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Publication Details

van Gend, R. (2018). A dialogue of traditions on the reality of mind: Thomas Nagel and Bernard Lonergan [Master of Philosophy (School of Philosophy and Theology)]. The University of Notre Dame Australia. <https://researchonline.nd.edu.au/theses/237>

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A DIALOGUE OF TRADITIONS ON THE
REALITY OF MIND: THOMAS NAGEL AND
BERNARD LONERGAN

Robert van Gend

A thesis submitted in partial fulfilment of the requirements for the degree of
Master of Philosophy

School of Philosophy and Theology
The University of Notre Dame Australia

2018

Abstract

The scientific picture of the world is one of invisible particles and empty space, but this is not the world of our everyday experience. How can we reconcile the scientific view of the world with the view from our ordinary perspective? This thesis puts Thomas Nagel and Bernard Lonergan into dialogue on the question of the mind's place in the world. Coming from different philosophical traditions, both thinkers provide a bigger picture in which to place materialism and to assess its errors. Thomas Nagel criticises modern forms of materialism because they try to explain away the reality of our perspective by reducing it to physical events in a perspective-less scientific picture. He criticises the fundamental conception of the physical world upon which these reductionist theories depend, a conception that had its origins in the seventeenth century scientific revolution and one which conceived of the physical world as having no place for subjects' perspectives. In Lonergan's opinion, the reduction of the human consciousness to mere physical events is the result of a truncated conception of objectivity. The reason for this mistaken conception is that we confuse two distinct kinds of knowing, which in turn is because of a mistaken cognitional theory. This thesis argues that Nagel makes some insightful contributions to the place of mind in the cosmos, but that he, like the reductive materialists that he criticises, is limited by a truncated conception of objectivity that prevents him grasping the nature of the mind. This suggests that future philosophies of mind need to examine their presuppositions more deeply and be open to dialogue with one of the less well-known traditions of philosophy in contemporary scholarship – the Aristotelian-Thomistic tradition, in which Lonergan worked.

Declaration of Authorship

This thesis/dissertation is the candidate's own work and contains no material which has been accepted for the award of any degree or diploma in any other institution.

To the best of the candidate's knowledge, the thesis/dissertation contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Robert van Gend

Candidate's Name

Candidate's Signature

Date: 14.08.2018

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Introduction – the Monopoly of the Outside View

Sir Arthur Eddington famously described the lectern in front of him as it appears to us, and then in terms of its ultimate constituents as discovered by scientists: “One of them was visible, palpable, brown, solid and heavy; the other was mostly empty space with here and there an unimaginable wavicle”.¹ How can we reconcile the scientific picture of the world with the world of our normal experience?

In his short *Meditations in a Toolshed*, C.S. Lewis goes straight to the heart of the tension. He says we can approach realities from the inside and from the outside. As he explains, when a young man values ten minutes of casual chat with a woman as more precious than all the favours that other women could provide, he is experiencing love from the inside. The scientist explains the young man’s state of mind from the outside as genes interacting with biological stimulus. Lewis writes, “Which is the ‘true’ or ‘valid’ experience? Which tells you most about the thing? And you can hardly ask that question without noticing that for the last fifty years or so everyone has been taking the answer for granted.”² The outside view is supposedly objective and what is really out there, whereas the inside view is subjective, consisting of how things *seem* or appear to us.

Thomas Nagel (b.1937) is famous (or infamous among his materialist colleagues³) for criticising the modern form of materialism which is propped up by theories of Darwinian evolution. Materialism claims that reality is nothing more than matter or physical substance. The outside view is a true picture of reality and the inside view is reduced to physical events in the brain. Nagel says this reductionism is bound up with the materialist claim about the constituents of reality: “Materialist naturalism leads to reductionist ambitions because it seems unacceptable to deny the reality of all those familiar things that are not at first glance physical.”⁴ Nagel is keenly aware that the modern scientific picture of reality has its origins in the definitions of mind and matter that occurred at the time of the scientific revolution in the seventeenth century. This gives him ammunition with which to oppose the ideological dogmatism of the present physicalist conception of the world. It is dogmatic because it is so

¹ Cited in Daniel A. Helminiak, *Brain, Consciousness, and God: A Lonerganian Integration* (Albany, NY: State University of New York Press, 2015), 162.

² C.S. Lewis, “Meditations in a Toolshed”, in *God in the Dock: Essays on Theology and Ethics*, ed. Walter Hooper (Grand Rapids, Michigan: Wm. B. Eerdmans Publishing, 1970), 231.

³ See Andrew Ferguson, ‘The Heretic: Who is Thomas Nagel and why are so many of his fellow academics condemning him?’ *The Weekly Standard*, March 25, 2013.

⁴ Thomas Nagel, *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False* (New York: Oxford University Press, 2012), 15, Kindle.

sure that it can explain everything. Nagel thinks many realities escape its net. Consciousness and reason, he argues, cannot be reduced to the physical.

If the view from inside is *not* an illusion, how do the two views fit together? We are left with two views of the same reality which say different things about that reality. Nagel recommends that this is how we should approach reality – acknowledging our limits and allowing two perspectives to exist side by side. But we cannot expect the modern scientific picture, which is just one kind of objective conception of reality, to account for all reality.

Nevertheless, Nagel says we should try to come up with a new objective conception of reality that places mind in the world alongside matter, so that we can make sense of how the inside and the outside views are both real. It is a difficult task, he says, because it would require the creation of concepts that we have not yet thought up. C.S. Lewis also acknowledged the difficulty of the task: “Is it, then, possible to imagine a new Natural Philosophy, continually conscious that the ‘natural object’ produced by analysis and abstraction is not reality but only a view, and always correcting the abstraction? I hardly know what I am asking for.”⁵ In *Mind & Cosmos*, Nagel considers monism (or dual aspect theory) to be a promising way to move our understanding forward and place the mind in the natural order.

It came to light in my reading of Nagel that he was rejecting many sacred cows of the analytic tradition and pushing its limits. Bernard J.F. Lonergan (1904-1984), a thinker of the Aristotelian-Thomistic tradition, emerged as a good dialogue partner for exploring this point. Both Nagel and Lonergan are concerned with the place of the human subject in reality and they both provide a bigger picture in which to place materialism and to assess its errors. Nagel approaches the problem with the intellectual tools of the analytic tradition, while Lonergan draws on the ancient treasures of the Aristotelian-Thomistic tradition.

Lonergan’s magnum opus, *Insight: A Study of Human Understanding*, is a study of human consciousness. A key finding is that behind every metaphysic is an epistemology, and behind every epistemology is a cognitional theory. I will set his cognitional theory alongside Thomas Nagel’s to shed light on the latter’s struggles with physicalism and his tentative proposals for an expanded concept of objectivity.

The reason for different conceptions of objectivity is, according to Lonergan, that we confuse two distinct kinds of knowing, which in turn is because we get our cognitional theory wrong. By carefully distinguishing between these kinds of knowing, Lonergan enlarges our

⁵ C.S. Lewis, *The Abolition of Man* (New York: HarperCollins, 2001), 78-9.

conception of objectivity and offers a solution to the problem of the mind's relation to reality with which Kant wrestled, and Nagel too.

