not result in a new numerical instance of the existent. An ‘instantiation’ of a form, on the other hand, results precisely in a new numerical instance of the form; as such an instantiation includes matter in its essential nature. For example, an instantiation of ‘dogness’ would be an extramental material thing, a dog.

Haldane’s view here seems to be the same as Thomas’s, insofar as what is being rejected is some variant of the teaching of Empedocles, according to which a thought is a new material instantiation of the thing thought of.⁵¹ Against this, both Haldane and Thomas seem united in teaching that a thought entails the existence of the same nature in a new and different mode of being.

Thus the way matter is ‘included’ in a nature, for Thomas, has two meanings roughly equivalent to Haldane’s distinction between ‘exemplification’ and ‘instantiation’. A dog includes matter insofar as it is instantiated in matter where matter is constitutive of the substance. A dog-thought includes matter insofar as it exemplifies the proper notion of ‘dogness’ as a certain creature existing in certain material conditions. The instantiated (or, as Thomas might say, “substantial”) nature includes matter but not in the same way as does the exemplified or mental nature. The mental nature includes matter because matter is essential to man, but the mental nature is not constituted by matter: the nature does not have a material constitution.

⁵⁰ Haldane presents this ontology in both “Forms of Thought” and “A Return to Form in the Philosophy of Mind”.

⁵¹ Cf. *ST* 1.84.2; also, see *ST* 1.88.1 *ad* 2.

But there is still the question of realism: how do Haldane and Thomas answer the question why the universal mode of being is not a *distortion* of the thing known? A consequence of the view that concepts are identical to formal natures is that they are not identical or adequate to the very essence or nature of the thing, which are, after all, particular material things. One might then argue that this account falls short of Haldane's sought-after realism—an account of our concepts that describes how they are adequate to the requirement of knowing nature in itself as it truly is. In other words, a satisfying realism might perhaps demand that concepts be identical to things and not to parts of things. Concepts should be adequate to knowing what and how extramental things actually exist, and not merely adequate to knowing some “formal” part of extramental nature.

The reason why this is not a worry for Haldane nor for St. Thomas, it seems to me, rests in the unity of the various modes of knowing at the service of the human being. Both agree that not conceptual but rather sensory knowledge is that mode of knowing by which we cognitively access material things in their materiality. So while intellect is adequate to know formal parts of nature, sense is adequate to know material parts. The cooperation of both sense and intellect results in a cognitive agent who is apprised of both material and formal elements of essential natures by different and complementary modes of knowing.

In fact, as I hope has been evident in the previous chapters, the cooperation of sense and intellect is an important feature of Thomas's complete presentation of human cognition discharging its full function and achieving its perfection. The “completed situation” for the human knower is what Thomas calls “intellection”, which consists of knowledge of the nature of a material thing. As I discussed in chapter two, intellection requires not only the formal actualization of the intellect by the intelligible species, but also a consequent “return” or “conversion” to the phantasm so that the knower may know the formal nature as existing

in material conditions. I have in mind Thomas's doctrine that the intelligible species, while 'activating' the intellect, is not useable without a subsequent conversion to the phantasms in order to view the universal nature "as existing in a particular":

So the nature of a stone or any material thing cannot be known completely and truly, except in as much as it is known as existing in the individual. Now we apprehend the individual through the senses and the imagination. And, therefore, for the intellect to understand actually its proper object, it must of necessity turn to the phantasms in order to perceive the universal nature existing in the individual.⁵²

Thus we see that for Thomas and any commensurate thomistic philosophy of mind, the sense and the intellect together determine human cognition to know material things as existing in matter: the human is truly in an 'embodied situation' that includes sensory cognition.

Because the quiddity of a material thing includes matter, it is necessary that the intellect, to know the quiddity, turn to the sensory phantasm so as to know the nature as existing in the material thing; this is the situation that completes human intellection.

It is interesting to note that Thomas goes on, in the above-quoted text, to dismiss Platonism, which strikes me as being at once a dismissal of the view Haldane himself first advanced, then rejected, and that I have examined in this chapter, namely, that the form in the mind and the form known have the same mode of being, i.e., immaterial and universal.

Thomas writes:

if the proper object of our intellect were a separate form; or if, as the Platonists say, the natures of sensible things subsisted apart from the individual; there would be no need for the intellect to turn to the phantasms whenever it understands.⁵³

⁵² ST 1.84.7: "*Unde natura lapidis, vel cuiuscumque materialis rei, cognosci non potest complete et vere, nisi secundum quod cognoscitur ut in particulari existens. Particulare autem apprehendimus per sensum et imaginationem. Et ideo necesse est ad hoc quod intellectus actu intelligat suum obiectum proprium, quod convertat se ad phantasmata, ut speculetur naturam universalem in particulari existentem.*"

⁵³ ST 1.84.7: "*Si autem proprium obiectum intellectus nostri esset forma separata; vel si naturae rerum sensibilibus subsisterent non in particularibus, secundum Platonicos; non oporteret quod intellectus noster semper intelligendo converteret se ad phantasmata.*"

Moreover, earlier in the same question Thomas dismisses this view for reasons very close to those I am using here to counter Haldane's earlier view. Thomas writes:

it seems ridiculous, when we seek for knowledge of *things* which are to us manifest, to introduce *other beings*, which cannot be the substance of those others, *since they differ from them essentially*: so that granted that we have a knowledge of those separate substances, we cannot for that reason claim to form a judgment concerning these sensible things.⁵⁴

We see how Thomas agrees that the item with which our knowledge is identical cannot be a formal component alone, which item simply would not fashion us with knowledge of the complete being of the thing. I notice that Thomas uses not '*intellectus*' but '*notitia*' here, further indicating that he is not speaking only of the object of intellect (which is the formal part of the thing known) but rather of the object of the whole human knower, which is the essence of a material thing. Plato's error, he tells us, consisted in Plato's thinking that the form of the thing known needs exist in the knower in the same manner that it exist in the thing known. This, if any, is the point on which both St. Thomas and John Haldane insist and agree in their theories of knowledge: the knower is fashioned with knowledge of material things by cooperation of sense and intellect, each of these presenting various modes of being to the assimilating knower.

Perhaps most importantly, the cooperation of sense and intellect for the sake of the human knower answers the problem of the status of essential natures outside the mind and the way in which mind is adequate to these. Intellect abstracts the immaterial species from the phantasm to which it returns to view this species as a nature existing in the particular. But intellect need not understand a nature as existing in *this* matter, but rather as existing in

⁵⁴ ST 1.84.1: "*derisibile videtur ut, dum rerum quae nobis manifestae sunt notitiam quaerimus, alia entia in medium afferamus, quae non possunt esse earum substantiae, cum ab eis differant secundum esse, et sic, illis substantiis separatis cognitiss, non propter hoc de istis sensibilibus iudicare possemus.*" My emphases.

“common matter”. It is the senses that apprehend the particularities of any present individual (“*this* individual”) in virtue of the designate or individual material conditions of ‘*hic*’ and ‘*nunc*’. The intelligible form serves the human knower as that ‘programming principle’ by which, in conjunction with a conversion to the phantasm, material things are known in the manner of their own existence. The object of intellection is the essence of a material thing, and this completed cognitive process involves both intellect and sense. While intellect’s mode of knowing is universal, attendant upon intellectual abstraction, this does not prevent the knower from knowing the essences of material things.

And yet, it is the item in the intellect that continues to occupy our attention here. After abstraction we arrive at the possession of an intellectual item that is responsible for unifying the knower with that which is known. This intellectual item abstracted from the phantasm—the intelligible species, what Haldane calls the ‘concept’—is the item Haldane says is “identical” with the form of the thing known, i.e. the formal nature of the material thing. It is at this stage in cognition that Thomas will also speak of the “unity” or “oneness” of the intellect of the knower and the form of the thing known.

Accordingly, then, Thomas and Haldane seem to be defending the same view that the mental form is identical to or unified with the essential form of a material thing. The worry that the matter is not included in exactly the same mode of being is not a real problem, neither for Thomas nor for Haldane, since they hold that formal natures may exist in different modes of being. Moreover, they take these different modes of being to be evident in the distinction between cognizant and non-cognizant beings. Things that know possess forms in a mode of being different from the material mode of being constitutive of the existence of a numerically individual material thing. In this way, talk of different modes of existence are, to borrow an expression from John Haldane, “no more than a metaphysical redescription of

what is otherwise obvious”,⁵⁵ namely, that things that can know and things that cannot are very different kinds of thing.

It is a nice expression for this point, but it is opportune to note its original context: Haldane was speaking of “the mysterious sounding ‘identity of thinker and object’” as being a redescription of the obvious fact that “in thought we may be united with the world.”⁵⁶ The concept is universal, the thing is individual, and this difference is describable as a difference in ways a form can be. The form in question, though, Haldane insists, is one and the same form. Concept and thing are “formally identical”. This formal identity is perhaps anything but obvious, and so it remains to offer a reading of both John Haldane and St. Thomas on this keystone doctrine of the unity of knower and known. This is my task in the next chapter.

§5.5: *Conclusion*

The discussion in this chapter was meant primarily to show how Haldane understands the extramental natures with which concepts are identical in his mind-world identity theory. I brought this out to resolve the worry originally plaguing Haldane: that the universal cognitive form in the knower must be identical with some universal form outside the mind in a thing. We see that Thomas defends the view that the human knower is apprised of the natures of individual things insofar as both sense and intellect work in conjunction, and the concepts in the intellect exist in a universal mode that is nevertheless adequate to know formal counterparts in nature. It so happens that these formal counterparts do not exist as universal, and the difference in mode of existence between concept and thing is not a

⁵⁵ Haldane, “Whose Theory? Which Representations?” *Pacific Philosophical Quarterly* 74 (1993), pp. 247-257, at p. 256.

⁵⁶ Haldane, “Whose Theory? Which Representations?” at p. 256

philosophically problematic distortion in knowledge but rather a feature of the distinction between cognitive and non-cognitive beings.

The question remains, though, what Haldane means by “identity” and what he thinks it accomplishes. In the introductory chapter, I showed that the identity theory brings out Haldane’s principal thesis about human cognition: concept and thing are identical in form but distinguished by mode of existing. The concept is universal, the thing is individual, and this difference is describable as a difference in ways a form can be: the intellectual mode of existing just is a universal mode of existing, and the instantiated mode of existing is an individual mode of existing. But, one wonders, if mind and world are distinct in this allegedly non-problematic way, then in what sense are they ‘united’ or ‘identical’?

In the next chapter I set out Haldane’s presentation of mind-world identity theory, and I compare this with relevant points in Thomas’s own presentation of the doctrine of unity of knower and known. I believe that Haldane succeeds in presenting a generally faithful account of Thomas’s doctrine of the unity of knower and known. Thomas certainly thinks that the difference between the form in the mind and the form in the world is a difference in modes of being, which Haldane emphasises.⁵⁷ But it seems to me that there are two main points in Haldane’s presentation that now need to be amended. I turn to these next, in a consideration of the meaning of “identity” and the nature of intentionality. After making suggestions for amendments, the discussion culminates in the final chapter, where what is at stake ultimately is being able to draw a distinction between cognizant and non-cognizant beings.

⁵⁷ Cf. a principal text on just this point, *ST* 1.84.1

Chapter 6: Mind-World Identity and Representation

For John Haldane the mind-world identity thesis is “no more than a metaphysical redescription of what is otherwise obvious”, namely, that “in thought we may be united with the world.”¹ It is, also, his contemporary version of St. Thomas’s doctrine that in knowledge the knower and known are one. Their identity answers the question of intentionality: a thought is “of” or “about” a certain thing just in case the form in the knower is identical to the form of the thing known; i.e. thought and thing are “formally identical”. As such Haldane presents mind-world identity theory as “an *explanation* of how it could be that thoughts are essentially related to their objects. The intrinsic character of a mental act is formally identical with that of the extra-mental entities to which it is directed.”²

In this chapter I examine this identity of knower and known and I suggest two specific corrections to Haldane’s presentation in light of St. Thomas’s. First, I argue that Haldane’s treatment of the identity thesis remains couched in language more suited to his earlier espousal of *universalia in rebus*, and so I suggest he should now follow Thomas’s own presentation of the doctrine. Second, Haldane explains representation in terms of formal identity. I suggest that this raises the problem of being unable to distinguish cognitive forms from non-cognitive forms. The solution, which I discuss in the final chapter, is to see that the representational character of the cognitive is a special mode of being, which is, as I see it, Thomas’s own position on the intentional or representational character of cognition.

My goal in the present chapter, then, is to show that it is philosophically desirable for Haldane to reorient his presentation to be more in line with Thomas. Even if Thomas’s doctrines are not themselves perfectly conspicuous, Thomas’s view stands more consistent

¹ Haldane, “Whose Theory? Which Representations?” *Pacific Philosophical Quarterly* 74 (1993), pp. 247-257, at p. 256.

² “Mind-World Identity Theory”, p. 22, emphasis in original.

with Haldane's other thomistic commitments. There are two main points in Haldane's presentation that I wish to address with suggestions for amendment. The two suggestions I will make here are well introduced in terms of what I will call the "dual role" of the cognitive form, a feature of both Thomas's and Haldane's accounts of cognition.

§6.1: *The Dual Role of the Cognitive Form*

Thomas teaches that the cognitive form has two roles in bringing about knowledge,³ and both roles are stated in the doctrine that 'the species of the thing known must be in the knower'.⁴ The first role is that the species must be *present* to or "*in the knower*". The second role is that the species must *represent* or be "*of the thing known*". The two roles, then, are presence and representational or intentional content. The presence of the cognitive species is what causes knowledge: it is what brings the cognitive agent from not knowing to actually knowing (as we will examine in detail in a later section). The content of the species is the informational character of that act of knowing: it is what distinguishes one's knowledge of, say, a dog, from one's knowledge of, say, a human being.

³ E.g., *DV* 3.1 *ad* 2: "For a species to be a medium of knowledge there are two requirements. Namely, it must represent the thing known, which belongs to the species insofar as it has a relationship to the thing known. And, it must have spiritual or immaterial being, which belongs to a species insofar as it has its being in the knower. Hence, a thing is known better by means of an intellectual species than by means of a species in the sense, because the former is more immaterial (*immaterialior*)."
(*ad speciem quae est medium cognoscendi duo requiruntur: scilicet repraesentatio rei cognitae, quae competit ei secundum propinquitatem ad cognoscibile; et esse spirituale, vel immateriale, quod ei competit secundum quod habet esse in cognoscente. Unde per speciem quae est in intellectu, melius cognoscitur aliquid quam per speciem quae est in sensu, quia est immaterialior.*)
The passage also, I suggest, uses 'spiritual' and 'immaterial' to indicate *esse sensibile* and *esse intelligibile*, respectively. That is, Thomas is not using 'spiritual' and 'immaterial' as synonyms here. This interpretation (i) shows that he is talking about cognition as such (i.e. both sensory and intellective), and (ii) is supported by his subsequent reference to the distinction between sensory and intellective cognition, stating that an intellectual species is more immaterial than a sensible species (where the sensible species, we might say, is 'spiritual').

⁴ Cf. *ST* 1.14.1. Cf. *ST* 1.80.1: "In things having knowledge each one is so determined to its own proper natural being through its natural form (*determinatur unumquodque ad proprium esse naturale per formam naturalem*) that, nevertheless, it is receptive of the species of other things (*est receptivum specierum aliarum rerum*): as sense receives the species of all sensible objects, and intellect of all intelligible objects, in such a way that the soul of the human being is in some way (*quodammodo*) all things in function of sense and intellect."

A species causing knowledge thus has a dual-role: it must be present in the cognizer with representational content or intentionality.⁵ Both of these features seem to be necessary in order that knowledge can be said to belong to a certain individual (it is *this* person's knowledge), and that the knowledge is of or directed at a certain knowable nature (it is knowledge of *that* thing): the knower is informed by the form of the knowable thing. The cognitive species is thus in full command of knowledge, so much that Thomas calls the species "the principle of cognition", noting again the dual role:

All cognition is according to some form which is the principle of cognition in the knower. Such a form can be considered in two ways: in one way according to the being it has in the knower; in the other way according to its relation to the thing of which it is the likeness. In the first respect, it causes the knower actually to know; but in the second respect, it conforms the knowledge to some determinate knowable thing.⁶

What Thomas means by "coming actually to know" is the evident and common experience that humans move from being ignorant to understanding. As we saw in earlier chapters, this movement indicates that the human intellect has a "passive" capacity or power to receive intelligible forms or species, which power Thomas calls the "possible intellect".⁷ The intelligible species is the principal item effecting the actualization of this intellectual capacity. Again, the nature of this actualizing relationship is one of formal determination — an immaterial analogue of the way form determines or organizes matter — such that the species determines or characterizes the intellect:

The possible intellect exists as in potency in intelligible being, though it is made actual by the intelligible species, just as

⁵ Cf. again in *ST* 1.14.6 *ad* 1.

⁶ *DV* 10.4: "*omnis cognitio est secundum aliquam formam, quae est in cognoscente principium cognitionis. Forma autem huiusmodi dupliciter potest considerari: uno modo secundum esse quod habet in cognoscente; alio modo secundum respectum quem habet ad rem cuius est similitudo. Secundum quidem primum respectum facit cognoscentem actu cognoscere; sed secundum respectum secundum determinat cognitionem ad aliquod cognoscibile determinatum.*"

⁷ Cf. *ST* 1.79.2; 1.84.3

prime matter is made actual in sensible being by a natural form. Also, nothing is known insofar as it is only in potency, but rather insofar as it is actual: and hence form is the principle of cognition of a thing by which the thing is made actual. Likewise the cognitive power is made to be actually knowing by some species. Therefore our intellect knows itself only through an intelligible species, whereby it is made to have actually intelligible being.⁸

In previous chapters I have described this “determining” role of species, both in sense and intellect. In the doctrine of *intellectual* species, Thomas is teaching that when the agent intellect abstracts the intelligible species from the phantasm,⁹ that species is made the form of the possible intellect.¹⁰ The presence of the species effects this actualization.

John Haldane appreciates this function of cognitive species, describing them as “determinants of the character of mental activity”.¹¹ When the species determines or informs the intellect, this is one and the same event as the human being actually knowing. Likewise Thomas says “the intellect actually understands a thing when the species of the thing is made the form of the possible intellect: because of this it is said that the intellect in act is the intellectual item in act,”¹² (*intellectus in actu est intellectum in actu*). This is Thomas’s statement of the unity of knower and known. In the act of knowing, the knower is unified with or becomes one with what is known. It is this doctrine that Haldane has adopted as his mind-world identity thesis.

⁸ SCG 2.98: “*Intellectus enim possibilis est ut potentia existens in esse intelligibili; fit autem actu per speciem intelligibilem, sicut materia prima fit actu in esse sensibili per formam naturalem. Nihil autem cognoscitur secundum quod est potentia tantum, sed secundum quod est actu: unde et forma est principium cognitionis rei quae per eam fit actu; similiter autem potentia cognoscitiva fit actu cognoscens per speciem aliquam. Intellectus igitur possibilis noster non cognoscit seipsum nisi per speciem intelligibilem, qua fit actu in esse intelligibili.*” Thomas continues: “and because of this Aristotle says in *De anima* 3 that the intellect is knowable just as other things are, namely, by a species received from phantasms, just as by proper forms.” (*et propter hoc dicit Aristoteles, in III de anima, quod est cognoscibilis sicut et alia, scilicet per species a phantasmatis acceptas, sicut per formas proprias.*)

⁹ Cf. ST 1.85.1; SCG 2.77.

¹⁰ Cf. SCG 1.53; ST 1.85.2 ad 1.

¹¹ “Mind-World Identity”, p. 23.

¹² *Compendium theologiae* 1.83: “*Sic enim actu intelligit res, cum species rei facta fuerit forma intellectus possibilis: propter quod dicitur quod intellectus in actu est intellectum in actu.*”

Thomas differs from Haldane, as we have seen, in the emphasis the former puts on *sensory* cognition. Thomas is explicit that not just intellect but also sense can be “one” with the thing sensed. In the *Summa theologiae* Thomas puts the view as follows:

It is said in *De anima* that the sensible item in act is the sense in act, and the intelligible item in act is the intellect in act. For it is from this that we sense or understand something actually: that it is actually informed (*informatur in actu*) by the sensible species or intelligible species. And only according to precisely this is the sense or intellect other than the sensible or intelligible object: that either of them is in potency.¹³

Thomas refers here to the doctrine as he sees Aristotle present it in *De anima*. In his commentary on that passage in *De anima*, Thomas expresses the doctrine as follows:

Now everything received is received according to the mode of the recipient.¹⁴ All knowledge occurs in this way, that the thing known is in some way in the knower, namely according to its likeness. For the knower’s actuality as such is the actuality of the thing known.¹⁵

The claim, while still unexplained, is straightforward enough: I am sensing just in case there is a species actually present in my sensorium, and I am understanding just in case there is a species actually present in my intellect. I will return in a later section (§6.3) to talk of what Thomas means by the distinction between knower and known as given by potency, so it needn’t hold us up here. Now I turn to look at his claim that “the thing known is in some way in the knower, namely according to its likeness.”

¹³ ST 1.14.1: “Unde dicitur in libro de anima, quod sensibile in actu est sensus in actu, et intelligibile in actu est intellectus in actu. Ex hoc enim aliquid in actu sentimus vel intelligimus, quod intellectus noster vel sensus informatur in actu per speciem sensibilis vel intelligibilis. Et secundum hoc tantum sensus vel intellectus aliud est a sensibili vel intelligibili, quia utrumque est in potentia.”

¹⁴ Thomas’s talk of “reception” in the *De anima* commentary is apropos human cognition (as opposed to Divine) and there he also gives the general definition of cognition (including Divine cognition, in which there is presence and likeness but never reception.)

¹⁵ InDA 2, lect 12: “Unumquodque autem recipitur in aliquo per modum sui. Cognitio autem omnis fit per hoc, quod cognitum est aliquo modo in cognoscente, scilicet secundum similitudinem. Nam cognoscens in actu, est ipsum cognitum in actu.”

This teaching that the cognitive form is a “likeness” (*similitudo*) of the thing known highlights the second role of the species causing knowledge: the possessed form’s being “of another”.¹⁶ To be sure, when dealing with the question of intentionality the emphasis must be on the relation between mind and world, and in the thomist case, how the form in the mind is, in a way, the form of the thing known. For Thomas, the way in which the cognitive form is representative of the thing known is by its’ being a likeness of the essence of that thing:¹⁷ the cognitive form exists as a likeness of the thing known. Thus Thomas teaches: “All cognition is achieved by this, that the thing known is in some way in the knower, namely according to its likeness.”¹⁸

The second role of the species, then —the species as ‘likeness’— fashions the knower with representational or intentional content. Haldane and Thomas treat this representational character differently, and I will come to this. Here, though, I note that this special character suggests the point of distinction between mind and world. Forms in the mind *represent* in virtue of their status as “likeness”, while extramental forms do not. This intentionality of the mode of being a likeness is what distinguishes cognitive forms from non-cognitive ones.