This thesis's argument is that Nagel makes some insightful contributions to the place of mind in the cosmos, but he is limited by the notion of extroverted objectivity.

Chapter one introduces Lonergan's cognitional theory and epistemology, finding that the common sense notion of objectivity as extroversion – as encountering what is “already out there now” – is merely animal knowing, not fully human knowing, and this notion of objectivity is inconsistent with the data of consciousness. According to Lonergan's understanding of the data of consciousness, reality is not just what is “already out there now”; it is what can be intelligently understood and rationally verified.

Chapter two examines Nagel's analysis of the origins of our concepts of mind and matter and with Lonergan's help unearths the deeper principles informing these concepts, namely that reality is “already out there now” and knowing it is like “taking a good look” at it.⁶

Chapters three and four examine Nagel's views on the irreducibility of consciousness and reason to the physical conception of objectivity in particular, and to any conception of objectivity in general. Nagel argues that the subject with its conscious activities is in being, and he does this using the tools of his own tradition, where for something to count as real it must be “already out there now”. If consciousness resists physicalist explanation, he reasons that there must be a mistake in the physicalist conception of objectivity. Nagel supposes it to be a mistake about overextending one particular form of objectivity, but I will argue that it is a mistake about the conception of knowing and objectivity in general.

Chapter five analyses theories about the relation of mind and matter (dualism, epiphenomenalism and reductive materialism) in light of Lonergan's cognitional theory, finding that they all assume an extroverted notion of objectivity. Although Nagel's proposed theory of monism points in promising directions by uniting the insights of the three main theories of mind, it has its own significant limitations that Nagel himself identifies. In fact, it falls prey to the same fundamental error about objectivity as the other theories of mind. This suggests that future philosophies of mind need to examine their presuppositions more deeply and be open for dialogue with one of the less well-known traditions of philosophy in contemporary scholarship – the Aristotelian-Thomistic tradition.

⁶ These phrases are coined by Lonergan. Their meanings will be elucidated in chapter one. Bernard Lonergan, *Insight: A Study of Human Understanding* (New York: Harper & Row, 1978), 251-2.

Chapter 1 – Lonergan’s Cognitive Theory

This chapter explores Lonergan’s Cognitive Theory, so as to argue that the common sense notion of objectivity as extroversion – as encountering what is really “out there” – is merely animal knowing, not fully human knowing, and that this notion of objectivity is inconsistent with the data of consciousness.⁷ According to Lonergan’s understanding of the data of consciousness, reality is not just what is “out there”; it is what can be intelligently understood and rationally verified. This is important to the argument of the thesis as a whole because the common sense notion of objectivity is one that is adopted by Nagel and is a limiting framework for his thought about the place of the mind in the world. The chapter will proceed by examining the conscious activities that constitute any act of human knowing (1.1, 1.2), the expanded inventory of what is real (1.3), and how Lonergan grapples with Kant’s view that human understanding is only related to sensible objects, not to the whole universe of being (1.4).

1.1 The Desire to Know

Lonergan claims that although there are similarities, human knowing goes beyond merely animal knowing. Animals live in the world of sense. Through their senses they become aware of their habitat, food, offspring, enemies. Their senses are highly complex. Bats use sonar to sense their environment, something humans are unable to do.⁸ The real world for an animal is the world that can be sensed.

Humans share in this world of sense, the spatiotemporal world that is tangible, palpable, “there” outside our minds. According to Lonergan, as animals, we grow and develop and survive without needing to think: “It is not by asking and answering questions that [a human] learns to function vitally and sensitively. On those levels development is spontaneous.”⁹ The ability to ask and answer questions sets humans apart from animals, and it opens up a much larger world to us. This world includes the laws of nature, ethics, and metaphysics. The first philosophers saw that knowledge of the deepest principles of reality

⁷ Lonergan usually uses the phrase “already out there now” to designate the reality that is material and encounterable. One who believes that objectivity is extroversion has presumed that the “already out there now” is the whole of reality. Lonergan, *Insight*, 251.

⁸ Nagel uses the bat as an example of an animal that senses its world in a very different way to human beings, and speculates that humans could never know what it is like to be a bat. See Thomas Nagel, “What Is It Like to Be a Bat?”. *The Philosophical Review* Vol. 83, No 4 (October, 1974).

⁹ LRIT Archives, A268-71. Unnumbered page under the heading ‘Intelligence and Reality’. Quoted in William A. Mathews, *Lonergan’s Quest: A Study of Desire in the Authoring of Insight* (Toronto, Canada: University of Toronto Press, 2005), 254.

was the fruits of a peculiar attitude of a human towards reality: “Wonder is the feeling of a philosopher, and philosophy begins in wonder,”¹⁰ says Plato. His student Aristotle said something similar: “It is owing to their wonder that men both now begin and at the first began to philosophize.”¹¹

Wonder and knowing are closely related. Wonder is the state of not knowing yet. When we wonder, we want to know. Aristotle opened his *Metaphysics* with the observation, “All men by nature desire to know.”¹² It is an observation that every person can corroborate for themselves. We have all been faced with a problem that needs solving, whether it be in mathematics, science, philosophy or everyday life. One smells a faint burning smell in the house, and the desire to know spontaneously carries the mind to ask a question (what is the cause of the burning smell?) and to suggest answers (toaster, paper resting on a hot light, neighbour’s fireplace). The inbuilt desire will not stop with possibilities, but will drive the mind to solve the problem, to make a judgment about what is the fact of the matter. Having checked the toaster and all the light sources in the house, and then having opened the side door to see the neighbour’s smoky chimney, the problem is solved. The inquiry is at an end and the desire to know is satisfied and quiets down. Echoing Aristotle, Lonergan identifies this fact of human nature: “The desire to know, then, is simply the inquiring and critical spirit of man.”¹³

We need to recognise that humans have this desire. It hungrily stretches out towards reality, and will not be stilled until it understands an aspect of reality. The desire to know is not satisfied with the possession of sense data alone, although it is due to the desire to know that we cast our eyes on the data of our neighbour’s chimney. The desire to know is not satisfied with ideas of merely hypothetical status - it must be confident that all other rival explanations are ruled out by checking all the lights and the toaster. The desire drives the knower on until he finds out what really is the case. In other words, the desire aims for reality, being, that which is.

The detached and disinterested scientist is an idealisation of that human desire allowed to unfold freely and purely. In reality, our desire to know is often impure, inhibited by other desires, which distort our grasp of reality. Nevertheless, it is clear that we have this desire, that it drives our questioning and answering and that it is a cause of our eventual grasp

¹⁰ Plato, *Theaetetus*, trans. Benjamin Jowett (CreateSpace Independent Pub., 2017), 155d.

¹¹ Aristotle, *Metaphysics*, trans. W.D. Ross (Oxford: Clarendon Press, 1924), I,2,982b.

¹² Aristotle, *Metaphysics*, I,1.

¹³ Lonergan, *Insight*, 348.

of intangible realities like the laws of nature, the moral law, and the principles of metaphysics.

1.2 Cognitive Structure

We engage in an unusual kind of awareness to identify our inbuilt desire to know. Unlike our awareness of objects, sounds and colours, the awareness of the desire to know is of something internal. As Lonergan writes:

In the very act of seeing a colour, I become aware not only of that colour on the side of the object but also, on the side of the subject, I become aware of the one who sees and the act of seeing. In the very act of understanding an essence, I come to know not only that essence in an objective way but I also come to know in a subjective way the one who understands and the act of understanding. In the very act of judging that a certain thing exists, I not only know the existence of that thing objectively but also am subjectively aware of myself as judging and of my act of judging.¹⁴

The first several chapters of *Insight* are dedicated to helping the reader discover the inner data of consciousness, but Lonergan summarises the journey succinctly here:

First, then, there are to be experienced one's experiencing, understanding, judging, deciding. But this fourfold experience is just consciousness. We have it every time we experience, or understand, or judge, or decide. But our attention is apt to be focused on the object, while our conscious operating remains peripheral. We must, then, enlarge our interest, recall that one and the same operation not only intends an object but also reveals an intending subject, discover in our own experience the concrete truth of that general statement. That discovery, of course, is not a matter of looking, inspecting, gazing upon. It is an awareness, not of what is intended, but of the intending.¹⁵

We can only know ourselves as cognitive beings when actually engaged in knowing, which makes the discovery of these operations of consciousness quite difficult. Liddy, when grappling with Lonergan's *Insight*, was hit with an 'aha!' moment when he realized that cognitive operations cannot be seen or visualized: "Asking 'where' is an attempt to visualise what can't be visualised. You're attempting to imagine what of its nature goes

¹⁴ Cited in Mathews, *Lonergan's Quest*, 294. Even though Lonergan uses the word "know" in this passage, he does not mean that the awareness of cognitive acts is already knowledge in the fullest sense. It is only a "preliminary and unstructured sort of knowledge" which we call experience. (Cited in Mathews, *Lonergan's Quest*, 294).

¹⁵ Bernard Lonergan, *Method in Theology* (Toronto: University of Toronto Press, 1990), 15.

beyond imagination, that is insight! Indeed, you can be aware of the act of insight, understand it in its relationships with other cognitional acts, but you can't see it!"¹⁶ Consciousness "is not some inward look but a quality of cognitional acts, a quality that differs on the different levels of cognitional process..."¹⁷ Lonergan reserves the term "consciousness" for the awareness of the cognitional operations of the human knower.

On Lonergan's account, there are four broad kinds of cognitional activities: experiencing, understanding, judging, doing. The fourth, "doing", is not relevant to a discussion of human knowing but of human action. The first three operations are the built-in structures of knowing that will be employed by the human mind in any case of knowing.

Experience

Experience is the name given to the functioning of consciousness at its first level. Lonergan defines experience implicitly, in terms of its relation to understanding. Experience and understanding are nothing without each other: experience provides the data upon which the understanding works, and understanding is what grasps intelligibility in the data of experience.

The data are the raw material that prompts the process of understanding and of finding meaning. The human mind tries to organise and make sense of the data. As Aristotle said, "all men by nature desire to know." We have an innate desire to make sense of things by asking questions and testing possible solutions for the closeness of fit and efficiency of explanation. Without this initial stage of gathering data, there is nothing to wonder about and nothing to understand. Data have the potential to be understood. In other words, data are intelligible.

Data is given. It is prior to questioning because questioning is an intelligent activity which implies data as its object. Lonergan says the data of experience is "unquestionable", in that we cannot doubt its reality.¹⁸ To doubt its reality is to operate intelligently, which implies data that we doubt. Data are the raw materials about which we ask questions and search for solutions. We cannot understand without something to be understood.

Human knowing begins in experience. Although as infants we have built-in instincts, the mind of an infant is a *tabula rasa*, to use Locke's phrase. Its mind is structured a certain way, but the infant knows nothing of the theoretical sort. The first data of experience that an

¹⁶ Richard Liddy, *Transforming Light* (Collegeville: The Liturgical Press, 1993), 206.

¹⁷ Lonergan, *Insight*, 326.

¹⁸ Lonergan, *Insight*, 381.

infant gains would be the taste of milk, the feeling of being cuddled and rocked, her parents' faces, and sounds that eventually are recognised as words. The data characteristic of the years to come include "the selective facts of learning and personal happenings that teenagers weave into tentative and everchanging philosophies of life."¹⁹ Events in our lives become something that needs to be understood, probably in the form of a narrative of our life. A smoky smell in the house becomes a practical problem that needs solving. Scientists gather data from nature and try to explain it with diagrams, equations, theories. The symbols that form this text are something to be understood.

The reality that is known through experience alone is the reality of the animal's world. Lonergan calls what is known at this level "bodies", whereas he will call the "unity-identity-wholes" that are grasped in the data by intelligence, "things".²⁰ An example of a "thing" is a chicken. An example of a "body" is the unorganized and unrelated data that we grasp (upon reflection on the data and gaining an insight) to be a chicken. Bodies are confronted experientially in a non-conceptual knowing. This "elementary knowing involves neither questioning nor insight but is constituted completely on the level of experiential operations."²¹ The reality that is grasped is the "already out there now real", which is Lonergan's helpful term.²² "Already" refers to the orientation of experiential consciousness: it expects to find its object already constituted. "Out" refers to the awareness of objects that are distinct from the subject. "There" and "now" designate the spatial and temporal nature of the object of extroverted consciousness. "Real" refers to a subdivision in the "already out there now"; some of it is appearance, some is real.²³ The world of bodies is "already out there now" in relation to our senses. The world of things is not "already out there now"; things are not *encounterable* objects lying about, whether physically "out there" or mentally "in here". Things *qua* things cannot be experienced or imagined; things *qua* bodies can. In fully human knowing, the intelligible dimension of the real is grasped, and it does not lie "out there" like bodies do. How intelligible being is known will be explained in the next section, "Understanding".

It is a common mistake to think that merely experiencing something is knowing it. Experience is a necessary condition for knowing, but it is not yet knowing. If we stop at experience, we will think that all reality is the kind of thing that can be experienced or looked

¹⁹ Helminiak, *Brain, Consciousness, and God*, 45.

²⁰ Lonergan, *Insight*, 250.

²¹ Mark D. Morelli and Elizabeth A. Morelli, eds., *The Lonergan Reader* (Toronto: University of Toronto Press, 1997), 153.

²² Lonergan, *Insight*, 250.