¹⁶ Cf. *DV 2.5 ad 17*: “It is in this way that something is known: inasmuch as it is represented within the knower, and not according as it is an existent within the knower. For the likeness existing within the cognitive power is not a principle of knowledge of the thing in function of the being that it has in the cognitive power, but according to the relation it has to the thing known. And hence it is not according to the mode of being that the likeness of the thing has in the knower that the thing is known, but to the extent that the likeness of the thing existing in the intellect is representative of the thing.” (*hoc modo aliquid cognoscitur, secundum quod est in cognoscente repraesentatum, et non secundum quod est in cognoscente existens. Similitudo enim in vi cognoscitiva existens non est principium cognitionis rei secundum esse quod habet in potentia cognoscitiva, sed secundum relationem quam habet ad rem cognitam. Et inde est quod non per modum quo similitudo rei habet esse in cognoscente, res cognoscitur, sed per modum quo similitudo in intellectu existens est repraesentativa rei.*)

¹⁷ *QQ 8.2.2*: “*species intelligibilis est similitudo ipsius essentiae rei*”. More on this key text later.

¹⁸ *InDA 2*, lect 12: “*Cognitio autem omnis fit per hoc, quod cognitum est aliquo modo in cognoscente, scilicet secundum similitudinem.*”

We can see this in Thomas's approval of Aristotle's doctrine that "the stone is not in the soul, but rather the *likeness* of the stone".¹⁹ This is very important. It indicates Thomas's (and Aristotle's) disagreement with Empedocles, according to whom the form in the mind and the form in the world shared the same mode of being. On the contrary, for Thomas, the mode of being of the knowledge of a thing is very different from the mode of being of the thing. Thomas wants to show that the forms in mind and world have some commonality, but at the same time account for what he takes to be the evident fact that minds and things enjoy different modes of being:

Between the knower and the known there must be a community not of nature, but of representation. It is evident that the form of a stone existing within the soul has a far different nature from the form of a stone existing in matter, but, inasmuch as it represents the stone, it is a principle which commands knowledge of it.²⁰

Crucially, what Thomas teaches is that the intentionality or representational feature of the cognitive form, i.e. its being a 'likeness', is not a matter of identity in *nature* but rather of identity in *representation*. A cognitive form, then, is different from a natural form, just because it has the cognizance-specific mode of being of representation.

John Haldane similarly distinguishes mind and world in terms of modes of being, and he also employs the dual role of the cognitive form. For Haldane, the form in the thing exists with "natural being" (*in esse naturali*) and the form in the thought exists with "intentional

¹⁹ ST 1.85.2: "*id quod intelligitur primo, est res cuius species intelligibilis est similitudo. Et hoc etiam patet ex antiquorum opinione, qui ponebant simile simili cognosci. Ponebant enim quod anima per terram quae in ipsa erat, cognosceret terram quae extra ipsam erat; et sic de aliis. Si ergo accipiamus speciem terrae loco terrae, secundum doctrinam Aristotelis, qui dicit quod lapis non est in anima, sed species lapidis; sequetur quod anima per species intelligibiles cognoscat res quae sunt extra animam.*" Cf. a parallel discussion at *De unitate intellectus contra Averroistas* 5 (186-206), and also a presentation of 'like is known by like' at ST 1.76.2 ad 4.

²⁰ DV 8.11 ad 3: "*inter cognoscens et cognitum non exigitur similitudo quae est secundum convenientiam in natura, sed secundum repraesentationem tantum. Constat enim quod forma lapidis in anima est longe alterius naturae quam forma lapidis in materia; sed in quantum repraesentat eam, sic est principium ducens in cognitionem eius.*"

being” (*in esse intentionali*). The intentional mode of being (*esse intentionale*) is, for Haldane, the mode of being of “likeness”, and as such it is intrinsically representational: it intrinsically or naturally represents the form *in esse naturali*.

For Haldane *esse intentionale* is intrinsically representational because it functions as a “natural sign”. A concept is a “natural sign” of an extramental nature. “Following the scholastics”, he says, “one might say that concepts are *natural signs* of their extensions in virtue of the isomorphism of their intensions and the character of the corresponding natures and properties.”²¹ Haldane finds this doctrine in embryo in Thomas, stemming from the notion of ‘*passiones animae*’ —affectations of the soul— in Aristotle’s *De interpretatione*.²² Haldane treats *passiones animae* (which he translates as ‘concepts’²³) as “intrinsically contentful intentional states”²⁴ that are “ineliminable elements of any adequate account of intentionality”.²⁵

In this way Haldane employs Thomas’s dual role for the cognitive species in order to answer the question of intentionality: to be a natural sign is to have an “isomorphic” relation with the thing signified, which is to say that sign and thing signified—concept and thing—are “formally identical”. The form *in esse intentionali* exists cognitively in the knower, and it represents the form *in esse naturali* in virtue of its being formally identical to the form *in esse naturali*.²⁶ Haldane takes this picture to be an adequate answer to the question of

²¹ “Mind-World Identity Theory”, 1993, p. 25, emphasis in original.

²² *De interpretatione*, 16a 3-4; Haldane says that Aristotle’s claim that “spoken words are signs of concepts in the soul” (*passiones animae*, in the latin translation; Haldane translates as ‘concepts’) is progenitor of “ideational” theories of meaning, i.e. “theories which trace the semantic content of speech acts to the representational content of mental entities which those acts express”, in “Putnam on Intentionality”, p. 673.

²³ Presumably for the purpose of limiting himself to speaking of intellect, since he does not, as we have seen, speak of the formal identity in sensory cognition.

²⁴ “Life of Signs”, *Review of Metaphysics* 47 (1994), pp. 451-470 at p. 454.

²⁵ “Putnam on Intentionality”, p. 674.

²⁶ For some more detail, refer back to my presentation of Haldane in chapter one of the present work.

intentionality: “[the] intentionality of thought is constituted by the occurrence of the forms of things in the mind.”²⁷

We see, then, how both Haldane and Thomas present their accounts in accordance with a dual role for the cognitive species, which roles are distinct yet indissociable aspects of a thomistic description of knowledge as the possession of the form of another. The species both (i) engages and activates a cognitive power and (ii) is formally related to an extramental thing. The cognitive form, as such, is the trigger or principle effecting the knower’s knowledge of some determinate nature.²⁸

Nevertheless, while both Thomas and Haldane recognize the importance of these two roles of the species, each presents them somewhat differently. In the remainder of the chapter, I argue that there are two main problems with Haldane’s presentation:

The first problem, which I take up in the next section (§6.2), is that while Thomas presents the “presence” of the species as effecting the unity of known and knower in virtue of its actualizing the knowing power, Haldane’s presentation remains couched in language that preceded his change of mind on the problem of universals, and accordingly it is difficult to see what Haldane means by the term ‘identity’ in his “mind-world identity”. I suggest that this problem might be amended by reconsidering what is entailed by his rejection of *universalia in rebus* (discussed in the previous chapter), and attending to how Thomas presents identity (which I examine in §6.3).

The second problem, which I treat in §6.4, is that whereas Thomas presents the representational character of the cognitive form in terms of a certain perfection of being in

²⁷ “Intentionality and One-Sided Relations”, p. 95.

²⁸ Cf. Robert W. Schmidt, SJ: “The species is thus seen to have a *double relation*, one to the knower and the faculty by which he knows, another to the thing of which it is the likeness. *As a form having an accidental act of being* in the knower, it gives him an accidental perfection, which is the act of knowing. *From its relation to the external thing* it is the principle which determines the act to a definite object.” In his *The Domain of Logic According to Saint Thomas Aquinas* (The Hague: Martinus Nijhoff, 1966), p. 101, my emphasis.

the knower, Haldane presents representation in terms of formal identity. This second point is problematic because it is unclear what Haldane means by ‘identity’, but it is also, as I will show, problematic in itself. I suggest that this problem can be amended by attention to Thomas’s doctrine of grades of perfection within cognition, which I will turn to in the final chapter.

§6.2: *John Haldane and Mind-World Identity*

The general line Haldane has taken on “mind-world identity” concerning modes of being has stayed consistent with his early work, which means it has not adequately adapted itself to his change of mind concerning the status of universals. Consequently, the presentation he advances is incommensurate with the view he now wishes to defend. In the following short section I present his view and conclude that it must be modified accordingly. This first suggestion for amendment concerns what is meant by the term ‘identity’. I begin with a consideration of what Haldane does *not* mean by “identity”, which takes the form of defending Haldane against an external assessment and criticism.

In a recent paper, Jeffery Brower and Susan Brower-Toland offer a detailed summary of the different major views on Thomas’s unity doctrine throughout the twentieth century, from Étienne Gilson to John Haldane.²⁹ They treat Haldane as being the most successful exponent³⁰ of the view that the proper reading of Thomas’s doctrine is that the intellect and the intelligible item are identical, meaning “the very same item or event” (hence ‘mind-world *identity*’).

²⁹ Jeffrey E. Brower and Susan Brower-Toland, “Aquinas on Mental Representation: Concepts and Intentionality” *Philosophical Review* 117 (2008), pp. 193-243.

³⁰ Without, after all, agreeing with Haldane’s view. Brower and Brower-Toland reject *all* of the twentieth-century positions under review in favour of their own interpretation of Aquinas. I cannot engage their paper here, but in the following chapter I footnote my disagreement with their view.

What this means for Haldane, according to Brower and Brower-Toland, is that mind-world identity is a *numerical* identity of forms. “According to identity theory”, they write, “intentional likeness or assimilation is a matter of *numerically one and the same form* being present in both the cognizer and the object cognized.”³¹ They cite Haldane³² to this effect, and they say Haldane is perhaps the “sole exception” to the difficulty of finding an “unambiguous representative” of the ‘numerical identity’ thesis.³³ The authors go on to reject this view as inadequately Thomistic, on the grounds that the numerical identity thesis commits Haldane to *universalia in rebus*. They write:

insofar as the theory allows for numerically one and the same form (say, being a stone) to be exemplified by more than one subject—indeed, by more than one subject in more than one way (naturally by stones and intentionally by the mind)—it clearly presupposes a form of realism about universals. Haldane may be happy to embrace the realistic consequences of this interpretation, but Aquinas himself explicitly rejects them.³⁴

I think the inference here is correct, namely, that a strict identity between mind and world entails the doctrine that universals must exist in things.³⁵ We covered this view in the last chapter. But Haldane no longer holds this view.

It seems to me that because Haldane has given up his commitment to the view that universals exist as such in extramental things, he is no longer bothered by whatever problems belong to such a view. Moreover, I think it is clear that Haldane does not hold that the forms

³¹ Brower & Brower-Toland, p. 207.

³² Haldane, “A Return to Form in Philosophy of Mind” *Ratio* 11 (1998), pp. 253-77.

³³ Brower & Brower-Toland, p. 209.

³⁴ Brower & Brower-Toland, p. 210.

³⁵ The authors go on to say that for Thomas the forms in the mind and the world must be numerically distinct: “Given what Aquinas says about universals, the form received by the mind in cognition (i.e. the concept) and the form present in its object must be numerically distinct. Therefore, if we are going to analyse the intentionality of a given concept in terms of some type of sameness, it must be a relation that can obtain between distinct individual forms or tropes”. Brower & Brower-Toland, p. 211.

in the mind and in nature are numerically the same form. It seems to me that his emphasis on their distinct modes of being shows this sufficiently; but he shows it in other ways as well.

Specifically, Haldane consistently expresses mind-world identity in such ways as would more accurately place him in what Brower and Brower-Toland call the “formal-sameness” category of views, which “unlike the identity theory, it takes the sameness in question to be formal rather than numerical.”³⁶ In the article of Haldane’s that the authors cite in favour of their criticism I can find only one claim that would even remotely suggest that Haldane holds the ‘numerical identity’ view, and it is the following:

when I think of something, that which makes my thought to be the kind of thought it is—a dog-thought, say—is formally identical to that which makes the object of my thought to be the kind of thing it is, a dog. Each actuality (thought and object) has a structuring principle (concept and substantial form); and these principles, though distinct in the modes of their actualisation, are specifically alike. The form of the dog exists naturally and substantially (*in esse naturale*) in the dog, and intentionally and predicatively (*in esse intentionale*) in the thought.³⁷

But even in this passage it is clear that Haldane says that the forms are “specifically” alike, which itself entails no commitment at all to *numerical* identity. Fido and Rex, for example, are specifically alike in their dogness without being numerically alike. Haldane gives every indication, it seems to me, that this ‘sameness’ is what he means by ‘formal identity’.

In fact, in the very paper in which he first espouses Thomas’s universals doctrine Haldane clears himself of both accusations—numerical identity and *universalia in rebus*—in one phrase: “Universality is only to be found in the intellect, but general species are nonetheless real: they are formed by abstraction from a plurality of formally identical natures

³⁶ Brower & Brower-Toland, p. 212. The authors present criticisms of this view too, but I cannot consider them here.

³⁷ “A Return to Form in Philosophy of Mind”, p. 254.

existing in materially individuated substances.”³⁸ Further, in his seminal paper on ‘mind-world identity’ Haldane describes what he means by ‘identity’ and expressly compares two numerically distinct natural forms:

If one holds that the relationship between the conceptual structure of a judgment and the sortal structure of the natural situation it concerns is one of formal identity, then this is pretty much akin to the relationship between two natural situations of the same kind—the only difference residing in the mode of being of the structuring principles.³⁹

Surely “two natural situations”, say, two dogs, are not numerically identical. Yet this is the example Haldane uses to describe what he means by ‘identity’. I find him saying nothing that commits him to holding numerical identity between mind and world, and instead saying things that suggest the contrary. I cannot think that Brower’s and Brower-Toland’s assessment of Haldane’s position is accurate, and so I think he may safely be cleared of their charge. Ruling out numerical identity, then, it remains to see what Haldane *does* mean by mind-world identity. I shall argue that it turns out not to be perfectly clear.

When engaging Hilary Putnam on the question of realism in cognition Haldane approvingly cites John McDowell, who writes: “there is no ontological gap between the sort of thing one can [...] think, and the sort of thing that can be the case”.⁴⁰ Commenting on this passage, Haldane says this sounds very much like the “version of cognitive identity” he finds and endorses in Thomas’s teaching that the intellect in act is the intelligible in act:

If there is to be the sort of conformity of mind to thing which Putnam and McDowell seek, then I can only see this being provided according to an account of the sort developed by Aquinas when he writes that the intellect in act is the intelligible in act; or less scholastically, that the mind will only

³⁸ “A Thomist Metaphysics”, p. 104.

³⁹ See his “Mind-World Identity”, p. 33.

⁴⁰ From John McDowell, *Mind and World* (Cambridge, MA: Harvard, 1994), p. 27; quoted by Haldane in “Realism With a Metaphysical Skull”, p. 102.

be of a thing when it is formally identical with it; when what we think and what is thought are the same.⁴¹

Elsewhere Haldane explains that he is committed to the identity view largely because he thinks it is the only way to have realism in cognition. Realism requires that “content-determining principles of perception *are one and the same* as the character-determining principles of the objects of perception—the identity of act and object.”⁴² Again, Haldane thinks realism requires “a natural, but non-physical *isomorphism* between thought and its objects” and this isomorphism is just what Haldane calls ‘mind-world identity’.⁴³

In spite of the stress on ‘identity’, there is an obvious numerical distinction between the mental and extramental, and Haldane couches the distinction between modes of being: a form in the intellect exists *in esse intentionali* and a form in a material thing exists *in esse naturali*. The form in question, say, ‘dog’, is “one and the same” form both mentally and extramentally, but the intentional (mental) and the natural (extramental) are different modes of existing that this form can enjoy. Haldane calls the form *in esse naturali* a “property” or an “essence”, depending on context: in either case it is a formal determinant of matter.⁴⁴ So another way to state the important qualification to whatever Haldane means by “identity” is that there must remain a certain difference between a concept and a property.⁴⁵ Each is a certain determining principle: a concept *in esse intentionali* and a property *in esse naturali*.

⁴¹ “Realism With a Metaphysical Skull”, p. 102.

⁴² “On Coming Home”, pp. 291 and 296, my emphasis. Cf. Haldane: “Perception is hylomorphically constituted, with ‘sensibles’ standing as forms to the matter of the sense organs,” in his “Return to Form”, p. 59.

⁴³ Haldane, “Humanism With a Realist Face”, *Philosophical Books* 35 (1994), pp. 21-29, at 26, my emphasis.

⁴⁴ See, e.g., his “A Return to Form in the Philosophy of Mind” (1999).

⁴⁵ Because he does not think there is formal identity in sensory cognition, as we saw in chapter two, he speaks of the identity thesis only as pertaining to intellectual cognition, and so he calls the form existing *in esse intentionali* a “concept”. I briefly discuss the distinction between the concept and intelligible species in the last chapter. Recall that I am following Haldane here in eliding this distinction just because the main interest for Haldane and in the present work is a feature that both concept and species have in common, namely, that they are forms in the intellect and likenesses or representations of the thing known.

Yet in spite of the distinction in modes of being, Haldane describes his identity theory as “the striking claim that the forms or natures which give structure to the world, and the concepts which give ‘shape’ to thought, are one and the same.”⁴⁶ Thus Haldane says: “The identity of the known and the knower holds that properties and concepts are the same entities existing in different modes of actualization.”⁴⁷ For example, the property ‘being-a-dog’ and the concept ‘dogness’ are the “same entity”, except the property exists *in esse naturali* and the concept exists *in esse intentionali*. The identity theory unites them, and the mode of being distinguishes them.

There is clearly a numerical distinction between mind and world here, but there is the added, repeated, and somewhat confusing remark that the forms and concepts “are one and the same” and that this is what is meant by “identity”. It seems to me this way of phrasing the identity between mind and world is confusing precisely because it does not follow Thomas’s answer to the problem of universals that was discussed in the previous chapter. Thomas speaks of universals in the mind and particularized forms in the world. But talk of these being “the same entity” seems only to reopen the problem of speaking of some entity ‘in itself’, which can be spoken of as “self-same”, existing independently of minds and things, in virtue of which mind and things are common.

Haldane fought with this problem in his early presentations of mind-world identity,⁴⁸ and so it seems to me that Haldane’s manner of speaking is left over from when he was working with a *universalia in rebus* view. It strikes me that it would be better now for Haldane to speak more in terms of Thomas’s answer to the problem of universals that he now endorses. A separate entity in virtue of which mind and thing are identical is a non-entity,

⁴⁶ “Mind-World Identity Theory”, p. 21.

⁴⁷ “Forms of Thought”, pp. 165-66.

⁴⁸ E.g., most explicitly in his “Forms of Thought” (1997).

and presenting “mind-world identity” in these terms seems to require a commitment to just such an entity, or, as Brower and Brower-Toland rightly noticed, a commitment to *universalia in rebus*.

When St. Thomas, on the other hand, presents the doctrine of unity of known and knower, he does not run into this problem of describing the relation of mind and world in virtue of some “third thing” through which mind and world are identical. As I showed in the last chapter, both Thomas and Haldane believe that talk of such a third entity is a kind of mistaken assumption or a misunderstanding of the nature of intentionality. It seems to me, then, that Haldane must now look to Thomas to see whether there can be found a different account of mind-world identity that is more compatible with his commitment to the *distinction* of mind and world and the rejection of *universalia in rebus*. Since the problematic phrasing indeed predates Haldane’s change of mind, he might readily agree to this suggestion. Now, then, we must get clear on Thomas’s presentation.

§6.3: *St. Thomas and the Unity of Knower and Known*

Any presentation of the unity of knower and known must respect and account for the evident numerical distinction between them. Earlier we saw Thomas remark that that the actually-knowing knower and the thing actually known can be considered as different things only according as either of them is in potency.⁴⁹ That is, whenever the knower is not actually but only potentially knowing, only then we may say that knower and known are distinct. But just in case the knower is actually knowing, then the known is one with the knower.

⁴⁹ In §6.1, ST 1.14.1: “Unde dicitur in libro de anima, quod sensibile in actu est sensus in actu, et intelligibile in actu est intellectus in actu. Ex hoc enim aliquid in actu sentimus vel intelligimus, quod intellectus noster vel sensus informatur in actu per speciem sensibilis vel intelligibilis. Et secundum hoc tantum sensus vel intellectus aliud est a sensibili vel intelligibili, quia utrumque est in potentia.” Also InDA 2, lect 12: “Unumquodque autem recipitur in aliquo per modum sui. Cognitio autem omnis fit per hoc, quod cognitum est aliquo modo in cognoscente, scilicet secundum similitudinem. Nam cognoscens in actu, est ipsum cognitum in actu.”

Although the knower and known are “something one”, the only sense in which they differ is according to act and potency.

By way of example, Thomas says a body may exist as actually transparent and is at the same time potentially a coloured body. The body is not actually coloured, but can be coloured. Similarly, a being can actually exist, and at the same time be potentially intelligible. The being is not actually intelligible, but it can become intelligible.⁵⁰ When the body is made coloured, this is one and the same event as there being an actually coloured body. So when something is made intelligible, this is one and the same event as actual intelligibility, which is, for Thomas, actual knowledge. The intelligible thing is different from knowledge, and the knower (or knower’s intellect) itself is different from knowledge, but the knower actualized by the intelligible item is one and the same event as knowing.⁵¹

Paying attention to the distinctions can assist in revealing the point of unity. What Thomas means here is that the intellect and the intelligible thing are to be considered as

⁵⁰ *DV* 8.6: “Now one must know that nothing prevents something being one thing in act and potentially something else, as when a transparent body is actually a body, but is only potentially something coloured. And similarly, it is possible that something be actually a being, which in the domain (*genere*) of intelligibles is merely a potency. For just as there are grades (*gradus*) of act and potency in the domain of [natural] beings, such that something is in potency only, (i.e., primary matter) and something is in act only (i.e., God) and something is both in act and in potency (i.e., all intermediates [between primary matter and God]), so also this is the case in the domain of intelligibles. Something is in act only, namely, the divine essence, and something is in potency only, that is, the possible intellect, which in the intelligible order is like primary matter in the sensible order, as the Commentator says in *De anima* 3. However, the angelic substances have an intermediate position, having something of potency and act, not merely in the order of beings, but also in the order of intelligibles.” (*Sciendum est igitur, quod nihil prohibet esse aliquid actu unum et in potentia alterum, sicut corpus diaphanum est actu quidem corpus, sed potentia tantum coloratum; et similiter possibile est esse aliquid actu ens, quod in genere intelligibilium est potentia tantum. Sicut enim est gradus actus et potentiae in entibus, quod aliquid est potentia tantum, ut materia prima; aliquid actu tantum, ut Deus; aliquid actu et potentia ut omnia intermedia; sic est in genere intelligibilium aliquid ut actu tantum, scilicet essentia divina; aliquid ut potentia tantum, ut intellectus possibilis; quod hoc modo se habet in ordine intelligibilium sicut materia prima in ordine sensibilium, sicut dicit Commentator in III de anima. Omnes autem substantiae angelicae sunt mediae, habentes aliquid de potentia et actu, non solum in genere entium, sed etiam in genere intelligibilium.*)

⁵¹ We see here just how much the whole order of knowledge, of intelligibility, depends on a hierarchy of act and potency grounded ultimately in the divine being. Fr. Norris Clarke thus speaks of Thomas’s vision of an act-potency hierarchy as an “interlocking system of metaphysical compositions on different levels within a single real being”; see W. Norris Clarke, *The One and the Many: A Contemporary Thomistic Metaphysics* (Indiana: Notre Dame, 2001), p. 157.

potential and actual aspects (respectively) of one principle or cause of the situation called “knowing”. Hence their only real distinction is according to potentiality, i.e., just insofar as neither intellect nor intelligible thing is actualized as such, i.e. as to intelligible being. Again:

For it is on this basis that we sense or understand something actually, that is, that our intellect or sense is actually formed (*informatur*) by the sensible or intelligible species. And it is only in function of precisely this that the sense or the intellect is other than the sensible or intelligible item, that is, that either of them is in potency [i.e., not actually informed, but ‘on-the-ready’].⁵²

The way to construe the unity of known and knower, then, requires partly seeing the way in which they differ: the intelligible item and the intellect are distinct only when neither is “actual”. But when both the item and the intellect are in act —when the item is “known” or “actually intelligible” and the intellect is perfected by this item— this constitutes one act or event called knowing. Hence: *intellectus in actu est intellectum in actu*.