²³ The appearance of the bent oar turns out to be unreal when one grasps for it and misses.

at – something “already out there now” and separate to the knower – and nothing more. It is a perception-based model of knowing, because it relies on the analogy of looking: the subject is here and it must know the object that is spatially separated from the knower. On this physical model of knowing, all our data about objects comes via our senses in a mechanical, cause and effect fashion, which presents us with a problem: how do we know anything about the objects *in themselves*? This kind of theory cannot account for how we know anything beyond the external characteristics of a thing, the way things appear to human subjects.²⁴ The unities and relations grasped by intelligence will not be real but mere projections of the mind that have no corresponding basis in being. Thus a perception-based model of knowing creates the problem of the gap between the subject and the object, which needs to be bridged.²⁵ Perception-based thinking also leads to thinking of objectivity as extroversion: to be more objective, I must transcend the way the real world “already out there now” *appears to me* and find out what it is *really like*. The reason that so many thinkers would make this mistake is easily explained. We have an intuition that to be real means to be perceivable or tangible, or at least able to be imagined to take up some space even if the space is too small for our eyes to register the particle. Take David Chalmers for instance. He is bothered by the fact that “physical theory only characterises its basic entities *relationally*...”²⁶ He argues that the world picture that physics presents to us is “too lacking in substance to *be* a world”²⁷. That is, for something to be real, it needs to be substantial, tangible, actually there! But the more science explains, the more our understanding of the tangible material reality is replaced with mathematical equations. Chalmers makes this hypothesis because his perception of the world demands it, not because it is demanded by intelligence and judgment. He adopts a perception-based model of knowing, and it is an easy mistake to make.

In general, materialists hold that we know an exclusively material reality “already out there now”, which we encounter through our senses. There are some idealists, Berkeley for instance, who still thought knowing was an encounter with something “already out there now”, but with an idea not with matter.²⁸ This example will clarify what Lonergan means by “out there”. Berkeley thought secondary and primary qualities were mere appearance and not

²⁴ See Helminiak, *Brain, Consciousness, and God*, 46.

²⁵ There is no difficulty bridging the subject and object at the level of sense experience, where data enters the subject through eyes and ears, etc. However, how do our *ideas* – intelligible unities and relations which are understood not sensed – link up with objects “out there”? How are our mental concepts *about* real objects? When we conceive of all reality as “out there”, we condemn our ideas of objects to be forever estranged from the real objects themselves, because ideas cannot *be* “out there”. There will be more on this in the next section.

²⁶ D.J. Chalmers, *The Conscious Mind: In search of a fundamental theory* (New York: Oxford University Press, 1996), 153.

²⁷ Chalmers, *The Conscious Mind*, 304.

²⁸ Lonergan, *Insight*, 413.

really material at all, and that reality – that which is *really there* – appears to be material but is in fact mental.²⁹ We could adapt Lonergan’s terminology and say that Berkeley conceived of reality as “already in here now”, since it is composed of ideas within minds. Berkeley’s view still has its root in conceiving of knowing as analogous to looking, where the object of knowledge is something other than the self and is known through some kind of encounter.³⁰ In Berkeley’s case the reality “in here” composed of ideas is known through an intellectual look or inspection. Plato’s theory of forms is another example of a perception-based model, where the perfect archetypal ideas of everything exist in a realm outside space and time and are encountered by remembering the previous state when one’s soul and mind were united with these archetypal ideas.³¹ Augustine, too, may have adopted a similar perception-based model where knowing is an inspection of the eternal ideas in the mind of God.³² On this truncated view of human knowing, knowing something is a matter of encountering it in a very particular way, arguably best categorized as a kind of looking. Whether through the senses or intellectual intuition, these theories share the idea that reality is “already out there now”, waiting to be encountered. Reality is conceived as a kind of substance, whether material or mental, and we know it by seeing it as it is, already formed, with the eye of the body or the eye of the intellect.

Is it true that everything real is an encounterable entity “already out there now”? Or is there more going on in human knowing, which we mistake for a perception-like encounter of a subject with an object “already out there now”?

Understanding

Lonergan calls the second level of conscious activity, *understanding*. The second and third levels of conscious activity differ from the first in that they involve questions, a quality

²⁹ Lisa Downing, "George Berkeley", *The Stanford Encyclopedia of Philosophy* (Spring 2013 Edition), ed. Edward N. Zalta, URL = <<https://plato.stanford.edu/archives/spr2013/entries/berkeley/>>.

³⁰ It is helpful to clarify by contrasting this with Lonergan’s alternative model (which will be further explored in the next sections). Lonergan claims that reality is more than “body” – which is only one principle – it is intelligibility and existence too. Reality conceived in this way is known through an encounter through the senses, but also through the unity of the mind and the intelligibility and existence of the object. These latter kinds of knowing are not extroverted looks at the reality lying “out there”; rather, they occur through “insights” that grasp invisible unities and relationships within the data of our senses.

³¹ Plato reifies ideas so that they are existing entities, though non-material ones. Knowing is going to be a matter of “looking” at these fully-formed realities that exist separately from us, not with our senses but with our mind or soul. Lonergan writes: “The objective universals of Platonist thought seem to owe their origin to the notion that, as the eye of the body looks upon colours and shapes, so there is a spiritual eye of the soul that looks at universals or, at least, recalls them.” Lonergan, *Insight*, 413.

³² On Augustine, Lonergan writes: “...for him truth was to be known, not by looking out, nor yet by looking within, but rather by looking above where in an immutable light men consult and contemplate the eternal reasons of things.” Lonergan, *Insight*, 412.

that marks out the intelligent character of these levels. Questions for intelligence may lead to insight and formulation. Questions for reflection may lead to a judgment of “yes” or “no” or “I don’t know”. As we have seen, experience provides the data upon which the understanding works; understanding is what grasps intelligibility in the data of experience. Lonergan defines understanding and judgment implicitly too. Understanding provides the questions for reflection and judgment, and judgment grasps whether questions and hypotheses are established by the data of experience.

Fully human knowing goes beyond experiencing; it grasps more than the animals’ world of bodies. An “insight” is an act of consciousness at the second level. Through insight we grasp relations, patterns and order in the data. What is known through insight is not mere data, but a different *kind* of reality. Helminiak, a Lonergan scholar, explains that: “Although sensible qualities might describe a thing, they do not constitute it. The essence of a thing lies in the relationships that are inherent in it and that make it what it is.”³³ When we move to the level of understanding and seek explanations within the data of our senses, we are no longer describing the reality that is “out there”; we are grasping the intelligibility within the data. When the data are understood, our mind grasps unities and relations within it. These unities and relations are not “bodies” lying out there in space and time; they are realities that can only be grasped by intelligence.

It is simplest to understand the nature of an insight by looking at a mathematical example. Confronted with a round wheel with spokes, one may ask the question, “Why is it round?” The kind of answer we are seeking is one that grasps the essence of roundness or circularity, not one that says that a wheel is round because it is the most efficient way to move a load. As a first attempt at an answer to “why is it round?” Lonergan suggests that it is because the spokes are equal. However this is not precise enough, for “the spokes could be equal yet sunk unequally into the hub and rim” and “the rim could be flat between successive spokes”.³⁴ We are onto something though. Let us imagine that the hub is a point and the rim and spokes are lines. Then if there were an infinity of equal lines the rim would be perfectly round. If there were not an infinity of equal lines, then there would be microscopic flat parts on the rim between the lines and the rim would not be perfectly round. “Hence, we can say that the wheel necessarily is round, inasmuch as the distance from the centre of the hub to the outside of the rim is always the same.”³⁵ We have had an insight into the definition of the circle.