This is not to say, Thomas cautions, that the intelligible item and the intellect are “active” and “passive” aspects of “knowing”, but rather that item and intellect are active and passive aspects of the *cause* or principle of knowing:

It is clear that the knower and the known are related not as active and passive but as two things from which arises one principle of knowing (*unum cognitionis principium*) [...]. And so, for knowledge it is not enough that contact (*contactus*) take place between the knower and the known; but rather it is necessary that the knowable item be united to the knower as a form, either by means of its own essence or by means of a likeness.⁵³

⁵² ST 1.14.2: “*Ex hoc enim aliquid in actu sentimus vel intelligimus, quod intellectus noster vel sensus informatur in actu per speciem sensibilis vel intelligibilis. Et secundum hoc tantum sensus vel intellectus aliud est a sensibili vel intelligibili, quia utrumque est in potentia.*”

⁵³ DV 8.7 ad s.c. 6: “*Ad secundum dicendum, quod cognoscens et cognitum non se habent sicut agens et patiens, ut ex dictis, art. 6, ad 5 et in corp. art., patet, sed sicut duo ex quibus fit unum cognitionis principium; et ideo non sufficit ad cognitionem contactus inter cognoscens et cognoscibile; sed oportet quod cognoscibile cognoscenti uniatur ut forma, vel per essentiam suam, vel per similitudinem suam.*”

So knowledge is effected precisely in the unity of intelligible item and intellect, according to which unity the known is the form of the knower. And so Thomas says: “The intellectual operation [i.e. knowing] is not a medium that stands as something between the knower and the known, but rather proceeds from both of these, according as these are united.”⁵⁴

From this metaphysical description of how knower and known are *distinct*, we are best equipped to proceed to the focal point of the present investigation, namely, an appropriate metaphysical description of how mind and thing are “*identical*”. The foregoing suggests a preliminary picture: the intellect and species are together a single principle of one effect called “the intellect in act”, i.e. of one event called “knowing”.

Thomas presents this identity in a detailed passage on angelic cognition⁵⁵, where Thomas is first concerned with “knowing” as an “action”. Thomas begins by distinguishing transitive action from intransitive action, calling the latter an “operation”. A transitive action is one that passes out into an object distinct from the agent, as “cutting” passes out into something cut. This is to say the transitive action is known with respect to what is acted upon or modified, e.g., as “cutting” is known with respect to something being cut. An intransitive action, i.e. an “operation”, is an action that does not pass out into an object but remains in the agent. Knowing, says Thomas, is an operation: it is an action that remains within the agent.

The purpose of this particular description of knowledge is for Thomas to guard against the view that knowing a thing somehow modifies the thing known. Thomas writes:

There are two types of action. One proceeds from the agent and goes out to an exterior thing, *which it changes*. An example of this is illumination [*illuminare*: i.e., casting light onto something (cf. the agent intellect)], which can properly be called an ‘action’ (*actio*). The second type of action *does not*

⁵⁴ DV 8.6 ad 11: “*operatio intellectualis non est media secundum rem inter intelligens et intellectum, sed procedit ex utroque, secundum quod sunt unita.*”

⁵⁵ DV 8.6.

go out to an exterior thing but remains in the agent as its perfection. Properly speaking, this is called ‘operation’ (*operatio*), an example of which is glowing [*lucere*: i.e., ‘shining’ or ‘being lit up’]. Now these two actions agree in this, that neither arises except from an actually existing thing insofar as it is in act. Consequently, a body does not shine unless it has light (*lucem*) in act, and similarly it does not illuminate [things unless it has light in act].⁵⁶

Thomas’s examples are telling, insofar as light can be thought of as possibly acting in both ways, transitively and intransitively. Recall that one of the actions of the agent intellect is to illuminate, acting upon the potentially intelligible thing so as to make it intelligible: this seems to be an action, not an operation: illumination “goes out to” the thing illuminated. But the second action, abstraction is the subsequent realization or actualization of the intellect by the now intelligible form. This is “knowing”, and this does not pass out into the thing known. Knowledge, then, is analogous to an operation such as shining or glowing; such an operation remains in and radiates from within the agent.

When any operation is executed brought to completion, Thomas speaks of this as a kind of “perfection”: a thing’s proper operation is the “perfection” or “completion” of that thing. Accordingly, knowledge is described as a perfection or completion of the knower.⁵⁷ But ‘perfection’, Thomas notes, is said of a thing in two ways. One way is according to the perfection of the thing’s own being (*secundum perfectionem sui esse*). Something is made perfect in this way if it develops fully and according to its proper specific and substantial

⁵⁶ DV 8.6: “*duplex est actio. Una quae procedit ab agente in rem exteriorem, quam transmutat; et haec est sicut illuminare, quae etiam proprie actio nominatur. Alia vero actio est, quae non procedit in rem exteriorem, sed stat in ipso agente ut perfectio ipsius; et haec proprie dicitur operatio, et haec est sicut lucere. Hae autem duae actiones in hoc conveniunt quod utraque non progreditur nisi ab existente in actu, secundum quod est actu; unde corpus non lucet nisi secundum quod habet lucem in actu; et similiter non illuminat.*” My emphases.

⁵⁷ ST 1.14.4: “To understand is not an act passing into any extramental thing, but rather remains in the operator as his own act and perfection, exactly as being is the perfection of existing thing, just as existence follows upon the form, so in like manner to understand follows on the intelligible species.” (*intelligere non est actio progrediens ad aliquid extrinsecum, sed manet in operante sicut actus et perfectio eius, prout esse est perfectio existentis, sicut enim esse consequitur formam, ita intelligere sequitur speciem intelligibilem.*)

nature. The specific nature of an acorn, for example, is to grow into an oak tree. The full-grown oak tree is said to be the perfection of the acorn. Any acorn whose growth is frustrated is “imperfect” as regards its own specific nature. The other way a thing may be perfect is when the perfection proper to one thing is found realized or completed in another thing.⁵⁸ This perfection involves something taking on the nature of another thing. This is the perfection of the knower as regards the specific nature of a knower, says Thomas, and “the more perfectly the known is in the knower, the more perfect is the mode of knowing.”⁵⁹

Thomas speaks of this second sort of “perfection” as an analogue of the cognitive species:⁶⁰ for a species to be *present* to a knower, in the way discussed at the outset of the chapter, just is for the knower to attain a certain perfection: achieving the nature of another thing. Just as the “perfection” of an existing thing is realized by its substantial form, so the “perfection” of the knower as such is achieved in virtue of the presence of the species:⁶¹ “For it is from this that we sense or understand something actually: that our sense or intellect is actually informed by the sensible species or intelligible species.”⁶²

⁵⁸ DV 2.2: “*perfectio quae est propria unius rei, in altera re invenitur*”.

⁵⁹ ST 1.14.6 ad 1

⁶⁰ DV 11.1 ad 10: Thomas teaches that the intelligible forms or species “are both likenesses of things and forms perfecting the intellect.” (*Formae enim intelligibiles, ex quibus sapientia consistit, et sunt rerum similitudines, et sunt formae perficientes intellectum.*)

⁶¹ DV 8.6: “So just as primary matter cannot perform any action unless it is perfected by form—and even then that action is more of an emanation of the form itself than of the matter, whereas actually existent things can perform actions, inasmuch as they are in act—so also, our possible intellect can understand nothing until it has been perfected by the intelligible form in act. For then it understands the thing whose form that is.” The passage ends on a point about the intellect knowing itself, which also is impossible without a species: “nor can it understand itself except through the intelligible form actually existing within it.” (*Sicut igitur materia prima non potest agere aliquam actionem nisi perficiatur per formam; et tunc actio illa est quaedam emanatio ipsius formae magis quam materiae; res autem existentes actu possunt agere actiones, secundum quod sunt actu; ita intellectus possibilis noster nihil potest intelligere antequam perficiatur forma intelligibili in actu. Tunc enim intelligit rem cuius est illa forma; nec potest se intelligere nisi per formam intelligibilem actu in se existentem.*)

⁶² ST 1.14.1: “*Ex hoc enim aliquid in actu sentimus vel intelligimus, quod intellectus noster vel sensus informatur in actu per speciem sensibilis vel intelligibilis.*” Before this, Thomas makes it clear that he is talking about the unity doctrine, writing: “*Unde dicitur in libro de anima, quod sensibile in actu est sensus in actu, et intelligibile in actu est intellectus in actu.*” Cf. ST 1.14.4: “As was said above [14.2], the act of understanding is not an action going forth into something outside, but rather remains within the one performing the operation as its actuality and perfection, in the way that the act of being is the perfection of the existing thing: for just as the

This actualization or perfection of the knowing power, in virtue of its operation consequent upon the presence of the cognitive species, is how Thomas presents the unity of knower and known. It is here, in the context of calling knowledge an *operatio* or perfection, that Thomas says the *intellectus* and *intellectum* are identified as a single cause or principle of one effect, viz., understanding:

Now the action of appetite, sense, and intellect is not like an action proceeding forth into external matter, but is like an action that remains in the agent as its perfection; and therefore it is necessary that the thing which understands, insofar as it understands, be in act. However, it is not necessary that in performing the act of understanding the thing which understands behave as an agent and the thing understood behave as a patient. Rather, the understanding individual and the intellectual item (*intelligens et intellectum*), inasmuch as out of them something one is brought about, which is the intellect in act, are one principle of this act that is understanding. And I say that out of these is effected something one, inasmuch as the thing understood is conjoined to the one who understands either by its [the understood item's] essence or by its likeness.⁶³

In this passage Thomas both distinguishes the intellect from the intelligible item, and also identifies them insofar as they are “one principle” out of which “something one is brought about”. This “something one” is the act of knowing (or, an event called actual

act of being attends upon form, just so, the act of understanding follows upon the intelligible species.” (*Sicut enim supra dictum est, intelligere non est actio progrediens ad aliquid extrinsecum, sed manet in operante sicut actus et perfectio eius, prout esse est perfectio existentis, sicut enim esse consequitur formam, ita intelligere sequitur speciem intelligibilem.*) Cf. SCG 2.98: “a cognitive power is made actually to know through some species.” (*potentia cognoscitiva fit actu cognoscens per speciem aliquam [...].*) SCG 1.46: “The intelligible species is the formal principle of intellectual operation, just as the form of any agent is the principle of its own operation. [...] The intellect is made to be actually understanding by the intelligible species, just as the sense actually senses by the sensible species. Thus in comparison the intelligible species is to the intellect as act is to potency.” (*Species enim intelligibilis principium formale est intellectualis operationis: sicut forma cuiuslibet agentis principium est propriae operationis. [...] Per speciem intelligibilem fit intellectus intelligens actu: sicut per speciem sensibilem sensus actu sentiens. Comparatur igitur species intelligibilis ad intellectum sicut actus ad potentiam.*)

⁶³ DV 8.6, continued.

knowledge). Knowing is said to be ‘something one’ “just insofar as the thing understood is conjoined to the intellect” (*inquantum intellectum coniungitur intelligenti*).⁶⁴

Interestingly, Thomas goes on to say that in this event called knowing, the knower himself can properly be considered only as an “effect” of the already present unity of knower and known. That is, the intellect and intellectual item are united as a cause or principle of the effect called knowing:

So the knowing [individual] behaves neither as agent nor as patient, except incidentally (*per accidens*), inasmuch as in order for the thing understood to be united to the intellect, some action or passion is required: indeed an action inasmuch as the agent intellect makes the species to be actually intelligible, and a passion inasmuch as the possible intellect receives the intelligible species, and the sense the sensible species. But that act which is ‘knowing’ follows upon this action or passion, as an effect relative to its cause. Thus just as the luminous body shines when there is an actual light within it, so also the intellect knows all that which is actually intelligible within it.⁶⁵

The act of knowing is an effect whose cause or principle (the sufficient condition) is the conjoined intellect and the intelligible item. The “conjoining” of intellect and intelligible item are the cause, and knowing is the effect of this conjoining.

It would seem, then, that the act of knowing differs from the united knower and known, just insofar as a cause differs from its effect. But in a later text Thomas says that knowing is an effect that differs *not* from its cause or principle as such, but rather from the *parts* of that cause or principle. This is to say that the act of knowing as such differs from the intellect itself and from the intelligible item itself. This now emphasises the identity:

⁶⁴ It is exactly this portion of this *DV* 8.6 text that John Haldane cites in favour of his identity thesis. His translation runs as follows (the brackets are his): “Knower and known are one principle of activity inasmuch as one reality results from them both, *viz.*, the mind in act [i.e. actually thinking]. I say that one reality is the result, because therein the mind is conjoined with its object.” After the quotation, Haldane writes, “thus, the claim of identity between subject and object of cognition”. See his “Mind-World Identity Theory”, p. 22.

⁶⁵ *DV* 8.6

The action which passes out (*transit*) to some extrinsic object, is really a medium between the agent and the subject receiving the action [i.e. the patient]. The action which remains within the agent [i.e. an operation], is not really a medium between the agent and the object, but only as a manner of speaking; for [an operation] really follows upon the union of the object with the agent. For the act of understanding is brought about by the union of the thing understood with the one who understands it, as an effect which differs from both (*differens ab utroque*).⁶⁶

Thomas sees a transitive action as a kind of medium between an agent and a patient. In the act of heating, for example, there is the hot thing and the thing made hot, and the action “heating” exists as a mediating relation between them. In this kind of case we can talk of a familiar sort of relation between disparate items. But the intransitive operation is different: there is no passing out into something else. In the case of the intellect, it must at once be ‘on-the-ready’ to receive intelligibility, and, render the intelligible item actually intelligible. These are the necessary and sufficient conditions of the act of knowing, insofar as they are considered one principle of that act. So it is again asserted that the knower and the known are “something one”: the identity of intellect and intelligible item just is knower knowing.

In the thomist account, modes of being must be kept central as the reason for distinction between knower and known. Earlier I said *representation* or “likeness” is the cognizance-specific mode of being distinguishing mind from world. Any talk of their “identity” must respect this distinction of modes of being. Accordingly, for Thomas, ‘identity’ is a term used primarily to indicate the oneness of a substance,⁶⁷ such as a cat or a dog. A dog is one substance, and in this way it is truly said to be an identity or “self-same”. We may use ‘identity’ terms with analogous meanings, such as the term ‘equality’, which

⁶⁶ ST 1.54.1 ad 3: “*actio quae transit in aliquid extrinsecum, est realiter media inter agens et subiectum recipiens actionem. Sed actio quae manet in agente, non est realiter medium inter agens et obiectum, sed secundum modum significandi tantum, realiter vero consequitur unionem obiecti cum agente. Ex hoc enim quod intellectum fit unum cum intelligente, consequitur intelligere, quasi quidam effectus differens ab utroque.*” My bracketed insertions.

⁶⁷ Cf. CM 4.2 (561), on identity as substantial unity.

denotes oneness as to *quantity*, and the cognate terms ‘similarity’ or ‘likeness’, which denote oneness as to *quality*. The “identity” in mind-world identity must be an identity of *quality*, and not of substance. Mind and world are distinct substantially, but they are identical in quality. Their difference is given in terms of different modes of being: quality is a mode of being distinct from substantiality. Thus mind and world are substantially different, qualitatively the same.

I suggest, then, that the approach taken in the foregoing section is how best to see what Thomas means by the “identity” of mind and world. Knowing is a formal perfection otherwise described as the intellect made actual.⁶⁸ The intellect is actual only when the intelligible item is actual, which effects one event called “knowing”. In this way we may say that the knower is identical to the known, and that they are distinct just insofar as neither is in act, i.e. when there is not actual knowledge taking place. In the latter case, knower and known are merely potentially identical. Knower and known enjoy different modes of being, such that known and knower are identical not as to substance, but as to quality.

“Quality” in this sense concerns formal sameness, what Thomas calls “likeness” (*similitudo*): thus Thomas tells us that likeness (*similitudo*) is precisely “agreement or sharing of form”.⁶⁹ Mind and world, concept and thing, are identical in point of form, such that the concept is a likeness of the essential nature of the thing. Thus the way in which two dogs are qualitatively alike *qua* dog, this is the way in which mind and world are qualitatively alike *qua* formal nature. But there is an important caveat that must be added to this doctrine of

⁶⁸ Fergus Kerr puts the view nicely, in terms of the operative or intransitive nature of understanding: “[Thomas] never pictures the mind as projecting significance on intrinsically unintelligible and valueless objects but always rather as the actualisation of intellectual capacities by potentially significant objects, according to the axiom ‘*intellectus in actu est intelligibile in actu*’: our intellectual capacities actualized *are* the world’s intelligibility realized.” Fergus Kerr, *After Aquinas: Versions of Thomism* (Oxford: Blackwell, 2002), p. 27.

⁶⁹ *ST* 1.4.3: “*similitudo attendatur secundum convenientiam vel communicationem in forma*”.

formal sameness, likeness, and representation, and it seems to me that in Haldane's presentation this caveat has gone unnoticed. I address this now in the final section.

§6.4: *Identity, Intentionality and esse intentionale*

The general import of the mind-world identity thesis, for Haldane, is to answer the question of intentionality, to describe the representational character of thought. Using the identity thesis, Haldane describes the feature of representation in terms of formal identity. In other words, the reason a concept is about a thing is because concept and thing are formally identical. I believe this presentation adequately explains "*likeness*" ("agreement or sharing of form") but it does not adequately explain *intentionality*. In what follows I set out Haldane's position and draw attention to the problem that I see. It is a small but important problem, and it will lead us into the final chapter of the thesis. I begin here by stating what Haldane and Thomas share in common and then highlighting the point at which they differ.

In Haldane's terms, the central shared insight is that thought is "intrinsically representational" and that the world is "intrinsically intelligible". Thought is intrinsically representational because real features of the intrinsically intelligible world bear upon, and thus activate, cognitive-representational capacities. Haldane writes:

mental reference is only possible because of the possession by subjects of cognitive features (concepts) that correspond in point of natural similarity (that is formal identity) to properties of things in the world. An implication of this account is that thought and reality are related somewhat in the manner of reflected image and object of reflection. This state of affairs suggests two complementary descriptions, viz., that thought is *intrinsically representational* and that the world is *intrinsically intelligible*.⁷⁰

⁷⁰ "Mind-World Identity", p. 26.

This intrinsic representation just is intentionality, and this is the mark of the cognitive as such. Cognition is, says Haldane, “the intentional communion of an agent and an object”,⁷¹ and this communion is distinguished from cases of non-cognizant natural change by the feature of representation. Haldane writes:

As I am using the term, a state is ‘cognitive’ if it is intrinsically contentful; that is if in being in such a state one is *ipso facto* apprised of some representational element. [...] Thus, thoughts, beliefs, perceptions, imaginings, and non-relational experiences, e.g., pains, colour impressions, and so on, are all cognitive according to the meaning of the term.⁷²

We can summarize Haldane’s view as follows: cognizance occurs just in case there is an “intrinsically contentful” state, where ‘intrinsically contentful’ means “apprised of some representational element.” Thus there is cognizance just in case there is representation. Further, “intentionality is characteristic of all cognitive activity”,⁷³ and “intentional phenomena are essentially conceptually contentful.”⁷⁴ Thus the cognitive is intrinsically intentional, since representation is intrinsically intentional.⁷⁵

So far there is nothing here with which Thomas Aquinas would disagree.

Intentionality is a part-and-parcel feature of our cognitive union with the world, where (i) the

⁷¹ Haldane, “Whose Theory? Which Representations?” *Pacific Philosophical Quarterly* 74 (1993), pp. 247-257, at 255.

⁷² “Naturalism”, p. 307. Haldane continues: “What do not fall within its compass, however, are states which simply consist in, or are causal consequences of systematic physical reactions to environmental features, what some philosophers choose to call ‘informational’ states [...] such as the fluctuating temperature of the room (which is a function of the outside temperature and the heat of bodies within it).”

⁷³ “Naturalism”, p. 308.

⁷⁴ “[Intentional phenomena] involve characterization of the object thereby intended. To think of *a* is always to think of it in some way or another—as an *F*, or as being *g*, i.e. as instantiating some sortal or characterizing concept”, “Naturalism”, p. 312.

⁷⁵ Because of this formal identity with extra-mental formal structuring natures, concepts are “naturally meaningful, intentional states and processes,” says Haldane, which “must be such as not to require an interpretation through the assignment of semantic values but somehow be intrinsically significant.” “Mind-World Identity”, p. 24. Cf. “Life of Signs”: “if anything has content or significance, then either it or something else has significance intrinsically; otherwise no adequate explanation of content can be given. The search for a class of meaning-bestowing items is then brought to a halt with the claim that signs are used by persons to express intrinsically contentful intentional states.” (p. 454)

‘determining structural principles’ of both mind and world are unified, and because (ii) in such a union the concept emerges in the knower as a feature that directs us toward its extramental cause and counterpart. The concept’s being “intrinsically significant” just is for the concept to be “essentially (re)presentational” or essentially “of another”: the concept directs away from itself to some other thing. The concept is a determination of the knower that actualizes the knower with some informational content, and as such directs the knower to intelligible reality. Finally, as we have seen, for both Thomas and Haldane we see the involvement of the dual role of the cognitive species, such that the form in the knower must be one with the knower and it must be a likeness of the thing known.

The difference between Haldane and Thomas comes at the point of explaining the representational character of cognition. Here Haldane seems to do something that Thomas does not: Haldane explains representation in terms of formal identity. That is, the reason why a cognitive form represents a form in the world is because the cognitive form is intrinsically representational in virtue of a formal identity with the extramental form. I will briefly present this view as I find it in Haldane.

Earlier I quoted Haldane as saying: “concepts are *natural signs* of their extensions *in virtue of* the isomorphism of their intensions and the character of the corresponding natures and properties.”⁷⁶ Here we see that for Haldane (i) an “intrinsically representational” state is explained by the fact that the state is, of its own nature, a sign of something else, and (ii) signhood is explained in terms of formal identity. A concept is a natural sign of its object *because* a concept is isomorphic with properties of a thing, some “intrinsically intelligible” feature of the world. Thus Haldane says that “mental reference is only possible because of

⁷⁶ “Mind-World Identity Theory”, 1993, p. 25, my emphasis on “*in virtue of*”.

the possession by subjects of cognitive features (concepts) that correspond in point of natural similarity (that is formal identity) to properties of things in the world.”⁷⁷

This is Haldane’s view that concepts are the mental counterparts of real-world properties: concepts and properties are “formally identical”. The only and crucial distinction between them is that a property is not “intentional”: a property does not *represent* anything. Properties “belong to” something else, but they are not “about” anything else:

A property is intrinsically attributive. Its character is constitutive of it. However, the parallel [with concepts] is strictly limited, for in the case of a concept its essential nature consists in reference to something else: a property or a particular. A concept *is* a way of something’s being presented to a mind.⁷⁸

In contrast to a property, a concept is “essentially (re)presentational” or “intrinsically intentional”. This intrinsic intentionality, for Haldane, “is explained by the theory of concepts as abstracted general natures existing *in esse intentionali*. The exercise of a concept in thought or language *is* the actualization of something intrinsically intentional.”⁷⁹ In other words, a concept is representational because it exists *in esse intentionali*. *Esse intentionale* is that mode of being that is “intrinsically” representational, and, because a concept *in esse intentionali* is formally identical to some nature existing *in esse naturali*, the concept is properly said to be “about” that nature.

Haldane takes this very picture to be Thomas’s own “elegant” solution to the question of intentionality or the intrinsic significance of thought; he reads Thomas as saying that

⁷⁷ “Mind-World Identity”, p. 26, Haldane’s parentheses.

⁷⁸ “Naturalism”, p. 313.

⁷⁹ “Mind-World Identity”, pp. 23-24; at the end of this quotation, note 25, p. 36, Haldane references his “Putnam on Intentionality” for more on this line of thought.

“intentional states are structured by general features derived from the subject’s transactions with the environment in which these features are also exemplified.”⁸⁰

However, I see Thomas as doing something very different here with respect to representation. To speak of knowledge as a “transaction” with the environment invokes Thomas’s teaching that knowledge is a kind of “assimilation” of the knower to the known, such that the knower becomes like the thing known in point of form. “Assimilation”, for Thomas, involves a special mode of likeness pertaining to cognition as such. That is, for Thomas, ‘*assimilatio*’ indicates an “intrinsically representational” mode of being.

Thomas teaches that ‘likeness’ or ‘*similitudo*’ is said in many ways,⁸¹ and he has a discussion that pertains especially to cognition. There he says there are two ways something might exist as a likeness. First, “likeness between two things is according to agreement in form”,⁸² where this “likeness concerns an agreement or sharing of form, and there are many sorts of likeness corresponding to the many ways of sharing form”.⁸³ This sort of likeness can hold between any two individuals of the same species, two dogs, say, or even in instances of causation where the likeness of an agent is somehow in the patient, as when the heat of fire is found in the thing heated. This sort of “natural” likeness is contrasted with a “cognitive” mode of likeness:

A likeness of one thing can be found in another in two ways: in the first way, in accordance with natural being, as when the heat of a fire is found in the thing heated by the fire; the second way is according to cognition, as when the likeness of fire is in sight or touch.⁸⁴

⁸⁰ “Life of Signs”, pp. 469-470.

⁸¹ Cf. *ST* 1.4.3 *in corpore*.

⁸² *DV* 8.8: “*similitudo autem inter aliqua duo est secundum convenientiam in forma*”.

⁸³ *ST* 1.4.3: “*similitudo attendatur secundum convenientiam vel communicationem in forma, multiplex est similitudo, secundum multos modos communicandi in forma*.”

⁸⁴ *SCG* 2.46: “*Similitudo autem unius invenitur in altero dupliciter: uno modo, quantum ad esse naturae, sicut similitudo caloris ignei est in re calefacta per ignem; alio modo, secundum cognitionem, sicut similitudo ignis est in visu vel tactu.*”

This “likeness of cognition” is a sort of representation, which Thomas contrasts with agreement as to nature, and this representation is required, as we saw in a similar quote earlier, as a necessary condition of cognition:

The likeness holding between two things can be understood in two ways. In one way, it can be understood as an agreement in nature. This sort of likeness is not required between cognizer and cognized. [...] In another way, however, it can be understood as representation, and this sort of likeness is required between cognizer and cognized.⁸⁵

The distinction between the terms ‘assimilation’ and ‘likeness’, then, is that assimilation is the likeness of *representation*, and this is special to cognitive being as opposed to cases of *natural* or substantial form: “knowledge is by assimilation, likeness however concerns form.”⁸⁶ It is not some stone itself in the soul, but the *cognitive likeness* of the stone.

Another way of recognizing this distinction is to notice that sameness of form in a natural way is insufficient for cognition:

The likeness of nature is not a sufficient cause of knowledge; otherwise what Empedocles said would be true, namely, that the soul needs to have the nature of all in order to know all. But knowledge requires that the likeness of the thing known be in the knower, as a kind of form thereof. Our passive intellect, in the present state of life, is such that it can be informed with likenesses abstracted from phantasms.⁸⁷

⁸⁵ *QDV* 2.3 ad 9: “similitudo aliquorum duorum ad invicem potest dupliciter attendi. Uno modo secundum convenientiam in natura; et talis similitudo non requiritur inter cognoscens et cognitum [...] Alio modo quantum ad repraesentationem; et haec similitudo requiritur cognoscentis ad cognitum.”

⁸⁶ *ST* 1.5.4 ad 1: “*cognitio fit per assimilationem, similitudo autem respicit formam.*” Cf. *SCG* 1.65 n9: “Now all knowledge is achieved by the assimilation of the knower and the thing known [...] and] this assimilation in human knowledge is achieved by the action of the sensible thing on the human cognitive powers.” (*Cognitio autem omnis fit per assimilationem cognoscentis et cogniti [...] et] assimilatio in cognitione humana fit per actionem rerum sensibilium in vires cognoscitivas humanas [...].*)

⁸⁷ *ST* 1.88.1 ad 2: “*similitudo naturae non est ratio sufficiens ad cognitionem, alioquin oporteret dicere quod Empedocles dixit, quod anima esset de natura omnium, ad hoc quod omnia cognosceret. Sed requiritur ad cognoscendum, ut sit similitudo rei cognitae in cognoscente quasi quaedam forma ipsius. Intellectus autem noster possibilis, secundum statum praesentis vitae, est natus informari similitudinibus rerum materialium a phantasmatis abstractis.*” Cf. *ST* 1.76.2 ad 4: “What is thought about is not present in the intellect by itself, but only according to its likeness.” (*Id enim quod intelligitur non est in intellectu secundum se, sed secundum suam similitudinem.*)

What is clear is that the ‘similitudo’ or likeness required for knowledge, says Thomas, is not a likeness of nature but rather a likeness unique to cognition, what he will call a likeness of representation.⁸⁸ Continuing along this line of anti-Empedoclean reasoning, Thomas writes:

The conformity of the cognizer to what is cognized (which conformity achieves cognition) is not to be understood in terms of sameness (*identitas*).⁸⁹ On the contrary, it is to be understood in terms of representation. In this sense, it is not necessary that something is in the cognizer in the same way it is in the cognized.⁹⁰

Thomas reasons, then, that since all cognition takes place through some form distinct from natural form, and since these forms are likenesses of the thing known, this is a special cognitive mode of likeness. Thus: “all cognition occurs through the *assimilation* of the knower to the thing known.”⁹¹

So Thomas employs a special mode of being to speak of cognitive likeness, and this differentiates cognitive likeness from cases of natural likeness. Adopting his terms,⁹² “similitudo” concerns likeness of form, such as could hold between two individuals of the same kind. “Assimilation”, on the other hand, concerns a specifically cognitive mode of

⁸⁸ Thomas in a cryptic passage says that if a thing were known primarily in terms of its natural similarity to the knowing power, then “sight would perceive hearing rather than colour”, presumably because sight and hearing are both sensory powers and so naturally alike in this respect. In this passage about sight and colour, Thomas says that a knowing power knows its proper object on account of an aptitude (*convenientia*) for that object. The power is suited to register or detect a certain mode of being. *ST* 1.85.8 *ad* 3: “*similitudo per quam intelligimus, est species cogniti in cognoscente. Et ideo non secundum similitudinem naturae ad potentiam cognoscitivam est aliquid prius cognitum, sed per convenientiam ad obiectum, alioquin magis visus cognosceret auditum quam colorem.*” Notice this teaching that a power has a certain natural aptitude for or attunement to a certain mode of being is consonant with the presentation in the preceding chapters.

⁸⁹ The term ‘*identitas*’ is broader than our ‘identity’, and in this case it means “sameness” in the sense of “natural likeness”. See Robert W. Schmidt, *The Domain of Logic According to St. Thomas Aquinas* (The Hague: Martinus Nijhoff, 1966), pp. 195-96. Also see Brower and Brower-Toland, note 50, p. 228.

⁹⁰ *DV* 2.5 *ad* 7: “*applicatio cogniti ad cognoscentem, quae cognitionem facit, non est intelligenda per modum identitatis, sed per modum cuiusdam repraesentationis; unde non oportet quod sit idem modus cognoscentis et cogniti.*”

⁹¹ *DV* 8.5: “*omnis cognitio est per assimilationem cognoscentis ad scitum,*” my emphasis.

⁹² Thomas does not reserve the term ‘*assimilatio*’ for discussion of cognition, since ‘*similitudo*’ is often used here too; but Thomas does use them to highlight the important distinction between cognitive and natural likeness.

being. A formal likeness or formal identity in Haldane's sense would hold of two individuals of the same species, two dogs, say. So Haldane would require a further distinction to explain representational "aboutness" or content.

Haldane sees this, and his suggestion, similar to Thomas's own move in this situation, is that the distinct modes of being (i.e. in the mind and in the world) offer the missing element. Mental being is representational being:

If one holds that the relationship between the conceptual structure of a judgment and the sortal structure of the natural situation it concerns is one of formal identity, then this is pretty much akin to the relationship between two natural situations of the same kind—the only difference residing in the mode of being of the structuring principles.⁹³

According to Haldane, as we have seen, the "conceptual structure" exists *in esse intentionali* and the "natural situation" exists *in esse naturali*. Thus *esse intentionale* is the special mode of being that provides the definitive mark of the cognitive. Thus he writes in his most recent presentation of the identity thesis:

It means that when I think of something, that which makes my thought to be the kind of thought it is—a dog thought, say—is formally identical to that which makes the object of my thought to be the kind of thing it is, a dog. Each actuality (thought and object) has a structuring principle (concept and substantial form); and these principles, though distinct in the modes of their actualisation, are specifically alike. The form of dog exists naturally and substantially (*in esse naturale*) [sic] in the dog, and intentionally and predicatively (*in esse intentionale*) [sic] in the thought. [...] my thinking takes on a general feature dogness, which serves as a concept directing me to a particular or to the class.⁹⁴

Thus in Haldane's presentation the distinction between thought and world is the distinction between *esse intentionale* and *esse naturale*. A form existing *in esse naturali* is not cognizant

⁹³ See his "Mind-World Identity", p. 33.

⁹⁴ See his "Realism with a metaphysical skull" in *Hilary Putnam: Pragmatism and Realism*, James Conant and Urszula Zeglen, eds., (London: Routledge, 2002): 97-104, at 102.

just because it does not exist *in esse intentionali*. *Esse intentionale*, then, is the mode of being that uniquely enjoys representation.

What I wish to highlight here is that Haldane's presentation is a form of begging the question. We can see this by first noticing that Haldane speaks in two different ways about one and the same item. Under one description, *esse intentionale* is a representation of some form existing *in esse naturali*. Under another description, the form existing *in esse intentionali* is representational because of its formal identity with the form *in esse naturali*: a thing is a representation of another thing just in case those things are identical in form.

Here is the question-begging presentation. The "intrinsic representation" of *esse intentionale* is explained in terms of formal identity: x (concept) represents y (thing) just in case x and y are formally identical. Now if formal identity explains representation, then there is no reason why y (thing) shouldn't also represent x (concept): y is formally identical with x , and so the condition for representation holds. This move is blocked by saying that y does not represent x because y exists with natural being (*esse naturale*), and x represents y because x exists with intentional being (*esse intentionale*). *Esse intentionale*, then, supplies the missing representational ingredient, and is the criterion of cognition. But if *esse intentionale* supplies the missing representational ingredient, then formal identity does not. So now *esse intentionale* is representational not because of its formal identity with *esse naturale*, but for some other reason. Yet to explain how *esse intentionale* supplies the missing representational ingredient, Haldane says it is because of formal identity with *esse naturale*.

As such, the view begs the question: if *esse intentionale*'s representational character is explained by formal identity, then why doesn't formal identity between two things *in esse naturali* suffice for representation? The answer: a special mode of being is needed for

representation. But what makes this mode of being representational? Haldane's answer is "formal identity". This will not do.

If we are going to say, with Thomas, that the cognitive is an "intrinsically representational" mode of being, we must look for something in addition to formal identity to supply this special mode of being. There seems to be no reason why formal identity alone accounts for why a thing is cognizant or intentional. Moreover, if the presentation in chapters two and three is correct, there seems to be no reason why *esse intentionale* is itself representational. So there seems to be a problem in Haldane's presentation of conjoining *esse intentionale* and formal identity to explain the representational character of the cognitive.

As I will argue in the following chapter, Thomas understands cognizance as a special mode of being firmly grounded in *esse immateriale*, and *esse intentionale* is something of a junior partner. The representational character of cognition is not explained by formal identity, but is rather a special and *sui generis* mode of being that is representational as such. The cognitive mode of being is, as I will show in the final chapter, best described as *esse intentionale* existing *in esse immateriali*.

§6.5: Conclusion

In the present chapter I addressed two problems with Haldane's mind-world identity thesis and suggested some amendments. I suggested first that the tension between how mind and world are identical yet distinct can be resolved by returning to Thomas's presentation, and second, that intentionality should not be described or explained in terms of formal identity, but should be described somehow as a uniquely cognitive mode of being.

In the final chapter I try to offer the account of how intentionality should be presented in a thomistic theory of knowledge. If the foregoing arguments are correct, then Thomas

thought immateriality was a necessary but insufficient condition of cognizance, and that intentional being existing in the thing and in the medium is exploited by a cognitive power. I will now argue that neither *esse immateriale* nor *esse intentionale* is by itself a sufficient condition for cognizance, which suggests that cognizance is not reducible to either of these modes of being.⁹⁵ Insofar as it is a feature that is reducible neither to immaterial being nor to intentional being, knowledge or cognizance is a *sui generis* and irreducible aspect of being.

The doctrine of *esse intentionale* I will present is something I believe Haldane already finds largely agreeable. The discussion will show that the cognizance-specific feature of representation is achieved only when *esse intentionale* is rendered immaterial. This will involve an argument showing, contrary to Haldane's current presentation, that the distinction between a species causing knowledge and a form in nature is not given just as the distinction between *esse intentionale* and *esse naturale* but rather between a determinant of nature *in esse materiali* and a determinant of cognition *in esse immateriali*. Haldane already adheres to Thomas's doctrine that a form enjoying cognitive being (existing "according to the mode of the knower") is by that fact representational or intentional. I aim in the next chapter to show how Thomas presents intentionality as *esse intentionale* achieving immaterial existence in the soul, and to show how this is commensurate with and can contribute to John Haldane's advancement of a thomistic theory of cognition.

⁹⁵ I suspect that Thomas understood cognizance as a basic mode of participation in the divine light, but exploring that idea goes beyond what I wish to do here. I mention in passing that I do not mean to overlook Thomas's doctrine that our "natural light" is sufficient for much cognition, but rather to say that even our natural light is participation in divine light, whose fullness of being is the *sine qua non* of cognition. For example, Thomas will appeal to the participatory status of the agent intellect. E.g., *QDA 5*: "[...] *intellectus agens sit quasi quaedam virtus participata ex aliqua substantia superiori, scilicet Deo. Unde philosophus dicit quod intellectus agens est ut habitus quidam et lumen; et in Psal. IV, dicitur, 'signatum est super nos lumen vultus tui, domine'.*"

Chapter 7: *Esse intentionale, esse immateriale, and Cognizance*

According to John Haldane *esse intentionale* is an “intrinsically representational” mode of being. As such, the distinction between mind and world is between a representational mode of being, *esse intentionale*, and a non-representational mode, *esse naturale*. But if my presentation in chapters three and four is correct, then *esse intentionale* cannot by itself be the representational criterion of the cognizant, since it can exist in non-cognizant modes. Further, if my argument in the previous chapter is sound, then formal identity cannot by itself explain the representational character of cognition. It remains, then, to suggest what accounts for the representational mode of being unique to cognition.

In this final chapter I present such a suggestion, according to which the distinction between a species causing knowledge and a form in nature is not given as the distinction between *esse intentionale* and *esse naturale* but rather between a determinant of nature *in esse materiali* and a determinant of cognition *in esse immateriali*. This will do justice to the many distinctions within the complete presentation, and show that the cognitive representational mode of being is best described, within the Thomist scheme, as *esse intentionale* existing *in esse immateriali*.

In the last chapter we saw that both Haldane and St. Thomas think representation is the distinguishing mark of the cognitive. But unlike Haldane, Thomas does not equate representation with *esse intentionale*. On the contrary, Thomas presents *esse intentionale* as a mode of being common to both mind and world. Accordingly, Thomas gives the distinction between cognizance and non-cognizance in very different terms from Haldane’s *esse intentionale/esse naturale* distinction. Thomas distinguishes mind and world in terms of the different grades of perfection of *esse intentionale* in thought and thing. According to Thomas, *esse intentionale* reaches its perfection when it achieves immaterial existence in the

soul, and it is precisely in virtue of this immaterial existence that *esse intentionale* becomes representational.

In the first section of this chapter, I show why Thomas might be thought to present *esse intentionale* as the defining mark of knowledge as such. Here I focus on Haldane's reading in particular, and I raise a problem specifically for Haldane's reading of the texts. In the second section I argue that this '*esse intentionale*-as-representational' view cannot account for Thomas's teaching that *esse intentionale* exists extramentally, i.e. non-representationally. There I present Thomas' view that *esse intentionale* as such is not equivalent to the cognitive or representational. In the final section, I show how non-representational *esse intentionale* plays a key role in Thomas's teaching on representation itself. I conclude that in order to capture what is most desirable in a thomist theory of knowledge—a description of how thought is a cognitive realization of features in the world—*esse intentionale* must work in subordinate cooperation, as it were, with the *esse immateriale* that runs throughout all cognitive being.

§7.1: *Esse intentionale and the Cognitive As Such*

We have seen Thomas say something is cognizant just in case it is able to possess, in addition to its own form, the form of some other thing.¹ When I am actually knowing, I possess the form of some other thing. The form of the thing known has a mode of “being in the knower”, a representational mode which is the distinguishing mark of the cognitive as such. It is not just John Haldane but many scholars who say this distinguishing mode of

¹ *ST* 1.14.1: “[...] the cognizant are distinguished from the non-cognizant in this respect, that the non-cognizant have nothing but their own form alone, whereas a cognizant entity is disposed to have the form of another thing as well. For the species of the thing known is in the knower.” ([...] *cognoscentia a non cognoscentibus in hoc distinguuntur, quia non cognoscentia nihil habent nisi formam suam tantum; sed cognoscens natum est habere formam etiam rei alterius, nam species cogniti est in cognoscente.*)

being is *esse intentionale*.² It seems to me, however, that Thomas does not feature *esse intentionale* as the distinguishing mark of the cognitive. Rather, for Thomas *esse intentionale* features in cognition as something of a junior partner to *esse immateriale*.

Haldane's reasons and account of why he thinks Thomas holds that *esse intentionale* is the mark of the cognitive are clearly stated in his work. For Haldane, the primary reason for thinking that *esse intentionale* is the mark of the cognitive is his thought that it is the bearer of the feature of representation or intentionality; a cognitive being represents or is "about" some other thing, while a non-cognitive being cannot represent or be about anything else. This feature of "aboutness" is what Thomas means by the knower's possessing the form "of another thing": the form possessed is itself "of another".³ It is intrinsically representative of something other than itself.

Equating 'intentionality' and 'representation', here, and as I have throughout, indicates that we are discussing cognizance as such, i.e. that special mode of being that is representational and intentional. To be sure, something might be called a 'representation' without being intentional; e.g., the likeness of the queen on a coin represents the queen, but this likeness is not cognitive or intentional. The knowledge that the coin has a representation of the queen, on the other hand, is intentional. We can express this by saying that only

² See especially John Haldane, references cited throughout this paper. See also Jeffrey E. Brower & Susan Brower-Toland, "Aquinas on Mental Representation: Concepts and Intentionality", *Philosophical Review* 117 (2008), pp. 193-243; Paul A. MacDonald, jr., "Direct Realism and Aquinas's Account of Sensory Cognition", *The Thomist* 71 (2007), pp. 343-78, at p. 347; Peter Geach, "Form and Existence", reprinted in *Aquinas's Summa Theologiae: Critical Essays*, Brian Davies, OP, ed., (Rowman and Littlefield, 2006), pp. 111-128, at p. 126; Robert Pasnau, *Theories of Cognition in the Later Middle Ages* (Cambridge, 1997), pp. 38ff; Brian Davies, OP, *The Thought of Thomas Aquinas* (Oxford: Clarendon Press, 1992), pp. 127-28 (though Davies well stresses the importance of immateriality to Aquinas's account of cognition, he still says "[knowledge] occurs when the form of a material thing comes to have *esse intentionale* as opposed to *esse naturale*."); Yves SIMON, *An Introduction to the Metaphysics of Knowledge*, Vukan Kuic and Richard J. Thompson, trs., (New York: Fordham University Press, 1990), esp. pp. 12-13; Jean-Luc Solère, "La notion d'intentionnalité chez Thomas d'Aquin", *Philosophie* 24 (1989), pp. 13-36.

³ Cf. The doctrine of the "quo" of the cognitive form or *species*, at e.g., *ST* 1.85.2. See also *DV* 9.4, especially *ad* 4, for the doctrine that the *species* is a *signum* in virtue of which it is an "*id quo*".

cognizant being can exploit what are in themselves “representations” or “signs”. So we may speak of representations that are not themselves modes of cognizant being. Thus being a representation is broader than representational being. The distinction is the same as Thomas draws between likeness that holds between any like things, and the assimilation unique to cognition: the likeness in cognition is a mode of representational being. Because this is unique to cognition, I speak of intentionality as a *sui generis* mode of being. The nature of this cognitive mode of being is our present target of attention.