³³ Helminiak, *Brain, Consciousness, and God*, 67.

³⁴ Lonergan, *Insight*, 7.

³⁵ Lonergan, *Insight*, 7.

Why is the image necessary for the insight to occur? What we grasped in insight was that an infinity of equal lines protruding from one point *necessarily* results in perfect roundness. It is the necessity that constitutes the insight. A relation has been grasped, between the infinity of equal lines and roundness. Ah ha! That is what makes a circle round. Lonergan observes that "...the insight is the act of catching on to a connection between imagined equal radii and, on the other hand, a curve that is bound to look perfectly round."³⁶

It was not a general necessity in the abstract that we grasped. Rather, we grasped the necessity of a particular relation that is embedded in the particular data before us. The feeling that the relation is necessary only dawns on us when examining the lines and points in our imagination. As Lonergan writes, "eliminate the image of the centre, the radii, the curve, and by the same stroke there vanishes all grasp of necessary or of impossible roundness."³⁷ We always have insights *into* data. We do not just understand; we always understand something. So what is grasped in insight is not imaginable, nor is it possible without experience or the imagination. Insights are the mediator or pivot between the concrete and the abstract. They are always insights *into* the concrete world of sense, but what is known through them are abstract relations. Lonergan summarises: "What is grasped in insight, is neither an actually given datum of sense nor a creation of the imagination but an intelligible organization that may or may not be relevant to data."³⁸ Simply to bring up an image in one's mind ("a creation of the imagination") is not the same as having an insight and understanding. And this is despite the fact that insights are into data and may not occur without a "suggestive image."³⁹ Insight is a catching on to a relation in the data. However, what is grasped in insight goes beyond the data. It yields an abstract relation that can be applied to more than the particular concrete data that produced the insight. One particular image of a wheel and spokes led to the insight of the definition of the circle, but this definition is applicable to infinitely many other situations.

In the light of intelligence, the merely given data are actually understood. A new relation, pattern or unity is discovered, and what is then known includes more than just the data. Animal knowing confronts the spatiotemporal world around us, but human knowing is geared to the whole universe of being.

³⁶ Lonergan, *Insight*, 9.

³⁷ Lonergan, *Insight*, 9.

³⁸ Lonergan, *Method*, 10-11.

³⁹ Helminiak, *Brain, Consciousness, and God*, 260.

The moment of insight puzzled Plato, and also Augustine who would draw heavily on his thought. Since intellectual content is universal and unchanging, how could it come from the particular and transient things in the world?⁴⁰ As Augustine puts it: "...the ideas...I have not touched by sense-perception, nor have I seen them independently of my mind. I hid in my memory not their images but the realities. How they came to me let them explain if they can. I run through all the entrance doors of my body but do not find one by which they have entered in."⁴¹ Without the notion of "insight", Plato and Augustine had to conclude that our ideas do not enter us from the spatiotemporal world through our senses. Plato thought they must already exist in the recesses of our mind, but have been forgotten and must be remembered.⁴² Augustine thought the ideas are given by God to illuminate a human mind.⁴³

Hume tackled the same question, but unlike Plato and Augustine, he did not begin with the conviction that intellectual knowledge grasps some part of reality. If all we know about the objects in the world around us comes to us via our senses, then what is the validity of claims we make about non-sensible realities such as causation? Hume saw that a sense datum does not contain within it enough to ground claims about causality. In the sense data, we see two events (such as one billiard ball moving towards another and stopping, and the second ball starting to move off) but we do not *see* the causal connection.⁴⁴ The intelligible relationship between the two events – the causal connection – which we supposedly find in the data of our experience, must just be in our heads.⁴⁵ Polkinghorne, appealing to the

⁴⁰ Both Guthrie and Martin agree that this is one way in which Plato approached his theory of forms. Gail Fine argues that Plato is not committed to the argument that the forms must exist in order to explain *thought*, although he does explore the link between thought and the forms in the late dialogues. See W.K.C. Guthrie, *The Greek Philosophers: from Thales to Aristotle* (New York: Harper & Row, 1950), 88-90. C.J.F. Martin, *An Introduction to Medieval Philosophy* (Edinburgh: Edinburgh University Press, 1996), 64-5. Gail Fine, *On Ideas: Aristotle's Criticism of Plato's Theory of Forms* (Oxford: Clarendon Press, 2003), 120-140.

⁴¹ Augustine, *Confessions*, trans. Henry Chadwick (Oxford: Oxford University Press, 1992), X, x, 17.

⁴² "Plato tells us that when we think we are acquiring for the first time the concepts in terms of which our knowledge of changeless reality is expressed, we are in fact *remembering*: remembering a purely intellectual vision which our souls had in a previous existence." Martin, *Medieval Philosophy*, 66.

⁴³ Martin says that "Augustine in some of his works seems to toy with [Plato's] idea of recollection: but it has serious difficulties... Thus... [he] concludes that all intellectual knowledge is, like faith, a divine illumination." Martin, *Medieval Philosophy*, 66.

⁴⁴ Edward Feser writes on this point, as it pertains to demonstrating the existence of God: "...Hume and other later empiricists have argued compellingly that if we take seriously the thesis that we can have no idea that is not derived from experience, it seems that we can have no idea of a "necessary connection" between causes and effects, and thus no grounds for any inference to the effect that the material world simply must have its source in some immaterial necessary being..." (Edward Feser, *Locke*, Oxford: Oneworld Publications, 2007, 87.)

⁴⁵ Lonergan writes: "...Hume brought analysis to bear effectively on the issue; our knowing involves not only elements but also unities and relations; the elements consist in a manifold of unrelated sense impressions; the unities and relations have no better foundation than our mental habits and beliefs; whatever may be the practical utility of our knowledge, at least it cannot pretend to philosophic validity." Lonergan, *Insight*, 413.

testimony of science, thinks it is much more plausible that the scientist does not invent intelligible laws but uncovers what really exists: “The world, though ordered, is strange and subtle. Our powers of rational prevision are pretty myopic and limited by the contingency of the way things are, existing independently of how we think they ought to be.”⁴⁶ Polkinghorne observes that Kant thought it an *a priori* truth that space and time were absolute, but the strange and subtle world resisted our attempt to “impose” this pattern on it and Einstein gave us relative space-time.⁴⁷ Our ideas are limited by the way things are. Not just any idea will work – reality will push back.

Plato, Augustine and Hume are right – the unities and relations discovered by intelligence are not sensible like “bodies”. We do not apprehend meaning simply by the acts of perception. Polkinghorne is also right – the unities and relations (the laws of nature, for instance) are not arbitrary; they are related to the data and have to bow to reality in the end. The solution that brings these partial truths together is found in the notion of insight. Aristotle said “the mind grasps the forms in images.”⁴⁸ In order for the forms to be actualised, there needs to be a mind to grasp them. Only a mind can have an insight that pivots between unintelligent sense data and intelligent unities and relations. But when the insight occurs, what are grasped are real unities and relations in the sense data, which were present *potentially* before the moment of insight.