For Haldane the cognitive mode of being, the mode that is “intrinsically representational”, is *esse intentionale*:⁴ a species *in esse intentionali* represents an extramental form *in esse naturali*,⁵ and as such *esse intentionale* is the representational mode of being proper to cognizance. On this view, the distinction between the cognizant and the non-cognizant is the same as the distinction between the representational *esse intentionale* and the non-representational *esse naturale*.⁶

This use of the intentional/natural distinction is the main reason for thinking that *esse intentionale* is the mark of the cognitive. This use further takes support from a curious text

⁴ John Haldane, “Mind-World Identity Theory and the Anti-Realist Challenge”, in *Reality, Representation and Projection*, J. Haldane and C. Wright, eds., (Oxford, 1993), pp. 15-37, at p. 26.

⁵ For his developments of this view, see, e.g., Haldane, “Mind-World Identity Theory”, *op. cit.*; John Haldane, “Forms of Thought”, in *The Philosophy of Roderick Chisholm*, Lewis Edwin Hahn, ed., (Illinois: Open Court, 1997), pp. 149-170; John Haldane, “Realism with a Metaphysical Skull”, in *Hilary Putnam: Pragmatism and Realism*, James Conant and Urszula Zeglen, eds., (London: Routledge, 2002), pp. 97-104.

⁶ Haldane acknowledges a debt to Peter Geach’s work for Haldane’s introduction to the notion of individualized forms. I think also that Haldane first took from Geach the notion of the *esse intentionale* / *esse naturale* distinction as marking the cognitive from the non-cognitive. Cf. “What makes a sensation or thought of an X to be *of an X* is that it is an individual occurrence of the very form or nature which occurs in X—it is thus that our mind ‘reaches right up to reality’; what makes it to be a *sensation* or *thought* of an X rather than an actual X or an actual X-ness is that X-ness here occurs in the special way called *esse intentionale* and not in the ‘ordinary’ way called *esse naturale*.” G. E. M. Anscombe and P. T. Geach, *Three Philosophers* (Oxford, 1961), p. 95. I notice that for Geach, the forms are not ‘numerically identical’: “Though the essences of this cat and that cat are not identical—they contain different individualized forms—they are exactly alike, and so a single mental likeness (*species*) in a man’s mind can correspond to both.” (p. 84)

on angelic cognition,⁷ in which Thomas presents various modes of being relevant to cognitive being. The issue is raised in a broader discussion of how angels know things other than themselves (in this case, other angels). It looks as if what Thomas says is that *esse intentionale* is the purely representational or cognitive mode of being distinct from the immaterial. Thomas writes:

One angel knows another by the species of such angel existing in his intellect. [This species] differs from the angel whose likeness it is, not according to *esse materiale* and *esse immateriale*, but according to *esse naturale* and *esse intentionale*. The angel is himself a subsisting form in his natural being (*in esse naturali*), but his species in the intellect of another angel is not so, for there it possesses only an intelligible existence (*esse intelligibile*). This is like the case of the form of colour in a wall having *esse naturale*, whereas in the transmitting medium it has only *esse intentionale*.⁸

Here Thomas is concerned with the distinction between the immaterial being of the known angel and the immaterial being of the cognitive species by which the knowing angel knows. The problem Thomas sees is that since an angel and a cognitive species are both immaterial, they are not distinguished as species are usually distinguished from substantial forms. In human knowers, the cognitive form is distinct from the substantial form of the thing known in virtue of the cognitive form's immateriality. In the case of the angel, the known angel has its own immaterial being—it is “a certain subsisting form”⁹—and the

⁷ *ST* 1.56.2 *ad* 3, quoted below; To name just a few relevant discussions of this text in the later twentieth century: Anthony Kenny, “Intentionality: Aquinas and Wittgenstein”, in his *The Legacy of Wittgenstein* (Oxford, 1984), pp. 61-76, at p. 65; Gerard Casey, “Immateriality and Intentionality”, in *At the Heart of the Real*, Fran O'Rourke, ed., (Dublin: Irish Academic Press, 1992), pp. 97-112, *passim*; Robert Pasnau, *Theories of Cognition in the Later Middle Ages* (Cambridge, 1997), pp. 38ff.

⁸ *ST* 1.56.2 *ad* 3: “*unus Angelus cognoscit alium per speciem eius in intellectu suo existentem, quae differt ab Angelo cuius similitudo est, non secundum esse materiale et immateriale, sed secundum esse naturale et intentionale. Nam ipse Angelus est forma subsistens in esse naturali, non autem species eius quae est in intellectu alterius Angeli, sed habet ibi esse intelligibile tantum. Sicut etiam et forma coloris in pariete habet esse naturale, in medio autem deferente habet esse intentionale tantum.*”

⁹ *ST* 1.56.1: “An angel, however, since it is immaterial, is a certain subsisting form, and in virtue of this it is actually intelligible. Hence it follows that an angel understands itself by its own form, which is its substance.” (*Angelus autem, cum sit immaterialis, est quaedam forma subsistens, et per hoc intelligibilis actu. Unde*

species has a different but still immaterial being in the knower. Accordingly, Thomas frames the distinction between the thing known and the cognitive species in terms of *esse intentionale*: Thomas says the known angel has “natural being” (*esse naturale*), while another angel’s knowledge of him has “intentional being” (*esse intentionale*).

The point at issue in the angel text seems to be the question of the representational or intentional character of knowledge: what distinguishes cognitive being from some non-cognitive mode of being now that immateriality is common to both?

Thomas seems to say that the representational character is precisely that which distinguishes the immaterial species from the immaterial nature.¹⁰ The species causing knowledge is distinguished from the natural being of the angel in virtue of the species’ being representational or “about” some thing. The angel itself is immaterial and actually intelligible¹¹ but it is not, in virtue of these features, “about” anything else. Thus Thomas appeals to *esse intentionale* over and above *esse immateriale* when here introducing this special feature of knowledge being “about” some other thing.

This text is not the only place where Thomas can be seen to speak of *esse intentionale* specifically in terms of the distinction between cognizance and non-cognizance. For

sequitur quod per suam formam, quae est sua substantia, seipsum intelligat.) cf. *SCG* 2.98: “separate substances are according to their own nature actually existing as intelligible being” (*Substantiae autem separatae sunt secundum suam naturam ut actu existentes in esse intelligibili*). See also *DV* 8.6.

¹⁰ The comparative example Thomas gives suggests that he is making the intentional/natural distinction also to serve as the distinction between cognizance and non-cognizance: he likens the situation of the distinction between angel and species to the difference between the form of colour existing naturally in a wall and the form of colour existing intentionally in the medium. Cf. a parallel text at *QDSC* 1 ad 11: “The intelligible species which is in the intellect of the understanding angel differs from the angel understood not according to abstraction from matter and concrete material conditions, but rather just as intentional being differs from an entity that has a fixed being in nature; just as the species of colour in the eye differs from the colour that is in a wall.” (*species intelligibilis quae est in intellectu Angeli intelligentis, differt ab Angelo intellecto non secundum abstractum a materia et materiae concretum, sed sicut ens intentionale ab ente quod habet esse ratum in natura; sicut differt species coloris in oculo a colore qui est in pariete.*)

¹¹ *ST* 1.56.1, *op. cit.*

example, in his commentary on *De anima* he contrasts *esse intentionale* with *esse naturale* in sensation. He says:

The senses receive the form without matter, which form in the sense has a different mode of being from that which it has in the thing sensed. For in the sensible thing it has a natural mode of being (*esse naturale*), but in the sense it has an intentional and spiritual mode of being (*esse intentionale et spirituale*).¹²

Again the question is the difference between a knower and a non-knower, and this distinction is explained in terms of intentional and natural being.¹³ Once again the introduction of cognizance seems to require the mention of *esse intentionale*.

It is little wonder then, that John Haldane and others believe that *esse intentionale* is the defining feature of knowledge as such. Thomas uses the term in places where he is distinguishing knowledge as such from something that cannot know, and the distinction seems to highlight precisely what goes by the name ‘intentionality’ today: the representational feature of “being about”. So it is that *esse intentionale* is treated as tantamount to “aboutness”; and since the representational feature of “aboutness” is the mark of the cognitive, *esse intentionale* is treated as its special mode of being.

The matter is not quite so clear, however. By the term ‘*esse intentionale*’, Haldane just means ‘representational’, and he claims this view is in Thomas’s *De veritate* 8.4, translating as follows (the bracketed insertion is his own):

¹² *InDA* 2, lect 24: “*sensus recipit formam sine materia, quia alterius modi esse habet forma in sensu, et in re sensibili. Nam in re sensibili habet esse naturale, in sensu autem habet esse intentionale et spirituale.*”

¹³ I notice that Foster and Humphries render ‘*esse naturale*’ here as “a material mode of being”, which I think is misleading. Translating ‘*esse naturale*’ as ‘material being’ makes it seem as if the distinction Thomas is highlighting here is the distinction between immateriality and materiality. But Thomas has already discussed the distinction between materiality and immateriality leading up to this passage, and now he is introducing the new distinction between natural and intentional modes of being. Moreover, he uses this distinction here in the same way as he does in the passage on angelic cognition, where the emphasis is on intentionality. See *Aristotle’s De Anima in the version of William of Moerbeke and the Commentary of St. Thomas Aquinas*, K. Foster and S. Humphries, trs., (New Haven: Yale University Press, 1954). (By way of contrast, Pasnau translates ‘*esse naturale*’ as “natural being”. See his translation of Aquinas, *A Commentary on Aristotle’s De anima*, Robert Pasnau, tr., (New Haven and London: Yale University Press, 1999), p. 283.)

The intelligible species [concept] is a similitude of a thing's essential nature, and is in some fashion the very essence and nature of it but existing intentionally and not physically.¹⁴

In fact, this passage is not in *De Veritate* but rather in *Quaestiones de quolibet*, where Thomas is addressing a question on created nature, an article on the nature of bodies.

Moreover, I think a better translation of the passage is the following:

The intelligible species is a likeness of the very essence of the thing, and is in a way the same quiddity and nature, [but] according to intelligible being (*esse intelligibile*), not according to natural being (*esse naturale*), which latter is the being it has in the thing.¹⁵

What Haldane translates as “existing intentionally” is Thomas’s ‘*esse intelligibile*’. This translation supposes that what Thomas means here by ‘*esse intelligibile*’ is the intentional-representational. From this, Haldane concludes that *esse intentionale* is the intrinsically representational mode of being that defines the cognitive.

But Haldane’s translation elides a distinction between two ways the term ‘*esse intelligibile*’ is used. Recall Thomas’s definition of knowledge as being able to possess the form of another,¹⁶ where the dual role of the species is its presence and its representational content. Thomas explains formal presence in terms of the immaterial being or perfection of the form in the knower, while the representational role is described as the informational content of the knowledge.¹⁷ Thomas uses ‘*esse intelligibile*’ to highlight either the feature of

¹⁴ John Haldane, “Mind-World Identity Theory”, *op. cit.*, at p. 22.

¹⁵ *QQ* 8.2.2: “Unde species intelligibilis est similitudo ipsius essentiae rei, et est quodammodo ipsa quidditas et natura rei secundum esse intelligibile, non secundum esse naturale, prout esse in rebus.”

¹⁶ *ST* 1.14.1, *op. cit.*

¹⁷ Thomas makes this distinction explicit elsewhere, highlighting presence and content as the two features required of a species causing knowledge, e.g., *DV* 3.1 *ad* 2: “For a species to be a means of knowledge there are two requirements. Namely, it must represent the thing known, which belongs to the species insofar as it has a relationship to the thing known. And, it must have spiritual or immaterial being, which belongs to a species insofar as it has its being in the knower.” (*ad speciem quae est medium cognoscendi duo requiruntur: scilicet repraesentatio rei cognitae, quae competit ei secundum propinquitatem ad cognoscibile; et esse spirituale, vel immateriale, quod ei competit secundum quod habet esse in cognoscente.*)

representation or the feature of immateriality. When he specifically deals with the distinction between mind and world he uses ‘*esse intelligibile*’ to highlight immateriality as that which marks the distinction between the cognizant and the non-cognizant. For example, in the above *Quodlibetal questions* passage, Thomas seems not to be highlighting the intentionality of the being, but rather the cognizance of the being, and contrasting it with the non-cognizant. This is to say that what Thomas is highlighting is not the intentionality or “aboutness” of cognizance, but rather its immateriality as it exists or is present in the knower.

It is normal for Thomas to speak of the distinction between the cognizant and non-cognizant in terms of the material and immaterial. Take for example this very similar passage:

For it is quite true that the mode of understanding, in one who understands (*in intelligendo*), is not the same as the mode of a thing existing (*in existendo*): since the thing understood is immaterially in the one who understands, according to the mode of the intellect, and not materially, according to the mode of a material thing.¹⁸

As Thomas here presents the distinction between forms in thought and world, the emphasis is not on *esse intentionale* but rather on *esse immateriale*. Cognizance per se is presented not in terms of intentionality but in terms of its immateriality, as distinct from the materiality of non-cognizant nature. Indeed, the question of the cognizant form’s having existence *in esse intentionali* does not enter into the picture at all.

Now in the text on angelic cognition the term ‘*esse intentionale*’ seems to be put to a specific use: the question is how the immaterial species causing knowledge differs from the immaterial nature of the known angel. It seems that Thomas uses ‘*esse intelligibile*’ interchangeably with ‘*esse intentionale*’, insofar as to be intelligible is just to be intentional

¹⁸ *ST* 1.85.1 *ad* 1.

or representational. It further seems that ‘*esse intelligibile*’ highlights intentionality—that the thought is *of* or “about” something—, whereas the immaterial and natural being of the angel itself is not about anything. So the reason Thomas features *esse intentionale* in the text is because the problem is how an immaterial mode of “being about” (*esse intentionale*) is distinguished from an immaterial mode of “being such” (*esse naturale*). Thus Thomas is highlighting the representational feature of knowledge, as opposed to its status as present in and to the knower.

However, I do not think this is how ‘*esse intentionale*’ features in this text: I will come to this point shortly (§7.2). Presently I note that even if it *were* used this way (i.e., as equivalent to ‘*esse intelligibile*’), we couldn’t conclude from this usage that *esse intentionale* as such is the criterion of cognizance, since in the case of the angel the *esse intentionale* in question exists at the same time *in esse immateriali*. In other words, the angel text does not show that *esse intentionale* as such is the mark the cognitive. Rather, at most it shows that the mark of the cognitive could be *esse intentionale* existing *in esse immateriali* (which, I shall argue, is the proper criterion of cognition). So even though it is representation that distinguishes the cognitive from the non-cognitive, nothing in the angel text permits us to conclude that Thomas equates representation with *esse intentionale* as such.

Furthermore, Thomas does not as a rule equate *esse intentionale* and *esse intelligibile*. This is clear from his doctrine that the *esse intentionale* in the non-cognizant medium is not also *esse intelligibile*: in the non-cognizant medium no being is actually intelligible, only potentially intelligible.¹⁹ Intelligible being is simply “being in an intellect”, being “actually intelligible”; it is a mode of being proper to an intellectual knower as such, and is a feature of

¹⁹ Cf. *InDA* 2, lect 14, where Thomas says the medium can receive intentional being, and *InDA* 2, lect 24 where he says that despite this presence of intentional form, the medium is not sentient or cognitive.

Thomas's doctrine that "the thing known is in the knower according to the mode of the knower".²⁰ Any existence in an intellect is existence *in esse intelligibili*. The "mode of the knower" for Thomas, seems just to mean "a cognitive mode of being" or "being in a cognitive power".²¹ And as Thomas tells us, the presence of a cognitive species, intelligible or sensible, just is a case of knowledge.²² *Intentiones* in the medium, on the other hand, are in no way actually cognitive, and so they have no *esse intelligibile*. *Esse intentionale*, then, cannot be the equivalent of cognitive being considered as such.²³

If this is correct then the *esse intentionale/esse naturale* distinction does not properly distinguish cognizant from non-cognizant modes of being. We may not conclude that *esse intentionale* as such is representational, and so we may not conclude that *esse intentionale* distinguishes the cognizant from the non-cognizant. In fact, the angel text further suggests that what also seems to be needed to distinguish cognition is immateriality.

Accordingly, in the next section I present *esse intentionale* as a mode of being that can come to have representational (i.e. cognitive) being through immateriality: representational being can "happen to" *esse intentionale*. This reading takes account of

²⁰ *ST* 1.14.1 *ad* 3: "Knowledge is according to the mode of the one who knows, for the thing known is in the knower according to the mode of the knower." (*scientia est secundum modum cognoscentis, scitum enim est in sciente secundum modum scientis.*)

²¹ Cf. John F. Wippel, "Thomas Aquinas and the Axiom 'What is Received is Received According to the Mode of the Receiver'", in his *Metaphysical Themes in Thomas Aquinas II* (Washington, D.C.: Catholic University of America Press, 2007), pp. 113-122, esp. pp. 113-118. In this brief discussion, Wippel places due emphasis on the immateriality of cognition.

²² E.g., *ST* 1.14.1. Cf. Thomas speaks of *esse intelligibile* and *esse sensibile* as those modes of being to which intellect and sense stand in potentiality. Thomas writes: "As potentiality to sensible being belongs to corporeal matter, so potentiality to intellectual being belongs to the possible intellect." (*ST* 1-2.50.4 *ad* 2: *sicut potentia ad esse sensibile convenit materiae corporali, ita potentia ad esse intelligibile convenit intellectui possibili.*) Sensible being pertains to sense in virtue of the sensory association with matter, whereas intelligible being pertains only to intellect in virtue of intellect's immateriality.

²³ Cf. Claude Panaccio's reading of a passage in *CT* 41: "[...] oportet quod verbum in nostro intellectu conceptum, quod habet esse intelligibile tantum, alterius naturae sit quam intellectus noster, qui habet esse naturale." Panaccio says: "the mental word is sometimes explicitly attributed a purely intentional mode of existence within the mind." The emphasis on "*quod habet esse intelligibile tantum*" is Panaccio's, indicating that he takes this passage to permit his claim that the *verbum* has "intentional" being as contrasted with natural being. See Claude Panaccio, "Aquinas on Intellectual Representation" in *Ancient and Medieval Theories of Intentionality*, Dominik Perler, ed., (Leiden, Boston, Koln: Brill, 2001), pp. 185-201.

Thomas's teaching that *esse intentionale* has being both mentally and extramentally, suggests what the angel text also seems to suggest in its presentation of the intersections of modes of being, and shows itself to be consistent with other related lines of Thomas's thought.

§7.2: *Esse intentionale Perfect and Imperfect*

My preferred reading of the angel text highlights the role of *esse intentionale* as operating within the domain of *esse immateriale* while ruling it out as the criterion of the cognitive as such. This reading begins from noticing that the text shows that the natural/intentional distinction "cuts across" the material/immaterial distinction.²⁴ This means that either of *esse naturale* or *esse intentionale* can be the mode of being of either a material or an immaterial entity. So, for example, a stone has material existence *in esse naturali*; an angel has immaterial existence *in esse naturali*; an *intentio* in the medium has material existence *in esse intentionali*;²⁵ and, a cognitive species has (grades of) immaterial existence *in esse intentionali*.

In the angel text Thomas is using *esse intentionale* as part of a distinction within *esse immateriale*, namely, between natural and intentional modes of immaterial being. He presents *esse intentionale* as a mode of being within *esse immateriale* to distinguish the

²⁴ This is Robert Pasnau's turn of phrase, in his translation of Thomas's *InDA*, *op.cit.*, p. 85 n4. Cf. "the intentional-natural distinction is orthogonal to the physical-nonphysical distinction." Robert Pasnau, *Theories of Cognition in the Later Middle Ages* (Cambridge, 1997), p. 38.

²⁵ Perhaps another example of the material-intentional is the *intentione* as it exists in the sense organ: Thomas teaches that the *intentione* exists in the sensible species in a 'downgraded' mode of immateriality, but is nevertheless in a way material insofar as it is not 'apprehended' or cognized by the external senses themselves. See *InDA* 2, lect 24, and see Anthony J. Lisska, who discusses this in terms of the notion of an *intentio non-sensata*, in his "A Look at Inner Sense in Aquinas: A Long-Neglected Faculty Psychology", *Intelligence and the Philosophy of Mind*, Proceedings of the American Catholic Philosophical Association 80, Michael Baur, ed., (Virginia: Philosophy Documentation Center, 2006), pp. 1-19. In any case, the examples as I have listed them show the distinction of concern, i.e. between intentional being in cognizant and non-cognizant modes. This reading of Aquinas shows why he would endorse a mode of being that is both material and intentional, contra Peter Sheehan, "Aquinas on Intentionality", in *Aquinas: A Collection of Critical Essays*, Anthony Kenny, ed., (Garden City, NY: Anchor Books, 1969), pp. 307-21.

likeness of the thing known in the knower from the natural being of the known angel. Earlier I said it can seem like what Thomas is highlighting here is the representational role of knowledge. Though this usage would still not secure *esse intentionale* as the mark of the cognitive, it might explain his use of the term ‘*esse intentionale*’. But when placed in line with another of Thomas’s doctrines, it can be seen that Thomas’s use of *esse intentionale* here has nothing to do with representation. Rather, Thomas is presenting how *esse intentionale* features within his doctrine that the “being in a knower” attains a certain immaterial perfection of its being.

In the *Summa contra Gentiles* Thomas presents the angel text’s doctrine and example of colour in the transmitting medium entirely in terms of this perfection of being. He writes:

The forms of sensible things have a more perfect mode of existence in the intellect than in sensible things, for in the intellect they are simpler and extend to more things; thus, through the one intelligible form of man, the intellect knows all men. Now, a form existing perfectly in matter makes a thing to be actually such, such as to be fire, or coloured: if, however, the form does not have that effect, then the form is in that thing imperfectly, as the form of colour in the air carrying it [...].²⁶

The notion of “perfection” used here is the same as we saw Thomas use²⁷ to discuss the perfection of an acorn and the perfection of a knower: there is a fullness of being proper to any thing, and attaining this fullness of being is to attain a perfection. In this text Thomas presents the form of colour existing in the air as an example of *esse intentionale* existing in

²⁶ SCG 2.50: “*Formae rerum sensibilium perfectius esse habent in intellectu quam in rebus sensibilibus: sunt enim simpliciores et ad plura se extendentes; per unam enim formam hominis intelligibilem omnes hominis intellectus cognoscit. Forma autem perfecte in materia existens facit esse actu tale, scilicet vel ignem, vel coloratum: si autem non faciat aliquid esse tale, est imperfecte in illo, sicut forma coloris in aere ut in deferente [...]*.” Fr. Dewan notes that although the Leonine text has printed ‘caloris’ (i.e., ‘heat’), this seems to be a typographical error, since the autograph has ‘coloris’ (i.e., colour). See Lawrence Dewan, OP, “St Albert, St Thomas, and the Intelligible”, unpublished paper, p. 11 note 26. (personal MS Word version)

²⁷ E.g., DV 2.2; 8.6; ST 1.14.4. See the discussion in the previous chapter.

an imperfect mode of being.²⁸ This is contrasted with the form existing in matter that “makes a thing to be such”, i.e. *esse naturale*. If the form does not exist naturally then it exists intentionally. The text further adds that intentional form can exist extramentally, as when the form of colour exists in the medium. This intentional form of colour in the medium, Thomas says, is a kind of imperfect existence, while the intentional form of colour in the knower is, for *esse intentionale*, a kind of perfect existence. That is, it is proper for *esse intentionale* to exist as representational within a knower.

As Thomas presents the doctrine, then, the distinction between perfect and imperfect cuts across the distinction between *esse naturale* and *esse intentionale*. So *esse intentionale* may exist extramentally, and as such, it is said to be “imperfect”. On the other hand, *esse intentionale* is brought to its proper full completion and perfection of being in cognition. This is likewise the perfection of the mode of being of the knower as such. What we see here is that in Thomas’s presentation, *esse intentionale* itself admits of grades of being.

Talk of grades of being is already familiar to us throughout the extended discussion across the chapters. Recall Thomas’s view that there is a middle grade (*medium*) between complete immateriality and materiality, where Thomas locates *esse sensibile*.²⁹ The higher grade is existence without matter and individuating material conditions, where Thomas situates *esse intelligibile*. This higher grade of immaterial being is called “complete” or “perfect” (*penitus*). The immateriality of intellect, then, *in esse intelligibili*, is presented as

²⁸ *Esse intentionale* is the target of our attention in this discussion, to be sure, as Thomas uses that term in precisely this same context in the angel text and also in *InSS* 1.1.5 n 4: “*Sed propter aliam rationem diaphaneitatis in medio perspicuo, sequitur quod medium recipiat alio modo speciem coloris quam sit in corpore colorato, in quo est diaphanum terminatum, ut infra dicitur. Actus enim sunt in susceptivis secundum modum ipsorum: et ideo color est quidem in corpore colorato sicut qualitas completa in suo esse naturali; in medio autem incompleta secundum quoddam esse intentionale; alioquin non posset secundum idem medium videri album et nigrum. Albedo autem et nigredo, prout sunt formae completae in esse naturali, non possunt simul esse in eodem: sed secundum praedictum esse incompletum sunt in eodem, quia iste modus essendi propter suam imperfectionem appropinquat ad modum quo aliquid est in aliquo in potentia*”, my emphasis.

²⁹ See *InDA* 2, lect 5.

having attained a higher degree of perfection, completeness, or fullness of being. Again, this is consonant with Thomas's discussion of the different "intensities" of being, reviewed in chapter two, where he teaches that for a form to exist in an extramental thing is for it to exist with a different intensity from a form existing in cognition.³⁰

What I wish to highlight here is that this perfected mode of being is something that happens to *esse intentionale* insofar as the latter comes to have the immaterial being of cognition. Thus we find Thomas saying that a thing is better known the more it is immaterial: the more immaterial the more perfected.³¹

The perfect/imperfect distinction is clearly serving as the distinction between the cognizant and non-cognizant. The perfection of extramental *esse intentionale* is achieved just insofar as it attains immateriality, and so the distinction between the perfect being of the cognizant and the imperfect being of the non-cognizant hinges entirely on immateriality.³² Thus the distinction between cognizance and non-cognizance is not given according to the presence of *esse intentionale* as such. Rather, Thomas gives the distinction between mind and world as the distinction between modes or grades of immaterial being.³³

³⁰ *ST* 1.84.1, quoted in chapter two, note 11. See also *DV* 2.2, and 8.6.

³¹ E.g., my discussion of *ST* 1.14.1 in chapter three: "the immateriality of a thing is the reason why it is cognitive; and according to the mode of immateriality is the mode of knowledge." (*immaterialitas alicuius rei est ratio quod sit cognoscitiva; et secundum modum immaterialitatis est modus cognitionis.*) *DV* 3.1 ad 2: "a thing is known better by means of an intellectual species than by means of a species in the sense, because the former is more immaterial." (*Unde per speciem quae est in intellectu, melius cognoscitur aliquid quam per speciem quae est in sensu, quia est immaterialior.*)

³² Cf. *ST* 1.7.1.

³³ "One can see that the whole thrust of the argument [of the *Summa contra Gentiles* text] is based on the perfection of being of the human act of knowing. It is not conceived after the model of the 'intentio' of colour in the conveying medium. It [knowing] is true being." Dewan, "St. Albert, St. Thomas, and the Intelligible", *op. cit.*, p. 9.

The representational character of cognition, then, is tantamount to the perfection of *esse intentionale* in a knower. It achieves this perfection only when rendered immaterial,³⁴ and so representation occurs when *esse intentionale* exists in *esse immateriali*. With the foregoing distinctions in hand we could speak of another mode of being, “cognitive being”, which is a perfected and representational grade of *esse intentionale*.³⁵ On this view, the cognitive as such is distinct from intentional being as such, since *esse intentionale* is not “intrinsically representational” but rather becomes representational. Immateriality remains the commanding notion involved in distinguishing the cognitive from the non-cognitive.³⁶

The present reading holds that *esse intentionale* exists outside of cognizance in an imperfect mode, and becomes a representational mode of being when existing in *esse immateriali*. This reading stays plausibly consistent with Thomas’s teaching that *esse intentionale* has being both mentally and extramentally, pays attention to the intersection of the distinctions of modes of being Thomas makes in the angel text, and makes full use of Thomas’s central teaching that knowledge is a perfection of immaterial being. It seems to me this entire picture is precisely why Thomas teaches in his *ex professo* discussion of the

³⁴ Cf. “How often have we heard a would-be Thomist speak of knowledge in terms of ‘intentionality’, yet how seldom in terms of ‘immateriality’!” See Lawrence Dewan, “St Thomas, Metaphysics and Human Dignity”, in his *Wisdom, Law and Virtue* (New York: Fordham University Press, 2007), pp. 58-67, at p. 67.

³⁵ Thomas does not have a term (at least not one that he uses with any regularity) that would correspond to ‘cognitive being’, such as, perhaps, ‘*esse cognoscibile*’, which would cover both *esse sensibile* and *esse intelligibile*. But I think Thomas shows that he envisions the cognitive to involve this *sui generis* mode of being immaterially intentional. Thomas does sometimes speak of ‘*esse in cognoscente*’, cf. *DV 3.1 ad 2, op. cit.*

³⁶ As such, says Fr. Dewan, the *SCG 2.50* text “warns us against using the notion of *esse intentionale* as the primary focus for St. Thomas’s ontology of knowing. The notion obviously has an appropriate use, but it should be subordinated to *esse immateriale*.” See his “St. Thomas and the Integration of Knowledge into Being”, at p. 384. Fr. Dewan has urged for some time that intentionality does not have centre stage in Thomas’s presentation of knowledge. More recently he has had occasion only to lament this over-emphasis in Thomistic scholarship: “How often have we heard a would-be Thomist speak of knowledge in terms of ‘intentionality’, yet how seldom in terms of ‘immateriality’!”. See his “St Thomas, Metaphysics and Human Dignity”, in his *Wisdom, Law and Virtue* (New York: Fordham University Press, 2007), pp. 58-67, at p. 67.

criterion of the cognizant³⁷ that the immateriality of a thing is the reason it is cognitive, and that the grade of immateriality determines the grade of cognizance. The highest perfection, for Thomas, is to be freed from the limiting constraints of material existence and to be rendered immaterial.³⁸ But also, the case of the angel, which has natural and immaterial existence, shows that immateriality alone is not sufficient for cognizance. Rather, to enjoy the representational mode of being unique to cognizance, *esse intentionale* must be rendered immaterial.

If this reading is correct then Haldane's *esse intentionale* / *esse naturale* distinction does not properly distinguish cognizant from non-cognizant modes of being. We may not conclude that *esse intentionale* is intrinsically representational, and so we may not conclude that *esse intentionale* is a mode of being proper to cognizance. Cognizance, as Thomas makes clear, is a special mode of being that is an intentional appropriation (*assimilare*) of forms of the things known. Now I wish to explain how this reading is commensurate with John Haldane's thomistic insight that the world is "intrinsically intelligible" and thought is "intrinsically representational".

§7.3: *Esse intentionale as Informational Being*

What is *esse intentionale* existing extramentally? "Non-representational *intentiones*" existing in extramental reality may well be troublesome to some philosophical sensibilities. One might say that even if it follows from Thomas's presentation, perhaps we shouldn't follow Thomas. It is not my goal here to give a robust defense of extramental intentions against all comers. Rather, in what follows I present a plausible picture of non-

³⁷ ST 1.14.1: "[...] *immaterialitas alicuius rei est ratio quod sit cognoscitiva; et secundum modum immaterialitatis est modus cognitionis.*"

³⁸ Cf. ST 1.7.1.

representational *intentiones* existing in extramental reality that is consistent with the reading of Thomas I have presented here and with Haldane's view that thought represents the world. I present *esse intentionale* as an informational or contentful mode of being that becomes representational when it is rendered immaterial by achieving existence in a knower. This continues the presentation of informational being already developed, and stays consistent with Thomas's and Haldane's view that representation or intentionality as such defines the cognitive.

We have seen that Thomas will speak of an '*intentio*' as a sensory feature received in the estimative power. Picking up the manner of speaking from chapters three and four, I suggest that Thomas speaks of extramental *intentiones* as "informational aspects" of things that lend themselves to be cognized, and when realized in a cognitive mode these aspects become representational.

This is perhaps a non-conventional rendering or treatment of '*intentio*'. One might think it is non-conventional because '*intentio*' is the Latin translation of Avicenna's Arabic term '*ma'na*', the connotation of which is, broadly, "meaning" or "to mean to say".³⁹ Hence in contemporary philosophy "intentionality" often concerns itself with what a thought "means" or with what a thought is "about". We get a further sense of this notion of "directedness" in the Latin infinitive '*intendere*', which means more literally "to reach (or tend) toward" or "to direct into".

However, with respect to the relationship of the mind and the world, it is acceptable to translate '*intentio*' as "message" or "signal".⁴⁰ The connotation in this context is

³⁹ For a brief statement on the difficulties of translating '*ma'na*' even simply as "meaning", see Jon McGinnis and David Reisman, eds., *Classical Arabic Philosophy: An Anthology of Sources* (Hackett, 2007), pp. xi-xii.

⁴⁰ Cf. Chapter three, note 26; and see Lawrence Dewan, OP, "St. Albert, the Sensibles, and Spiritual Being", in *Albertus Magnus and the Sciences*, James A. Weisheipl, OP, ed., (Toronto: Pontifical Institute of Mediaeval

“information” or “knowability”,⁴¹ and the interpretation of *esse intentionale* in the medium as “message” or “signal” is consistent with these connotations.⁴² Accordingly, I render ‘*intentio*’ when said of the extramental as ‘informational aspect’,⁴³ and I treat the *esse intentionale* of cognition as informational or representational content.

Thus Thomas’s doctrine is that an *intentio*, when received in the requisite and functional cognitive power, is intrinsically contentful or informational. Thomas will even use the term ‘*informatio*’ to describe the assimilation by which the knower achieves the known.⁴⁴ In this way the *intentio* represents the thing: it is an informational signal present in things and realized in a knower, which realization is just a redescription of the claim that the knower knows the thing.

This rendering of *intentio* as informational content fits well with Haldane’s view that the world is intrinsically intelligible or able to be known. *Esse intentionale* exists outside a cognitive power and contains information that is not actually known.⁴⁵ Thought is

Studies, 1980), pp. 291-320. Dewan says: “‘*Intentio*’ was the word selected by the Latin translators of Avicenna to translate the Arabic *ma‘na*; the fundamental Arabic verb involved here, “‘*ana*”, they translated *velle dicere* (cf. French *vouloir dire*), i.e., “to mean” or “to *intend* to say”. Thus “‘*intentio*’ is best rendered by such English words as “meaning” or “notion”. In [the present] context of sensibles and sense, it means the message sent from the sensible to the sense. It is misleading to put emphasis on the notion of tendency in the etymology of “‘*intentio*’.” (p. 293, n6) For Avicenna’s Arabic and the Latin translation, Dewan cites the lexicon contained in *Avicenna Latinus. Liber de Anima seu Sextus de naturalibus I-II-III*, Simone Van Riet, ed., (Louvain/Leiden, 1972), p. 346, p. 536.

⁴¹ See chapter three, note 26.

⁴² *Ibid.*

⁴³ Treating ‘*intentio*’ as “aspect” aligns with the third general use of ‘*intentio*’ (after the notions pertaining to “attention” and “willing” respectively) given in DeFerrari’s massive Lexicon. It can be rendered as ‘aspect’, ‘notion’, or ‘relation’, and it is this meaning of ‘*intentio*’ as Thomas uses it that I am concerned with here. See Roy J. DeFerrari and Sister M. Inviolata Barry, with Ignatius McGuinness, OP, *A Lexicon of St. Thomas Aquinas* (Washington, D.C.: Catholic University of America Press, 1948), p. 584.

⁴⁴ E.g., *In Sent.*, lib. 1 d. 3 q. 1 a. 1 arg. 3: “*omnis cognitio est per speciem aliquam, per cujus informationem fit assimilatio cognoscentis ad rem cognitam.*” Cf. *In Sent.*, lib. 1 d. 34 q. 3 a. 1 ad 4: “*Est etiam quaedam assimilatio per informationem, quae requiritur ad cognitionem.*”

⁴⁵ This view also pays heed to Thomas’s teaching that the natures of material things are “potentially intelligible”, cf. e.g., *ST* 1.79.3.ad 3: “The intelligible in act is not something existing in the nature of things, speaking about the nature of sensible things, which do not subsist outside of matter.” (*Intelligibile autem in actu non est aliquid existens in rerum natura, quantum ad naturam rerum sensibillum, quae non subsistunt praeter materiam.*)

“intrinsically representational”, then, because *esse intentionale* becomes actually knowable insofar as it becomes cognitive.

Construing “*intentio*” as an informational aspect of things has already been seen in chapters three and four in the discussion of sensory cognition. Revisiting and developing parts of that discussion is useful here. When discussing the animal estimative power, Thomas says that a sheep perceives “this coloured object” under the content or formal aspect of “natural enemy”. Here is the passage in full:

if an animal were moved by pleasing and disagreeable things only as affecting the sense, there would be no need to suppose that an animal has a power besides the apprehension of those forms which the senses perceive, and in which the animal takes pleasure, or from which it shrinks with horror. But the animal needs to seek or to avoid certain things, not only because they are pleasing or otherwise to the senses, but also on account of other advantages and uses, or disadvantages: just as the sheep runs away when it sees a wolf, not on account of its colour or shape, but, as it were, as a natural enemy: and similarly, a bird gathers together straws, not because they are pleasant to the sense, but because they are useful for building its nest. Animals, therefore, need to perceive such intentions, which the exterior sense does not perceive. And some distinct principle is necessary for this; since the perception of sensible forms comes by a modification caused by the sensible thing, which is not the case with the perception of those intentions.⁴⁶

The presentation of *intentiones* in sensory cognition seems to me to suggest the following sort of picture: A certain material thing, in virtue of its formal structure, transmits or contains a particular and accessible signal. The various receptive cognitive powers among

⁴⁶ ST 1.78.4: “*si animal moveretur solum propter delectabile et contristabile secundum sensum, non esset necessarium ponere in animali nisi apprehensionem formarum quas percipit sensus, in quibus delectatur aut horret. Sed necessarium est animali ut quaerat aliqua vel fugiat, non solum quia sunt convenientia vel non convenientia ad sentiendum, sed etiam propter aliquas alias commoditates et utilitates, sive nocumenta, sicut ovis videns lupum venientem fugit, non propter indecentiam coloris vel figurae, sed quasi inimicum naturae; et similiter avis colligit paleam, non quia delectet sensum, sed quia est utilis ad nidificandum. Necessarium est ergo animali quod percipiat huiusmodi intentiones, quas non percipit sensus exterior. Et huius perceptionis oportet esse aliquod aliud principium, cum perceptio formarum sensibilium sit ex immutatione sensibilis, non autem perceptio intentionum praedictarum.*”

various cognitive beings, however, are not all the same kind of receiver. Because animals are of different kinds and because cognitive powers are of different formal configurations, various powers in various animals are differently suited (or not) to receive specific information from any given material thing. The sheep, in Thomas's example, unlike certain species of bird, passes over a great deal of straw, never perceiving it under the informational aspect of 'nest building material'. A sheep perceives other different informational aspects of its environment, such as the presence and danger of wolves. A sheep runs from a wolf, however, not because of the wolf's colour or shape,⁴⁷ but because of a further aspect of the wolf's being in relation to the sheep: the aspect or *intentio* of 'natural enemy'.⁴⁸

Since the estimative power is suited to receive signals of precisely this sort, and since it is thoroughly a sensory power, this claim does not commit us to any sort of view that animals use concepts. Recall in chapter four I said that the *intentio* of 'natural enemy' is not a concept in the sheep, but is nevertheless known by instinct. Robert Pasnau stresses that the 'quasi' in '*quasi inimicum naturae*' is all-important.⁴⁹ It is a manner of speaking that the sheep perceives 'enemy' in the wolf, since the sheep behaves "as if" (*quasi*) the wolf is its enemy and so perceives 'natural enemy' "as it were".⁵⁰ This terminology may be due to our felicitous description of what the sheep does in the presence of the wolf. Thomas himself is cautious not to say that the *intentio* in the sense is a concept; it is, after all, in the sense. Still,

⁴⁷ Sensory objects proper to the external and common sense respectively.

⁴⁸ Cf. Stephen Theron's remark that this shows that the apprehension of *intentiones* is "not, therefore, a matter of mechanical causality. No feature of the wolf's image on its retina automatically makes a sheep's feet itch; we are offered the doctrine of the *vis aestimativa* as animal approximation to prudence." See his "Intentionality, Immateriality and Understanding in Aquinas" *Heythrop Journal* 30 (1989), pp. 150-159, at p. 151.

⁴⁹ See Robert Pasnau's translation of Thomas Aquinas, *The Treatise on Human Nature*, Robert Pasnau, tr., (Hackett, 2002), p. 283. I'm grateful to Graeme Hunter for drawing this text of Pasnau's to my attention.

⁵⁰ Cf. Pasnau commenting on *InDA* 2, lect 13: "The sheep does not even recognize its offspring as such—it lacks the concept '*offspring*'—but merely recognizes it as something to be nursed. And this, moreover, is not to say that the sheep has the concept of nursing, but only to say that the appropriate sensory input triggers a desire to nurse, and consequently triggers the appropriate action." Robert Pasnau, *Thomas Aquinas on Human Nature* (Cambridge, 2002), p. 271.

in his discussion of the cogitative power it is clear that Thomas thinks of *intentiones* as high-level sensory *information*. “Being inimical” is information really present in the wolf, but not actualized (actually sensed) until brought into sensible being by contact with a sensory power equipped to exploit it. An ant, for example, does not run from a wolf, and this is because the ant is not equipped or suited to receive this information from the wolf, and this is in turn expressed as saying this is because the wolf is *not* the ant’s natural enemy: the ant does not perceive the *intentio* of ‘natural enemy’ in the wolf. The information present in the wolf vis-à-vis the sheep, however, is, realized in the sheep with informative content: ‘enemy’.

The sheep and ant cases are, it seems to me, just instances of Thomas’s more general view that only certain aspects of our natural environment are accessible to certain cognitive powers. For example, the eye but not the ear perceives colour. This again is an instance of his more general view that “knowledge is according to the mode of the knower”, and the receiving-transmitting analogy seems like a fruitful, albeit anachronistic, point of view to help understand this doctrine. Consider Thomas saying the following:

Knowledge is regulated according as the thing known is in the knower. But the thing known is in the knower according to the mode of the knower. Hence the knowledge of every knower is according to the knower’s own nature. If therefore the mode of anything’s being exceeds the mode of the knower, it must be that the knowledge of the object is above the nature of the knower.⁵¹

We might describe what Thomas is saying like so: If there are signals sent out from a transmitter that go beyond the capacity of a certain receiver to exploit (decode, acknowledge, etc.), then those signals go unheeded; the receiver is indifferent to them, and they are, as it

⁵¹ *ST* 1.12.4: “*Cognitio enim contingit secundum quod cognitum est in cognoscente. Cognitum autem est in cognoscente secundum modum cognoscentis. Unde cuiuslibet cognoscentis cognitio est secundum modum suae naturae. Si igitur modus essendi alicuius rei cognitae excedat modum naturae cognoscentis, oportet quod cognitio illius rei sit supra naturam illius cognoscentis*”.

were, beyond the receiver or “above the nature” of the knower. On the other hand, whatever is received in the cognitive power is precisely fit to be so received: as Thomas says, “the power of knowledge is proportioned to knowable object”,⁵² or put another way, “the object of knowledge is proportionate to the power of knowledge.”⁵³ As such, humans only receive what the cognitive power is suited (as it were, hard-wired) to receive.⁵⁴ And so certain aspects of a thing’s nature will pass by our unaided sensory powers, just as wolves pass by ants unnoticed.

I am not here giving an account of how and in what precise way the form in the mind is a representational likeness of the form in the world, as if we were looking for a pictorial-relational mapping or isomorphism. While such attempts exist —offered mainly in response to and in keeping with Haldane’s general contention that mind and world are “isomorphic” in representation⁵⁵— I am interested only in showing the way in which *esse intentionale* might plausibly exist as a feature of extramental reality, and further how it can be construed in thomistic terms as an informational mode of being that becomes representational when exploited by the cognitive agent.

I think Haldane could agree to the foregoing picture. He says thought is “the exercise of a cognitive capacity of the person as he or she absorbs intelligible aspects of their material and social environment”.⁵⁶ As I see it, Thomas holds that a cognitive capacity is exercised when *esse intentionale* existing *in esse materiali* is rendered immaterial, and the

⁵² *ST* 1.84.7: “*potentia cognoscitiva proportionatur cognoscibili.*”

⁵³ *ST* 1.85.1: “*obiectum cognoscibile proportionatur virtuti cognoscitivae.*”

⁵⁴ Cf. Gerard Casey: “the (passive) powers embodied in physical energy interchanges can be realised only in their assimilation by the (active) powers of the appropriate receivers.” See his “Immateriality and Intentionality”, *op. cit.*

⁵⁵ Cf. especially Stephen Pimentel, “Formal Identity as Isomorphism in Thomistic Philosophy of Mind”, *Intelligence and the Philosophy of Mind*, Proceedings of the American Catholic Philosophical Association 80 (Virginia: Philosophy Documentation Center, 2006), pp. 115-126; See also Jonathan Jacobs and John Zeis, “Form and Cognition: How to Go Out of Your Mind”, *Monist* 80 (1997), pp. 539-557.

⁵⁶ ‘Whose Theory? Which Representations?’, *Pacific Philosophical Quarterly* 74, 1993, p. 254.

informational aspects in things become representations in the knower. Intentional being understood as informational can be presented (i) in a knower as a *sui generis* “intrinsic” mode of representation, and (ii) in extramental reality as an informational and accessible aspect that can be exploited by cognizant beings. This seems like a perspicuous way to describe and present Thomas’s and Haldane’s shared insight that the world is intelligible and that thought, in turn, is representational. It accounts for the existence of *intentiones* in the non-cognizant medium, and it emphasises Thomas’s view that representation occurs when *esse intentionale* exists immaterially.