In other words, understanding adds meaning to the sense data. Meaning is intellectual content, not something that can be perceived with the senses. As Lonergan explains,

Once one enters upon the way of explanation by relating things to one another, one has stepped out of the path that yields valid representative images. No doubt, I can imagine the plant as seen, as related to my senses, as described... [The plant,] in so far as it is considered as a thing itself, stands within a pattern of intelligible relations and offers no foothold for imagination.⁴⁹

Once we have put away the idea that anything real must lie “out there” and be encounterable or imaginable, we are able to identify other kinds of realities that belong to the intelligible dimension of being, including things, experiential conjugates (Lonergan’s word for experienced relations), explanatory conjugates (intelligible relations) and probabilities. The same sense data can lead to these different kinds of insights.

⁴⁶ John C. Polkinghorne, *One World: The interaction of science and theology* (West Conshohocken, PA: Templeton Press, 2007), 27.

⁴⁷ Polkinghorne, *One World*, 27.

⁴⁸ Aristotle, *On the Soul*, trans. J.A. Smith (Oxford: Clarendon Press, 1908), III, 7.

⁴⁹ Lonergan, *Insight*, 250.

If we ask the question, “what is it?”, the answer we will give will belong to the category of insight into what Lonergan calls a “thing”. On this notion, Lonergan writes, “...the notion of a thing is grounded in an insight that grasps, not relations between data, but a unity, identity, whole in data; and this unity is grasped, not by considering data from any abstractive viewpoint, but by taking them in their concrete individuality and in the totality of their aspects.”⁵⁰ Take a chicken, for example. We see a chicken-like shape, we smell droppings, we feel the softness of the feathers and we hear clucking sounds. We grasp that these data are not random and disconnected, but that they all belong to the chicken. What is that unity of data? A chicken, a thing. The thing is the unity to which all the concrete data belong.

Sensible qualities allow us to describe how a thing appears to us, but sensible qualities alone do not make a thing what it is. Helminiak explains: “A heart is a heart, for example, not because of its ‘substantive’ qualities: darkish colour, bulging arteries, and pulsating surface, but because of its intelligibility: its structure, its regularity, the nature of its muscle tissue, and its function with the circulatory system.”⁵¹ The intelligible dimension is, according to Helminiak, what Aristotle attempted to capture with the four causes: formal, material, efficient and final. The four causes are relationships and unities, grasped by a mind working on sense data, not just by the senses. Aristotle’s notion of “substance” – an understood unity of matter and form – is similar to Lonergan’s “thing” – a “unity, identity, whole” grasped by an insight into data. Lonergan’s notion goes further because it identifies the cognitional acts that occur when we grasp that a particular collection of matter is a single entity.

Without the notion of the thing, we cannot have a notion of change, according to Lonergan, “for a change is not just a newly observed datum, nor the substitution of one datum for another, nor the creation of a datum that previously did not exist.”⁵² A thing is a concrete individual that undergoes changes but is still the same individual.

It is useful to compare a “thing” to a “body”. A thing is an intelligible unity to be grasped within the intellectual pattern of experience. A body is an instance of the “already out there now real” that is given and unquestionable, for to question is to operate intelligently.⁵³ Materialists tend to say that things are all of the same kind, because things are just bodies.

⁵⁰ Lonergan, *Insight*, 246.

⁵¹ Helminiak, *Brain, Consciousness, and God*, 67. “Substantive” is a reference to Chalmers, *The Conscious Mind*, 153, 304.

⁵² Lonergan, *Insight*, 247.

⁵³ Lonergan, *Insight*, 251.

Though it might *appear* to us, they say, that there are individual entities, they are really just complex arrangements of the same kind of stuff and there is nothing over and above this stuff that distinguishes them. But this is a confusion between the two kinds of knowing. The materialist thinks that his idea of a tree (a thing) was gained by simply looking at the tree and experiencing it. This is not so, according to Lonergan. Although the materialist will now have forgotten the moment it first happened, his idea of a tree was grasped in a moment of insight. It was not just passively received through his senses.

Kinds of Insights/Realities - Conjugates

Things possess properties, and they are also subject to laws. The tree is brown, a descriptive property, and it has mass, a property grasped by intelligence. Lonergan would term “brown” an experiential conjugate, and its mass an explanatory conjugate. The notion of the thing links experiential conjugates and explanatory conjugates; it is the same thing that has perceptible properties and intelligible ones.

The term “property” is highly ambiguous in contemporary philosophy.⁵⁴ Properties can refer to the perceptual characteristics of things, such as the hotness of fire, the wetness of water, the taste of honey, or to non-perceptual characteristics like mass, malleability and melting point. Lonergan uses the term “conjugate” in order to capture the relational nature of these properties. When we use experiential conjugates, we are describing the way things appear *to us*.⁵⁵ When we use explanatory conjugates, we express the relation of things *to each other*, in terms of laws and frequencies.⁵⁶ We are no longer describing what they look like.

Whereas things are unities in concrete data, experiential and explanatory conjugates consider the data of experience from an abstract viewpoint. When we consider an experiential conjugate we retreat from all data except for a single quality like “brown”. The experiential conjugate is an abstraction from the totality of concrete data, which includes the look of feathers, the smell of droppings, the shape of the chicken. The explanatory conjugate is also an abstraction, considering intelligible relations in data rather than the concrete data in their

⁵⁴ Helminiak, *Brain, Consciousness, and God*, 176.

⁵⁵ Comes from the Latin, cum + jugare: to link or join together. See Helminiak, *Brain, Consciousness, and God*, 176.

⁵⁶ Lonergan writes: “...masses might be defined as the correlatives implicit in Newton’s law of inverse squares. Then, there would be a pattern of relationships constituted by the verified equation; the pattern of relationships would fix the meaning of the pair of coefficients, m_1 , m_2 ; and the meaning so determined would be the meaning of the name, mass. In like manner, heat might be defined implicitly by the first law of thermodynamics...” Lonergan, *Insight*, 80.

individuality and totality.⁵⁷ When we consider an explanatory conjugate we turn our focus away from the perceptible data and towards “a non-imaginable term that can be reached only through a series of correlations of correlations of correlations.”⁵⁸ Only intelligence can grasp these relationships, not perception. In the terminology of conjugates, Lonergan identifies visual properties (how things look to us) and intelligible ones (how things are related to each other), and the latter cannot be grasped by perception alone.

Relationship of the Subject and Object in Experience and Understanding

In perception, or experiential knowing, there is confrontation between the subject (“here”) and the object (“out there”). Bodies external to us cause different sensations in us (colours, sounds, textures, tastes, smells) through biological sense organs. Intellectual knowing is not confrontational like perception. In intellectual knowing, there is no gap between the knower and the thing itself, because the very intelligibility of the thing known is grasped by the knower. The intelligible relations and determinatives of the understood are taken into the intellect, so there is no confrontation or problem of the bridge, because there is no distance between us and the thing itself known through insight. Intellectual knowing involves an identity of the knower with the known. The intelligibility is understood and made one’s own. If one does not grasp the same intelligibility that is in the data, then one has not really understood it.