§7.4: Conclusion

The purpose of this chapter was to explain why *esse intentionale* cannot be the defining mark of cognition, and thus to offer a correction to John Haldane’s distinction between mind and world in the presentation of his thomistic theory of cognition. I argued that if Haldane would follow Thomas in the view that the representational is the mark of the cognitive, then he ought to present this with Thomas as *esse intentionale* existing in its immaterial and perfected mode of being. Then I offered a picture of extramental intentions as informational aspects of things detectable by knowers. This picture seems amenable with Haldane’s general concerns as to the intelligibility of the world and the intrinsic representation or intentionality of the cognitive as such.

It is worth saying here that in talking of informational aspects of being that are cognitively accessed, I am cautious not to present Thomas as a Platonist about human cognition. I am not saying that for Thomas the intentional is a realm of being entirely separate from things that somehow enables cognition of things. I take it that Thomas would reject the idea that there is an entirely separate intentional or informational realm for the

same reasons as he rejects Platonism,⁵⁷ namely, because then science would be not about bodies but about separate intentional species, and because since the immaterial substances are of an altogether different nature from material things, such knowledge would in no way entail or guarantee knowledge of material things. Thomas's rejection of Platonism can be seen, in part, as an affirmation that *esse intentionale* is an aspect of the being of real things, an aspect that becomes representational when exploited by a cognitive power.

I believe this presentation is agreeable to Haldane, and well-reflects his project to describe the world as being "intrinsically intelligible" and the mind as being "intrinsically representational". It further better distinguishes the cognizant from the non-cognizant, i.e., the "representational" from the "(potentially) intelligible", insofar as it pays attention to Thomas's distinction between grades of *esse intentionale*, and his teaching that *esse intentionale* may exist in the non-cognizant medium in a potentially intelligible mode of being. It is potentially intelligible for the same reason that any other feature of the extramental is potentially intelligible, namely, that it is to some degree material.

The outcome of the chapter, then, is to have presented cognizance as intrinsically representational, described within the Thomist scheme as 'intentional being rendered immaterial'. The reading presented here squares both with St. Thomas's texts and with John Haldane's ambitions to continue to present mind-world identity theory as a viable option in defending a realist philosophy of mind.

⁵⁷ Cf. *ST* 1.84.1, where he disagrees with Plato's view that the soul knows only through its knowledge of separate immaterial and intelligible substances.

Conclusion

The foregoing has been an extended argument to the effect that St. Thomas's presentation of the engagement of mind and extramental nature can serve as a corrective of two general theses in John Haldane's 'thomist' presentation of mind-world identity. The first thesis is that sensation is entirely material, and the second is that *esse intentionale* is the criterion of the cognitive. If I am right, then both of these theses are countered from within a 'thomist' presentation by the need to ascribe very different roles to both *esse immateriale* and *esse intentionale*.

First, St. Thomas defends a picture of cognition in which both *esse intentionale* and *esse immateriale* have a role reaching all the way out to the senses. This means that sensation, for Thomas, and for the thomist who wishes to defend cognition as the ability to possess forms, must involve immateriality.

Second, Thomas's presents *esse intentionale* as a mode of being in things, which means *esse intentionale* exists extramentally. The cognitive powers access and exploit intentional being in virtue of their share in *esse immateriale*, which immateriality serves to bring about the perfection of *esse intentionale* that Thomas presents as being tantamount to the representational nature unique to cognition.

Accordingly I have suggested that John Haldane's 'thomist' presentation of mind-world identity be modified to include (i) sensory immaterialism, and (ii) a corrected account of intentional being. Notice that the thomist answer to the question of intentionality hasn't changed from the one given in the introductory paragraph of the present work: a thought is about a thing because a representational likeness of the thing known comes to exist in the knower in virtue of some causal and informational involvement of the senses. So we might

say now that John Haldane could give the best ‘thomist’ answer to the question of intentionality as follows:

A thought is about a thing because a representational likeness of the thing known comes to exist in the knower in virtue of the causal involvement of the senses. The senses access the informational being present in things, preparing it for engagement with higher cognitive powers, notably including intellect. This information in the senses needs have some measure of immateriality, in virtue of which it represents the extramental formal nature of which it is a cognitive instance. Intellect renders the sensory information completely immaterial, whereby conceptual representation is said to be *esse intentionale* existing *in esse immateriali*. Finally, intellect only ever achieves indirect reference to an individual material thing, and the direct reference is achieved by the brute contact of the material thing with the material senses. As such the whole knower is apprised of the true nature of the thing. Here we have a presentation of Thomas’s answer to the question of intentionality that stands against both of Haldane’s early objections that the universal cannot achieve reference to the particular and that sensory immaterialism is a “vain attempt” to secure this reference while at the same time allow for interaction between sense and intellect.

In these next few concluding pages, I would like to say a word about the prevalence of this issue in broader contemporary philosophical debate. John Haldane has advanced his mind-world identity thesis largely during an extended dialogue with American philosopher Hilary Putnam, in which both thinkers are concerned with the nature of mind and reality and answering the question of intentionality. Haldane sees Putnam’s work on intentionality since and including Putnam’s well-known *Reason, Truth and History*¹ as moving toward a position very similar to Haldane’s own ‘thomist’ realism. Accordingly, Haldane was occupied with

¹ Hilary Putnam, *Reason, Truth and History* (Cambridge, 1981) (hereafter *RTH*).

having Putnam see the merits of the thomist viewpoint. I would like here to add my own take on this debate, rather acting as something of a ‘fly-on-the-wall’, and presenting what I take to be some of its notable features that deserve some further attention.

Both Haldane and Putnam are concerned to deny representationalism as a viable option to answer the question of intentionality. They understand ‘representationalism’ as the view that thought is primarily a cognitive relationship to mental items (e.g., images, concepts)² which themselves stand in some further relationship to the world. According to representationalism, human thought is not directly engaged with things in the world, but rather is mediated through mental items that purport to be veridical representations of worldly objects or states of affairs. Both Haldane and Putnam believe that if we posit intermediaries between thought and world, there will be no answer to the question of whether and how our thoughts are accurately “about” things.³ They see failure in answering this question as fatal to cognitive realism, their view that our thoughts are, in some way, accurate engagements with features in the world. Since both Putnam and Haldane wish to advance some version of realism, they both reject representationalism.

A brief reminder is called for as to why St. Thomas might share this ‘anti-representationalist’ spirit. Throughout the work I have spoken about mental items, including species and phantasms, and I devoted much space to the question of the “intrinsically

² The pairing in brackets here should not indicate that I equate images and concepts, but rather just that different versions of ‘representationalist’ thinking will posit different mental items as the intermediaries between the thinking mind and the worldly objects. Haldane and Putnam don’t care what is posited as an intermediary, since it is the very notion of such an intermediary (common to all theories of representationalism) that they are attacking.

³ See *RTH*, and also *Representation and Reality* (Cambridge, MA: MIT, 1988). Haldane rejects the view “that cognition involves the subject standing in a relation to internal items that themselves stand in some further relation to elements of the external environment—‘inner representations of non-inner items’,” and requires that cognition is “the intentional communion of an agent and an object.” Further, “no explanation of this unity will be forthcoming from the hypothesis that thought is made possible by intermediaries, such as are posited by the Representational Theory of Mind.” See Haldane’s “Whose Theory? Which Representations?” *Pacific Philosophical Quarterly* 74 (1993), pp. 247-257, at pp. 255, 256.

representational” character of the mental. Surely, it might be said, there is some degree of “representationalism” in Thomas’s account. But there is not. For Thomas, no mental item is (i) that which is first known, and (ii) that *from* which we infer the existence of an external. Such an item would stand in an epistemological relationship to the knowing mind. This mental item is first and foremost known by the mind, and then serves as a justification or evidence of its external cause. On the contrary, Thomas’s intelligible species is (i) not itself first known, and is (ii) that *by* which the knower is activated or ‘switched on’ as knowing things. Such an item does not stand in an epistemological relationship with a mind. Rather, this item occurs in the cognitive agent as part of the necessary equipment for knowing to take place.⁴

So there is a general ‘anti-representationalist’ spirit shared by Haldane, Putnam, and St. Thomas; all three deny a cognitive relationship between mind and a mental item and insists on some immediate engagement with the world. From this rejection of representationalism, Putnam advances his version of cognitive realism,⁵ the view that “successful perception is just a seeing, or hearing, or feeling, etc., of things ‘out there’ and not a mere affectation of a person’s subjectivity by those things”.⁶

⁴ Though it is not first known, such an item could be itself known after conscious reflection; but the point is just that cognitive attention is not directed first and foremost at the mental item, but rather first and foremost on things in virtue of the presence of the mental item.

⁵ Especially in his Dewey Lectures, reprinted in his *The Threefold Cord* (New York: Columbia University Press, 1999), Part 1. I am not concerned with the interesting question of whether Putnam’s various locutions for his version of realism (‘internal’, ‘pragmatic’, ‘natural’ and ‘common-sense’) correspond to different positions. Some relevant discussion of this question can be found in the volume *Hilary Putnam, Contemporary Philosophy in Focus Series*, Yemima Ben-Menahem, ed., (Cambridge, 2005), in essays by Yemima Ben-Menahem, and by Alex Mueller and Arthur Fine. As for Putnam himself, see his “Realism and Reason”, in his *Meaning and the Moral Sciences* (London: Routledge & Kegan Paul, 1978) where he first distinguished his realist view from ‘metaphysical’ realism. For the various locutions cited above, see, respectively, his *Reason, Truth and History* (1981); *The Many Faces of Realism* (Illinois: Open Court, 1987); *The Threefold Cord* (1999). The latter uses both ‘natural’ and ‘common-sense’ realism. In *The Threefold Cord* Putnam distinguishes between his ‘internal’ and his ‘natural’ realism (pp. 13-17); but see also p. 182 n36 for Putnam’s take on these locutions as largely tracking minor developments in the same general position.

⁶ See Part 1 of *The Threefold Cord*.

Haldane believes the anti-representationalism in Putnam's realism is not substantially different from his own mind-world identity theory. Nevertheless, Haldane thinks Putnam's view needs more detail and explanation.⁷ He supports Putnam's rejection of representationalism and his description of knowledge as 'immediate', but what is "missing from Putnam's discussion [...] is any explicit account of how this is possible".⁸ What is desired is an account that suggests how cognition is a direct engagement with features of the world, and for Haldane the only way this account can be given is by mind-world identity.⁹ Haldane presents mind-world identity as supplying the detail missing from Putnam's realism. The missing detail, it turns out, is the metaphysics of formal natures, according to which mind and world are *en rapport* because they share formal structuring principles enjoying different modes of existence.¹⁰

Putnam has made some anti-representationalist concessions to Haldane's insistence that mind and world must be immediately *en rapport*,¹¹ but he will not accept the

⁷ "Realism With a Metaphysical Skull", pp. 102-03.

⁸ "Realism With a Metaphysical Skull", p. 102.

⁹ "If there is to be the sort of conformity of mind to thing which Putnam [...] seeks], then I can only see this being provided according to an account of the sort developed by Aquinas when he writes that the intellect in act is the intelligible in act; or less scholastically, that the mind will only be of a thing when it is formally identical with it; when what we think and what is thought are the same." See Haldane, "Realism With a Metaphysical Skull", p. 102.

¹⁰ Haldane's main hope in the debate with Putnam is "that Putnam might be persuaded that what is true in [his] pragmatism is not only compatible with, but actually requires important aspects of Aristotelian metaphysics." See Haldane, "Realism With a Metaphysical Skull", p. 97.

¹¹ Putnam has said that he "can go part of the way" with some of Haldane's "Aristotelian" insights about the relationship to mind and world. What Putnam is willing to embrace is the notion that concepts and properties may just be, as he says, "two sides of the same coin", or, just two "ways things can be". Putnam accepts "the idea that ways things can be are both [i] worldly —things 'out there' are some of those ways— and [ii] available to thought, contrary to the idea of a sharp 'concept/property' distinction [...]". See his "Comment on John Haldane's Paper", in *Hilary Putnam: Pragmatism and Realism*, James Conant and Urszula Zeglen, eds., (London: Routledge, 2002), pp. 105-108, at p. 108. (My bracketed insertions.) But for Putnam, this does not mean that concepts and properties are "formally identical" while having different "modes of being". Rather, all Putnam means is that concept talk and property talk are two ways of talking about the same thing, two equally useful points of view. These ways of speaking are deployed more-or-less accurately in contextually appropriate circumstances. And that is all. Putnam credits Charles Travis with helping him to appreciate this point. See Hilary Putnam, "Comment on John Haldane's Paper", in *Hilary Putnam: Pragmatism and Realism*, James Conant and Urszula Zeglen, eds. (London: Routledge, 2002), p. 107. Travis has described Putnam's project as the effort to maintain both a realist theory of perception and Aristotle's insight that mind and world jointly

metaphysics of forms or species. In other words, the metaphysical picture to which Haldane's approach is committed ultimately rules it out of the question.

Putnam's denial that there is any coherent account of essential form is a block to further discussion with Thomists. Some few attempts have been made from within the Thomist community to engage Putnam on the question of the existence of essential forms.¹² But these, I think, may be beside the point. Although Putnam has criticized Haldane's "thomism" and any broadly 'Aristotelian' account of essential form, he also has independent arguments about the usefulness of speaking of 'formal similarity' in answering the question of intentionality.

It seems to me that there is much work to do in locating the real points of intersection for any possible debate between Thomists and Putnam on the question of "realism". It is my suspicion that there is a deep disagreement here that reveals further debate to be intractable. For example, Haldane's commitment to the notion that the world is "intrinsically intelligible" and mind is "intrinsically representational" seems to be a key component of the metaphysics of knowledge endorsed in mind-world identity. Putnam sees precisely this component as an 'occult medieval hangover',¹³ such that the burden of proof is on thomists to explain why we would want to "revert to medieval essentialism" to explain our cognitive engagement with

make up the mind and world—but without accepting Aristotelian essences. See Charles Travis, "The Face of Perception", in *Hilary Putnam*, Contemporary Philosophy in Focus series, Yemima Ben-Menahem, ed. (Cambridge, 2005), pp. 53-82.

¹² Even though Haldane and Putnam have not (yet) continued the discussion, there have been responses to Putnam's arguments from within the Thomist community. These replies usually focus on one or both of (i) Putnam's doubt that 'speaking of all of the accounts has any clear sense', and (ii) defending Thomas's account of essential form, showing its coherence and its accessibility to contemporary points of view. Cf. e.g., John O'Callaghan, "The Plurality of Forms: Now and Then", *The Review of Metaphysics* 62 (2008), pp. 3-43; John P. O'Callaghan, *Thomist Realism and the Linguistic Turn: Toward a More Perfect Form of Existence* (Notre Dame, 2003), esp. pp. 257-274; Gavin T. Colvert, "Thomism with a Realist Face: A Response to Hilary Putnam", in *Realism and Antirealism*, William P. Alston, ed., (Ithaca and London: Cornell University Press, 2002), pp. 183-210, esp. pp. 204-209.

¹³ Hilary Putnam, *The Many Faces of Realism*, lecture II.

the environment.¹⁴ To my knowledge, there have been no explicit analyses of the different kinds of philosophical commitments involved in Putnam's position and the position of any thomist interlocutor on what a possible answer to the question of intentionality might look like. This, I think, is work that needs attention.

I will say briefly, in closing, where I think such work might lead. It seems to me that the intractability of the debate is an effect of Haldane and Putnam not asking the same question concerning intentionality. On the one hand, when Putnam asks "How is intentionality, reference, possible?"¹⁵, his arguments seem to indicate that he is occupied with the question 'How can one know whether one's thought is about some thing?' This is an epistemic question, and one possible answer is the one Putnam gives: 'by contextual use of words and other signs'.¹⁶ On the other hand, when Haldane asks "what makes my thought of him a thought of him?"¹⁷, he seems to be occupied with the question 'How is a thought about some thing?' This is a metaphysical question, and one possible answer is: 'thought and thing share a form'.

When it is objected that mind-world identity "neither solves nor bypasses any of the hard epistemological problems that have preoccupied modern thought",¹⁸ I agree it does not solve them, but disagree that it does not bypass them. If I am right, the identity thesis does not solve them because it is not concerned with them, and it bypasses them for precisely this reason. Because the mind-world identity thesis is not meant to offer an answer to a problem

¹⁴ Putnam, *Realism and Reason* (Cambridge, 1983), p. xii.

¹⁵ Putnam, *RTH*, p. 2.

¹⁶ Cf. Putnam's *Renewing Philosophy*, p. 165.

¹⁷ Haldane, "Aquinas on Sense-Perception", p. 236, citing this as "Wittgenstein's question". See chapter 1.

¹⁸ Robert Pasnau, *Theories of Cognition in the Later Middle Ages* (Cambridge, 1997): 305.

of how knowledge is inferentially justified by some criterion outside of cognizance, Thomas is not an appropriate target of epistemological criticisms.¹⁹

There is also another direction that might be taken in analysing the debate. Putnam's main concern when critiquing the metaphysics of form is to show that the notion of form cannot justify or verify that our perceptions are in any way identical or adequate to the structure of reality. I agree with Putnam that it is very frustrating when followers of Thomas simply repeat the slogan that the mind and world are identical, as if this alone were helpful in accounting for the nature of human cognitive engagement with the environment.²⁰ But I also think there is some force to Haldane's claim that Putnam has no way of being a realist if he allows no formal natures for thoughts to represent.²¹

So, does Putnam deny formal natures? I think he does, and if he does not, it is immensely difficult to see what else he might be trying to express to his philosophical audience. I might phrase an invitation for clarity on Putnam's views as follows: Putnam objects to speaking of essential form to secure intentionality, but when he discusses his own approach to cognitive realism he makes use of the term 'things'. He says that "ways things can be" are both 'thing'-ways and 'available to thought'-ways. If we are not going to speak of formal structures in the world, then what does 'things' mean here? Is Putnam's expression 'ways things can be' any clearer than Haldane's "formal structuring principles"?²² The cognitive realist holds that we are directly engaged with the environment, but from where do

¹⁹ When Thomas speaks of justifying one's knowledge, or 'knowing that one knows', it is in the context of a discussion of truth and judgment, which occurs only after one has assimilated intelligible form. Cf. e.g., *ST* 1.16-17, and 1.84.8.

²⁰ Cf. Putnam, "Aristotle After Wittgenstein", in his *Words and Life*, James Conant, ed., (Massachusetts: Harvard, 1994), pp. 62-81, at p. 70.

²¹ Cf. "Realism With a Metaphysical Skull", p. 102.

²² E.g., "[...] the forms or natures which give structure to the world, and the concepts which give 'shape' to thought [...]", in Haldane, "Mind-World Identity Theory", p. 21; "Each actuality (thought and object) has a structuring principle (concept and substantial form); and these principles, though distinct in the modes of their actualisation, are specifically alike," in his "Realism with a metaphysical skull", p. 102.

we get the idea of an “environment” on Putnam’s view? It cannot be that we reason from our experience to some extramental cause that adequately fashions us with the notion of an environment (if not with notions of specific formal natures): that is the dreaded ‘representationalism’. The import of realism is that our experience just is an unmediated engagement with our environment. When Putnam says his “long defended” view is that “that the content of our thoughts is individuated in part by the sort of environments we inhabit”,²³ ‘environment’ here seems to be playing the same role as ‘formal structuring principle’ in terms of locating some mode of being that “individuates” or specifies the content of our thinking. So even though Putnam says that nature does not dictate what is essential, nature must dictate at least something or other enough for me to know that ‘things’ stand such that there is a thinker and an environment. This might be the point of insertion for a Thomist account of mind-world identity.

Other difficulties stand in the way of broader dialogue between St. Thomas and many contemporary analytical philosophers, not the least of which is giving a more positive and precise articulation of immateriality. I hope to have gone part of the way here, by showing why and how immateriality must figure as fundamental in any thomistic account of knowledge. But the work is still ongoing, and this and many other topics are very much in need of continuous renewal and articulation, it seems to me, in order to respond to Haldane’s astute call for a fully perspicuous account of a thomistic philosophy of mind.

²³ Putnam, “The Question of Realism”, in his *Words and Life*, James Conant, ed., (Mass: Harvard, 1994), pp. 295-312, at p. 306.

Bibliography

Primary Sources for St Thomas Aquinas:

Opera omnia iussu Leonis XIII P. M. edita, t. 24/1: Quaestiones disputatae de anima, Ed.: B. C. Bazán (Commissio Leonina - Éditions du Cerf, Roma - Paris, 1996)

Opera omnia iussu Leonis XIII P. M. edita, t.1/1: Expositio Peryermeneias, (Commissio Leonina - J. Vrin, Roma - Paris, 1989)

Opera omnia iussu Leonis XIII P. M. edita, t. 1/2: Expositio libri Posteriorum* (2^a ed.: Commissio Leonina-J. Vrin, Roma-Paris, 1989)

Opera omnia iussu Leonis XIII P. M. edita, t. 45/2: Sententia libri De sensu et sensato cuius secundus tractatus est De memoria et reminiscencia (Commissio Leonina-J. Vrin, Roma-Paris, 1984)

Opera omnia iussu Leonis XIII P. M. edita, t. 45/1: Sententia libri De anima (Commissio Leonina-J. Vrin, Roma-Paris, 1984)

Opera omnia iussu Leonis XIII P. M. edita, t. 42: Compendium theologiae, (Editori di San Tommaso, Roma, 1979)

In duodecim libros Metaphysicorum Aristotelis expositio. Ed. M. R. Cathala, R. M. Spiazzi (2^a ed.: Marietti, Taurini-Romae, 1971)

Opera omnia iussu Leonis XIII P. M. edita, t. 22: Quaestiones disputatae de veritate (Editori di San Tommaso, Roma, 1975-1970-1972-1976) 3 vol. 4 fascicula

Opera omnia iussu Leonis XIII P. M. edita, t. 43: De ente et essentia (Editori di San Tommaso, Roma, 1976) p. 315-381

Liber de veritate catholicae Fidei contra errores infidelium seu Summa contra Gentiles, t. 2-3. Ed. P. Marc, C. Pera, P. Caramello (Marietti, Taurini-Romae, 1961)

Opera omnia iussu impensaque Leonis XIII P. M. edita, t. 4-5: Pars prima Summae theologiae (Ex Typographia Polyglotta S. C. de Propaganda Fide, Romae, 1888-1889)

Opera omnia iussu impensaque Leonis XIII P. M. edita, t. 6-7: Prima secundae Summae theologiae (Ex Typographia Polyglotta S. C. de Propaganda Fide, Romae, 1891-1892)

Opera omnia iussu impensaque Leonis XIII P. M. edita, t. 8-10: Secunda secundae Summae theologiae (Ex Typographia Polyglotta S. C. de Propaganda Fide, Romae, 1895-1897-1899)

Other Sources (Including John Haldane):

Adler, Mortimer. "Sense Cognition: Aristotle vs. Aquinas", in *New Scholasticism*, vol. 42, 1968, pp. 578-591.

Adler, Mortimer. "The Immateriality of Conceptual Thought", *New Scholasticism*, vol. 41, 1967, pp. 489-497.

Allers, Rudolf. "Intellectual Cognition", in *Essays in Thomism*, Robert E. Brennan, OP, ed., (New York: Sheed & Ward, 1942), pp. 39-62.

Allers, Rudolf. "Evaluation of the *Vis Cogitativa*", *New Scholasticism* 15 (1941), pp. 195-221.

Alston, William P., ed. *Realism and Antirealism*. (New York: Cornell University Press, 2002).

Anscombe, G.E.M. & P.T. Geach. *Three Philosophers*. (Oxford: Basil Blackwell, 1967).

Avicenna (See Ibn Sina).

Ben-Menahem, Yemima, ed., *Hilary Putnam*, Contemporary Philosophy in Focus Series, (Cambridge, 2005).

Black, Deborah. "Imagination and Estimation: Arabic Paradigms and Western Transformations", *Topoi* 19 (2000), pp. 59-75.

Black, Deborah. "Mental Existence in Thomas Aquinas and Avicenna", *Medieval Studies* 61 (1999), pp. 45-79.

Brower, Jeffrey E. and Susan Brower-Toland. "Aquinas on Mental Representation: Concepts and Intentionality", *Philosophical Review* 117 (2008), pp. 193-243.

Burnyeat, M.F. "Aquinas on 'Spiritual Change' in Perception", in *Ancient and Medieval Theories of Intentionality*, Dominik Perler, ed., (Leiden, Boston, Koln: Brill, 2001), pp. 129-153.

Casey, Gerard. "Immateriality and Intentionality", in *At the Heart of the Real*, Fran O'Rourke, ed., (Dublin: Irish Academic Press, 1992), pp. 97-112.

Clarke, W. Norris. *The One and the Many: A Contemporary Thomistic Metaphysics* (Indiana: Notre Dame, 2001).

Cohen, S.M. "St. Thomas Aquinas on the Immaterial Reception of Sensible Forms" *The Philosophical Review* 91 (1982): 193-209.

Colvert, Gavin T., "Thomism with a Realist Face: A Response to Hilary Putnam", in *Realism*

and *Antirealism*, William P. Alston, ed., (Ithaca and London: Cornell University Press, 2002), pp. 183-210, esp. pp. 204-209.

Davies, Brian, ed. *Thomas Aquinas: Contemporary Philosophical Perspectives*. Oxford, 2002.

Davies, Brian. *The Thought of Thomas Aquinas* (Oxford: Clarendon Press, 1992), pp. 127-28.

De Anna, Gabriele, "Aquinas on Sensible Forms and Semimaterialism", *The Review of Metaphysics* 54 (2000), pp. 43-63.

DeFerrari, Roy J. and Sister M. Inviolata Barry, with Ignatius McGuinness, OP, *A Lexicon of St. Thomas Aquinas* (Washington, D.C.: Catholic University of America Press, 1948).

Dewan, Lawrence. "St Thomas, Metaphysics and Human Dignity", in his *Wisdom, Law and Virtue* (New York: Fordham University Press, 2007), pp. 58-67.

Dewan, Lawrence, *Form and Being* (Washington, D.C.: Catholic University of America Press, 2006).

Dewan, Lawrence. "St. Thomas and Pre-Conceptual Intellection", *Études maritainienne* 11 (1995), pp. 220-33.

Dewan, Lawrence. "St. Thomas and the Integration of Knowledge into Being", *International Philosophical Quarterly* 24 (1984), pp. 383-393.

Dewan, Lawrence. "St. Albert, the Sensibles, and Spiritual Being", in *Albertus Magnus and the Sciences*, James A. Weisheipl, OP, ed., (Toronto: Pontifical Institute of Mediaeval Studies, 1980), pp. 291-320.

Dewan, Lawrence. "St. Thomas, Ideas and Immediate Knowledge", *Dialogue* 18 (1979), pp. 392-404.

Dewan, Lawrence. "Cajetan on St. Thomas on Conversion to the Phantasms", unpublished paper.

Dewan, Lawrence. "St Albert, St Thomas, and the Intelligible", unpublished paper.

Foster, K., and S. Humphries, trs., *Aristotle's De Anima in the version of William of Moerbeke and the Commentary of St. Thomas Aquinas*, (New Haven: Yale University Press, 1954).

Frede, Dorothea. "Aquinas on *Phantasia*", in *Ancient and Medieval Theories of Intentionality*, Dominik Perler, ed., (Leiden, Boston, Köln: Brill, 2001), pp. 155-183.

Geach, Peter. "Form and Existence", reprinted in *Aquinas's Summa Theologiae: Critical*

Essays, Brian Davies, ed., (Rowman and Littlefield, 2006), pp. 111-128.

Geach, Peter. "Reply to Kenny", in *Peter Geach: Philosophical Encounters*, Harry A. Lewis, ed., (The Netherlands: Kluwer Academic Publishers, 1991), pp. 254-258.

Geach, Peter. "Teleological Explanation", in *Explanation*, S. Körner, ed., (Oxford: Basil Blackwell, 1975), p. 93.

Geach, Peter. "Abstraction Reconsidered", in *Knowledge and Mind: Philosophical Essays*, Sidney Shoemaker and Carl Ginet, eds. (Oxford University Press, 1983), pp.159-173.

Geach, Peter. *Mental Acts*. (London: Routledge & Kegan Paul, 1957/1971).

Geach, Peter. "Form and Existence", in *God and the Soul* (New York: Schocken Books, Inc., 1969), pp. 42-64.

Gracia, Jorge J.E. "Cutting the Gordian Knot of Ontology: Thomas's Solution to the Problem of Universals", in *Thomas Aquinas and His Legacy*, David Gallagher, ed., (Washington, DC: Catholic University of America Press, 1994), pp. 16-36.

Gracia, Jorge J. E. and John Kronen, "John of Saint Thomas", in *Individuation in Scholasticism, The Later Middle Ages and the Counter-Reformation, 1150-1650*, Jorge J. E. Gracia, ed., (Albany, SUNY Press, 1994).

Hackett, Jeremiah M., William E. Murnion & Carl N. Still. *Being and Thought in Aquinas* (Binghamton: Global Academic Publishing, 2004).

Haldane, John. "The Metaphysics of Intellect(ion)" in *Intelligence and the Philosophy of Mind*, Proceedings of the American Catholic Philosophical Association 80, Michael Baur, ed., (Virginia: Philosophy Documentation Center, 2006), pp. 39-55.

Haldane, John. "Medieval Philosophy in Later Thought: Current Engagements", in *Cambridge Companion to Medieval Philosophy*, A.S. McGrade, ed., (Cambridge, 2003), pp. 316-327.

Haldane, John. "Realism with a Metaphysical Skull", in *Hilary Putnam: Pragmatism and Realism*, James Conant and Urszula Zeglen, eds., (London: Routledge, 2002), pp. 97-104.

Haldane, John. "A Thomist Metaphysics", in R. Gale, ed., (*Blackwell Guide to Metaphysics* (Oxford: Blackwell, 2002), pp. 87-109.

Haldane, John. "American Philosophy: "Scotch" or "Teutonic"?", in *Philosophy*, 77 (2002), pp. 311-329.

Haldane, John. "The Spirit of Thomism and the Task of Renewal", in *Thomas Aquinas: Approaches to Truth*, James McEvoy and Michael Dunne, eds., (Dublin: Four Courts Press, 2002), pp. 66-76.

Haldane, John. "The State and Fate of Contemporary Philosophy of Mind", *American Philosophical Quarterly* 37 (2000), pp. 301-311.

Haldane, John. "Insight, Inference and Intellection", in *Insight and Inference*, Proceedings of the American Catholic Philosophical Association, Michael Baur, ed., (New York: ACPA, 2000), pp. 31-45.

Haldane, John. "A Return to Form in the Philosophy of Mind", in *Form and Matter: Themes in Contemporary Metaphysics*, David S. Oderberg, ed., (Oxford: Blackwell, 1999), pp. 40-64.

Haldane, John. "Thomism and the Future of Catholic Philosophy", *New Blackfriars* 80 (1999), pp. 131-146.

Haldane, John. "Analytical Philosophy and the Future of Thomism", *Cogito* 13 (1999), pp. 45-48.

Haldane, John. "A Return to Form in Philosophy of Mind" *Ratio* 11 (1998), pp. 253-77.

Haldane, John. "Analytical Thomism: A Prefatory Note", *Monist* 80 (1997), pp. 484-486.

Haldane, John. "Forms of Thought", in *The Philosophy of Roderick Chisholm*, Lewis Edwin Hahn, ed., (Illinois: Open Court, 1997), pp. 149-170.

Haldane, John. "On Coming Home to (Metaphysical) Realism", *Philosophy* 71 (1996), pp. 287-296.

Haldane, John. "Analytical Thomism", in *Oxford Companion to Philosophy*, Ted Honderich, ed., (Oxford, 1995).

Haldane, John. "Life of Signs", *Review of Metaphysics* 47 (1994), pp. 451-470.

Haldane, John. "Whose Theory? Which Representations?" *Pacific Philosophical Quarterly* 74 (1993), pp. 247-257.

Haldane, John. "Mind-World Identity Theory and the Anti-Realist Challenge", in *Reality, Representation and Projection*, J. Haldane and C. Wright, eds., (Oxford, 1993), pp. 15-37.

Haldane, John. "Putnam on Intentionality", *Philosophy and Phenomenological Research* 52 (1992), pp. 671-682.

Haldane, John. "Aquinas on the Active Intellect", *Philosophy* 67 (1992), pp. 199-210.

Haldane, John. "Naturalism and the Problem of Intentionality" *Inquiry* 32 (1989), pp. 305-322.

Haldane, John. "Aquinas on Sense-Perception", *The Philosophical Review* 92 (1983), pp. 223-239.

Hoffman, Paul, "St. Thomas Aquinas on the Halfway State of Sensible Being", *The Philosophical Review* 99 (1990), pp. 73-92.

Ibn Sina, *Remarks and Admonitions 'Part 1: Logic'*, Shams Inati, tr., (Toronto: PIMS, 1984).

Ibn Sina, *Avicenna Latinus. Liber de Anima seu Sextus de naturalibus I-II-III*, Simone Van Riet, ed., (Louvain/Leiden, 1972).

Jacobs, Johnathan. "Habits, Cognition, and Realism", in *Mind, Metaphysics and Value in the Thomistic and Analytical Traditions*, John Haldane, ed., (Indiana: Notre Dame, 2002).

Jacobs, Jonathan and John Zeis, "Form and Cognition: How to Go Out of Your Mind", *Monist* 80 (1997), pp. 539-557.

John of Saint Thomas, *Cursus philosophicus Thomisticus secundum exactam, veram, genuinam Aristotelis et Doctoris Angelici mentem*, B. Reiser, ed., 3 vols. (Turin: Marietti, 1933), vol. 1.

Kenny, Anthony. *Essays on the Aristotelian Tradition*. (Oxford: Clarendon Press, 2001).

Kenny, Anthony. *Aquinas on Mind*. (New York: Routledge, 1993).

Kenny, Anthony. "Intentionality: Aquinas and Wittgenstein", in his *The Legacy of Wittgenstein* (Oxford, 1984), pp. 61-76.

Kenny, Anthony. *Aquinas* (Oxford, 1980).

Kenny, Anthony. "Intellect and Imagination in Aquinas", in *Aquinas: A Collection of Critical Essays*, Anthony Kenny, ed., (Notre Dame, 1976), pp. 273-296.

Kerr, Fergus. "Aquinas and Analytic Philosophy: Natural Allies?" *Modern Theology* 20 (2004), pp. 123-139.

Kerr, Fergus. *After Aquinas: Versions of Thomism* (Oxford: Blackwell, 2002).

Kerr, Fergus. "Aquinas After Wittgenstein", in John Haldane, *Mind, Metaphysics and Value in the Thomistic and Analytical Traditions*, ed., (Indiana: Notre Dame, 2002), 3-19.

Klima, Gyula. "Contemporary "Essentialism" vs. Aristotelian Essentialism", in *Mind, Metaphysics and Value in the Thomistic and Analytical Traditions*, John Haldane, ed., (Indiana: Notre Dame, 2002), pp. 175-194.

Klima, Gyula. "The Semantic Principles Underlying Saint Thomas Aquinas's Metaphysics of Being", *Medieval Philosophy and Theology* 5 (1996): 87-141.

Klubertanz, George P. *The Discursive Power: Sources and Doctrine of the Vis Cogitativa According to St. Thomas Aquinas* (Ohio: Messenger Press, 1952).

Klubertanz, George P. "The Internal Senses in the Process of Cognition", *Modern Schoolman* 18 (1941), pp. 27-31.

Larcher, F.R. tr., Thomas Aquinas, *Commentary on the Posterior Analytics*. (New York: Hamilton Printing Co., 1970).

Laumakis, Stephen J. "The *Sensus Communis* Reconsidered", *American Catholic Philosophical Quarterly* 82 (2008), pp. 431-443.

Lisska, Anthony J. "A Look at Inner Sense in Aquinas: A Long-Neglected Faculty Psychology", *Intelligence and the Philosophy of Mind*, Proceedings of the American Catholic Philosophical Association 80, Michael Baur, ed., (Virginia: Philosophy Documentation Center, 2006), pp. 1-19.

MacDonald, Jr., Paul A. "Direct Realism and Aquinas's Account of Sensory Cognition", *The Thomist* 71 (2007), pp. 343-78.

McInerny, Ralph. *Aquinas*. Classic Thinkers Series (Cambridge: Polity Press, 2004).

McGinnis, Jon and David Reisman, eds., *Classical Arabic Philosophy: An Anthology of Sources* (Hackett, 2007).

Maritain, Jacques. "Language and the Theory of Sign", in *Language: An Inquiry Into its Meaning and Function*, Ruth Nada Anshen, ed., (New York: Kennikat Press, 1971), pp. 86-101.

Maritain, Jacques. *The Degrees of Knowledge*, 4th ed., Gerald B. Phelan, tr., (New York: Charles Scribner's Sons, 1959).

Martin, Christopher. "Reply to Haldane", *New Blackfriars* 80 (1999), pp. 157-160.

McDermott, Timothy, tr., Thomas Aquinas, *On Being and Essence*, in *Aquinas: Selected Philosophical Writings*, (Oxford, 1993), pp. 90-113.

McDowell, John. *Mind and World* (Cambridge: Harvard University Press, 1994).

Michon, Cyrille. "Intentional Thoughts and Proto-Thoughts", in *Ancient and Medieval Theories of Intentionality*, Domink Perler, ed., (Leiden, Boston, Köln: Brill, 2001), pp. 325-42.

Mulligan, Robert W. (vol. 1) and James V. McGlynn (vol. 2), trs., Thomas Aquinas, *Disputed Questions on Truth*. (Chicago: Henry Regnery Company, 1952/1953).

O'Callaghan, John. "The Plurality of Forms: Now and Then", *The Review of Metaphysics* 62 (2008), pp. 3-43.

O'Callaghan, John P. *Thomistic Realism and the Linguistic Turn: Toward a More Perfect Form of Existence*. Indiana: Notre Dame University Press, 2003.

O'Callaghan, John P. "Aquinas, Cognitive Theory, and Analogy: A Propos of Robert Pasnau's *Theories of Cognition in the Later Middle Ages*", *American Catholic Philosophical Quarterly* 76 (2002), pp. 451-82.

Oesterle, Jean T., tr., Thomas Aquinas, *Aristotle on Interpretation, Commentary by St. Thomas and Cajetan*, (Milwaukee: Marquette University Press, 1962).

Owens, Joseph. *Cognition: An Epistemological Inquiry* (Houston: Center for Thomistic Studies, 1992).

Owens, Joseph. "Aquinas on Cognition as Existence", *Proceedings of the American Catholic Philosophical Association* 48 (1974), pp. 74-85.

Owens, Joseph. "Judgment and Truth in Aquinas" *Mediaeval Studies* 32 (1970), pp. 138-158.

Owens, Joseph, "Common Nature: A Point of Comparison Between Thomistic and Scotistic Metaphysics", *Medieval Studies* 19 (1957), pp. 1-14.

Panaccio, Claude. "Aquinas on Intellectual Representation", in *Ancient and Medieval Theories of Intentionality*, Dominik Perler, ed., (Leiden, Boston, Köln: Brill, 2001), pp. 185-201.

Panaccio, Claude. *Le Discours Intérieur: de Platon à Guillaume d'Ockham* (Paris: Seuil, 1999).

Pasnau, Robert. "What is Cognition? A Reply to Some Critics", *American Catholic Philosophical Quarterly* 76 (2002), pp. 483-90.

Pasnau, Robert. *Thomas Aquinas on Human Nature* (New York: Cambridge, 2002).

Pasnau, Robert, tr. Thomas Aquinas, *The Treatise on Human Nature* (Hackett, 2002).

Pasnau, Robert, tr. Thomas Aquinas, *A Commentary on Aristotle's De anima*, (New Haven & London: Yale University Press, 1999).

Pasnau, Robert. *Theories of Cognition in the Later Middle Ages* (Cambridge, 1997).

Peghaire, Julien. "A Forgotten Sense, the Cogitative According to St. Thomas Aquinas", *The Modern Schoolman* 20 (1943), pp. 210-229.

Pegis, Anton C., tr. (vol 1), James F. Anderson (vol. 2), Vernon Bourke (vols. 3/4), Charles J. O'Neill (vol. 5), Thomas Aquinas, *On the Truth of the Catholic Faith: Summa Contra Gentiles* (New York: Image Books, 1955-57).

Peifer, John Frederick. *The Concept in Thomism* (New York: Record Press, 1952).

Pimentel, Stephen. "Formal Identity as Isomorphism in Thomistic Philosophy of Mind", *Intelligence and the Philosophy of Mind*, Proceedings of the American Catholic Philosophical Association 80 (Virginia: Philosophy Documentation Center, 2006), pp. 115-126.

Pouivet, Roger. *Après Wittgenstein, saint Thomas* (Paris: Presses Universitaires de France, 1997).

Pritzl, Kurt. "The Place of Intellect in Aristotle", *Intelligence and the Philosophy of Mind*, Proceedings of the American Catholic Philosophical Association 80, Michael Baur, ed., (Virginia: Philosophy Documentation Center, 2006), pp. 57-75.

Putnam, Hilary. "Comment on John Haldane's Paper", in *Hilary Putnam: Pragmatism and Realism*, James Conant and Urszula Zeglen, eds., (London: Routledge, 2002), pp. 105-108.

Putnam, Hilary. *The Threefold Cord* (New York: Columbia University Press, 1999).

Putnam, Hilary. *Words and Life*, James Conant, ed., (Massachusetts: Harvard, 1994).

Putnam, Hilary. *Renewing Philosophy* (Cambridge, MA: Harvard, 1992).

Putnam, Hilary. *Representation and Reality* (Cambridge, MA: MIT, 1988).

Putnam, Hilary. *The Many Faces of Realism* (Illinois: Open Court, 1987).

Putnam, Hilary. *Realism and Reason* (Cambridge, 1983).

Putnam, Hilary. *Reason, Truth and History* (Cambridge, 1981).

Putnam, Hilary. *Meaning and the Moral Sciences* (London: Routledge & Kegan Paul, 1978).

Rowan, John P. tr., Thomas Aquinas, *Commentary on the Metaphysics of Aristotle*, (Chicago: Henry Regnery Company, 1961).

Schmidt, Robert W., *The Domain of Logic According to Saint Thomas Aquinas* (The Hague: Martinus Nijhoff, 1966).

Shanley, Brian J. "Analytical Thomism", *Thomist* 63 (1999), pp. 125-137.

Sheehan, Peter. "Aquinas on Intentionality", in *Aquinas: A Collection of Critical Essays*, Anthony Kenny, ed., (Garden City, NY: Anchor Books, 1969), pp. 307-21.

Simon, Yves. *An Introduction to the Metaphysics of Knowledge*, Vukan Kuic and Richard J. Thompson, trs., (New York: Fordham University Press, 1990).

Sokolowski, Robert. "Exorcising Concepts", *Review of Metaphysics* 40 (1987), pp. 451-463.

Solère, Jean-Luc. "La notion d'intentionnalité chez Thomas d'Aquin", *Philosophie* 24 (1989), pp. 13-36.

Spruit, Leen. *Species Intelligibilis: From Perception to Knowledge* (2 vols). Brill's Studies in Intellectual History (The Netherlands: E.J. Brill, 1994).

Still, Carl N. "The Search for the Real Aquinas" *New Blackfriars* 40 (2005), pp. 67-74.

Stump, Eleonore. *Aquinas* (London and New York: Routledge, 2003/05).

Stump, Eleonore. "Aquinas's Account of the Mechanisms of Intellective Cognition", in *Revue internationale de philosophie* 52 (1998), pp. 287-307.

Sullivan, Daniel J., ed., Thomas Aquinas, *The Summa Theologica of Saint Thomas Aquinas* (2 vols), revised edition, The Fathers of the English Dominican Province, trs., (Chicago: William Benton, 1952/1971).

Tellkamp, Jörg Alejandro. "Aquinas on Intentions in the Medium and in the Mind", *Intelligence and the Philosophy of Mind*, Proceedings of the American Catholic Philosophical Association 80, Michael Baur, ed., (Virginia: Philosophy Documentation Center, 2006), pp. 275-289.

Theron, Stephen. "The Resistance of Thomism to Analytical and Other Patronage", *Monist* 80 (1997), pp. 611-618.

Theron, Stephen. "Meaning in a Realist Perspective", *Thomist* 55 (1991), pp. 29-51.

Theron, Stephen. "Intentionality, Immateriality and Understanding in Aquinas", *Heythrop Journal* 30 (1989), pp. 151-159.

Thomas Aquinas. See 'Primary Sources' at the beginning of the bibliography.

Travis, Charles, "The Face of Perception", in *Hilary Putnam*, Contemporary Philosophy in Focus series, Yemima Ben-Menahem, ed. (Cambridge, 2005), pp. 53-82.

Tweedale, Martin. "Representation in Scholastic Epistemology" in *Representation and Objects of Thought in Medieval Philosophy*, Henrik Lagerlund, ed., (Burlington, VT: Ashgate Publishing Company, 2007), pp. 63-80.

Tweedale, Martin. "Origins of the Medieval Theory That Sensation Is an Immaterial Reception of a Form", *Philosophical Topics* 20 (1992), pp. 215-231.

Veatch, Henry. *Swimming Against the Current in Contemporary Philosophy*. (Washington, D.C.: Catholic University of America Press, 1993).

Vollert, Cyril, tr., Thomas Aquinas, *Compendium of Theology*, (St. Louis and London: B. Herder Book Co., 1948).

White, Kevin, tr., Thomas Aquinas, *Commentaries on Aristotle's 'On Sense and What is Sensed' and 'On Memory and Recollection'*. (Washington, D.C.: Catholic University of America Press, 2005).

Wippel, John F. "Thomas Aquinas and the Axiom 'What is Received is Received According to the Mode of the Receiver'", in his *Metaphysical Themes in Thomas Aquinas II* (Washington, D.C.: Catholic University of America Press, 2007), pp. 113-122.

Wittgenstein, Ludwig. *Philosophical Investigations*, G.E.M. Anscombe, tr., ed., (Oxford, Blackwell: 2001).