According to Lonergan, and to Aristotle and Aquinas before him, in the moment of understanding, the intellect *becomes* the understood. Intelligence grasps the intelligibility in the data through a leap of insight. The thing itself - the unities and relations which make it what it is - and not just the way it looks to us - is known. To see how this works, consider that intelligible relationships are determinate in a way that material things are not. Material representations of triangularity will always have imperfections, but the definition (or “form”, in Aristotelian terminology) of triangularity is perfect. A thought about triangularity, such as the thought that $c^2 = a^2 + b^2$, must be as determinate as the form of triangularity, otherwise it is not a thought about *triangularity*, but an imperfect approximation of it. If a thought is about the definition of a triangle, it is precisely the thought that $c^2 = a^2 + b^2$; it is a thought and not

⁵⁷ As given, the concrete data are unrelated and unorganised; they contain no intelligible relations, which require a mind an act of insight to grasp.

⁵⁸ Lonergan, *Insight*, 245.

merely an approximation. Thus forms are precisely what is thought. The intellect becomes the form.⁵⁹

In the technical terms of Aristotelian and Thomist philosophy, the intelligibility of the understood “informs”—or shares its “form” with—the intelligence even as the intelligence “actualises” the intelligibility of the understood. What intelligence grasps is the intelligibility within the data, so what the subject eventually knows is precisely that to which the data and their intelligibility pertain, namely, the known object.⁶⁰

In Lonergan’s analysis, there is no confrontation between the subject and the object in intellectual knowing. The subject and object are unified in knowing, for the thing is not just a body out there; it also possesses a pattern of relationships that define what it is, and these are grasped by intelligence.

Judgment

Yet an act of understanding is still not knowing because we might be wrong. We are full of bright ideas, but not all of them are true. To say we “know” we would want to have some idea that our understanding of the data is correct. If knowing ended at understanding, we would be in the idealist camp, where knowing is by providing coherent explanations or good ideas. But idealism does not put its roots down into fact, into what happens to be the case in our world. Our knowledge remains theoretical, disconnected from what is in fact so. A complex network of mathematical relations can be internally coherent, but it does not necessarily have anything to do with reality.⁶¹ What makes logical sense *could* be real, but it is not necessarily real. Lonergan says that “...until I judge, I am merely thinking; once I judge, I know; as insight draws the definite object of thought from the hazy object of experience, so judgment selects the objects of thought that are objects of knowledge.”⁶² So experience alone is not knowing, nor are good ideas. Fully human knowing occurs in judgment. Judgment is also an insight, an intellectual act, but it is a different kind to that of understanding. To clarify by contrast, whereas understanding seeks possible answers to the open-ended questions “What is it?” or “Why is it?”, judgment responds to the closed-ended

⁵⁹ Edward Feser, *The Last Superstition: A Refutation of the New Atheism* (South Bend IN: St Augustine’s Press, 2008), 17.

⁶⁰ Helminiak, *Brain, Consciousness, and God*, 67.

⁶¹ Although it sometimes does. Theoretical physicists like Paul Dirac aim for mathematical beauty in their equations, because these tend to be true of the world. Dirac wrote: “It is more important to have beauty in one’s equations than to have them fit experiment... because the discrepancy may be due to minor features which are not properly taken into account and which will get cleared up with further developments of the theory...” Cited in Polkinghorne, *One World*, 55.

⁶² Lonergan, *Insight*, 340.

questions “Is it?” or “Is it so?” The only possible answers are “Yes” or “No” or “I don’t know”. With judgment, truth and falsity enter the picture. Two different kinds of intelligibility are at play in understanding and judgment, because two different matters are to be understood.

The Virtually Unconditioned

Judgment follows from understanding. It affirms or denies that a theory, hypothesis or understanding is in accordance with the data. Whereas our understanding only puts forward possibilities, with judgment we reach something solid and grounded. “Every answer to a question for intelligence raises a further question for reflection... We conceive in order to judge.”⁶³ The point of conceiving and formulating theories is to finally ask, “Is it so?” If all the data is accounted for and there are no further relevant questions, we can judge “Yes, it is so.” The insight that occurs in judgment is a realisation that the data contains all the requirements to make the idea or understanding correct. Lonergan calls it a “judgment of fact”.

Judgment does not deem fact absolutely necessary because it relies on the idea that everything in this universe is contingent – that the universe did not have to be the way it is, but after all it is this way. A judgment of fact is not necessary in the way that abstract mathematical or logical premises can yield necessary conclusions. Just because an idea is logically necessary does not mean it has anything to do with the real world. Judgment links our thinking back to concrete reality. Judgment cuts through and affirms what is in fact so in the real world. It expresses a *de facto* necessity.

When we grasp that the evidence is sufficient to ground a prospective judgment, we have an insight that the conclusion is firm and without conditions that still need to be fulfilled. In Lonergan’s language, the prospective judgment is “virtually unconditioned.”⁶⁴ To illustrate, let a, b, and c be the conditions that would make P true. If a, b and c were true, then the conclusion P would be firm and a correct judgment. But P did not *have* to be true – there is no absolute necessity involved. Caesar did not have to cross the Rubicon. But he did. It is now a fact, and will be forever. That is why Lonergan says the judgment of fact achieves the “virtually unconditioned”; the only absolutely unconditioned being is God. Everything else is contingent.

⁶³ Lonergan, *Insight*, 273.

⁶⁴ Lonergan, *Insight*, 280.

When we judge, we know. We affirm what is so, regardless of what we would like it to be or imagine it to be. We achieve objectivity because we know something of being, of reality.

Subjective and Objective Dimensions of Knowledge

This means that human knowing has a subjective dimension to it – there is no knowing without a knower. The knower has to judge whether his understanding of the data is correct. The data are given, but the understanding belongs to the knower as does his judgment. But knowledge is not merely subjective, in the sense that it has no grounding in reality, because data constrain understanding and judgment. It also means that knowledge is not entirely objective, in the sense that it is independent of a subject. There is no knowledge without a subject doing the knowing.⁶⁵ Human knowing involves objective and subjective elements because it has input from experience as well as from understanding and judgment.

A Consistent Cognitional Theory

Lonergan's theory maps the given structures of knowing, data that anyone with a mind can access and verify for themselves. Besides this claim to an empirically-derived epistemology, Lonergan says the fundamentals of his analysis are not open to revision. Any attempt to revise his account would be self-refuting because it could only make use of the very structures of consciousness that are being refuted. He claims that the failure to recognise the structure of consciousness led other philosophers to inconsistent theories. As Lonergan notes, "Hume thought the human mind to be a matter of impressions linked together by custom. But Hume's own mind was quite original. Therefore, Hume's own mind was not what Hume considered the human mind to be."⁶⁶ Kant claimed that human knowing is restricted to *phenomena*, our experience, and can never reach the *noumena*, the thing in itself. Helminiak points out that: "...this claim is a judgment. But, on the basis of Kant's theory, this particular judgment could be true and fundamental only 'if the truth of judgment is fundamental. But for Kant, judgment is not fundamental', but only regulatory: it 'oversees' the application of the categories of the mind to its perceptual input."⁶⁷ Paradoxically, Hume

⁶⁵ Helminiak, *Brain, Consciousness, and God*, 79.

⁶⁶ Lonergan, *Method*, 21.

⁶⁷ Helminiak, *Brain, Consciousness, and God*, 81. Helminiak quotes Lonergan in this passage, from Bernard Lonergan, "Understanding and being: The Halifax lectures on insight", *Collected Works of Bernard Lonergan*, vol. 5, edited by E.A. Morelli & M.D. Morelli (Toronto: University of Toronto Press, 1990), 179.

and Kant make judgments about what is real, but their theories of reality do not account for judgment in human knowing. A consistent cognitional theory must account for experience, understanding, and judgment.

The Accuracy of Human Knowing

Knowledge is not objective to the extent that we eradicate all traces of the human subject; it is objective to the extent that the knower respects the structure of knowing.⁶⁸ Objectivity is achieved by allowing the pure desire to know to unfold without bias. The subject must be attentive, intelligent and reasonable. He needs to take in all the available evidence, ask tough questions, and be honest in judgment. Lonergan summarises the heart of his epistemology: “Genuine objectivity is the fruit of authentic subjectivity.”⁶⁹ He gives us three transcendental precepts that guide the knower’s journey to authentic subjectivity and the consequent fruit of objectivity: Be attentive. Be intelligent. Be reasonable.⁷⁰ We are fallible creatures and our knowing is never certain as Descartes demanded. We can fail to pay attention to all the available evidence, we can misunderstand the evidence because of a poor night’s sleep. While there are honest mistakes, there is also deliberate trickery and cultural bias. We cannot separate human knowing from virtue. Knowledge cannot be achieved without honesty – honesty to the transcendental precepts. Communities of knowers offer the best protection against inaccurate knowing because they keep each other attentive, intelligent and reasonable. But there is no guarantee. Lonergan put it well in some notes he wrote: “There is no mechanical test for truth. It is the mind – It is the intelligence. A man’s ability to judge is the test of truth in the last analysis. Judgments are sometimes wrong. Cure is not to throw out judgments. It means you have to be careful.”⁷¹ Judgments can be wrong because of the shortcomings of the one making the judgment. A judgment is a personal commitment. We are happy to admit we have a faulty memory because it is not within our power, but not poor judgment, for which we are responsible!

⁶⁸ By “traces of the human subject” I mean characteristics of what humans are that distort our vision of reality. For example, according to Galileo, Descartes, and Locke, secondary qualities are not part of the world as it really is in itself. We see them because part of being a human subject is having phenomenal experiences of the world that only exist when a subject perceives the world through its senses. See Helminiak, *Brain, Consciousness, and God*, 90.

⁶⁹ Lonergan, *Method in Theology*, 292.

⁷⁰ Lonergan, *Method in Theology*, 53.

⁷¹ Mathews, *Lonergan’s Quest*, 156.

Summary: Levels of Consciousness

In summary, to know is to move through all three levels of cognitional acts and make a judgment about what is true. Lonergan's epistemology is not grounded in speculation, but empirical, contingent fact. Furthermore, the data of consciousness are public – they are accessible to anyone with a mind. "Data" derives from the Latin for "given". The data of these three levels are the given mechanisms, structures and processes of human consciousness. We cannot question whether they are real because to doubt or question the structure of consciousness would be to employ the very mechanisms, structures and processes in question. It is like the argument that Socrates made against the sceptics who knew that nothing could be known, yet somehow they could know this one truth! The data Lonergan begins with, the data of consciousness, are given and unquestionable. They are a solid place to start.

For Lonergan, consciousness is not a purple haze floating above our brain; it is the awareness immanent in each kind of cognitional act. When we turn our attention away from things in the world to the cognitional acts themselves, we find the data of consciousness: that we operate sensitively, intelligently and rationally. There is no cosmic necessity about these cognitional acts. In other possible worlds, knowing could conceivably be something different. But in our universe, knowing is an activity that comprises experiencing, understanding and judging. What is known by these activities is more than just a "body" lying "out there"; invisible unities and relations are grasped by the second level of consciousness, and the actuality or existence of these intelligibilities is affirmed in the third level of consciousness. There is literally more to the world than meets the eye, though without the eye, many insights may never occur.

1.3 Intellectual Conversion

At this stage in the journey to self-knowledge we have become aware of the pure desire to know and the different cognitional activities that constitute knowing. However, it is important to articulate the absent objective of the desire to know, which is being.

Being, or all that is, all reality, "is (a) the objective of the pure and unrestricted desire to know and (b) what is known through the totality of true judgments."⁷² As Mathews puts it, "potentially, intellectual desire is an anticipation or notion of being, of everything there is."⁷³

⁷² Lonergan, *Intelligence and Reality*, 16, sec. 7, quoted in Mathews, *Lonergan's Quest*, 257.

⁷³ Mathews, *Lonergan's Quest*, 251.

What is the structure of being that is anticipated by the desire to know, and then known in true judgments? The clue for Lonergan was to realise that “the form of the desired is in the desire” as C.S. Lewis put it.⁷⁴ If knowing is the key, the known is the keyhole which our knowing fits: “Objectivity, finally, is a compound of the experiential, normative, and absolute aspects that parallel the three levels of our knowing.”⁷⁵ The real is a composite of data, intelligibility and actuality. To realise this is to undergo an intellectual conversion and recognise that “our senses, imagination, and instincts are not the ultimate measure of knowledge and reality.”⁷⁶

Intellectual conversion is not a simple process. We can go all of our lives not realising that our knowing goes beyond animal knowing. We presume that we are wide awake to reality. The world of sense is so immediate and obvious and contains the pressing data for the needs of survival. But as Socrates and Plato realised, there is something fundamentally different about humans and animals. Cushman argues that:

... Socrates’ teaching concerning the *psyche* had loosed Plato forever from the tyranny of the obvious. For him there is an “organ of knowledge the value of which outweighs ten thousand eyes,” because only by it is true Being discerned.... Plato’s task ... was that of bringing men to the point of acknowledging that they were, in fact, asleep to the real nature of their world.⁷⁷

This openness to the deepest realities that go beyond sense is what reveals that humans have a spiritual soul. Pieper explains that spiritual beings are those whose “nature it is to exist in the presence of total reality. This is what we mean by possession of spirit or soul: to be involved with *everything* that exists: ‘to permeate the whole cosmos.’”⁷⁸ Fully human knowing, according to Lonergan, not only encounters bodies, but also at the same time grasps the real intelligible order with the understanding and affirms being itself in judgment.

1.4 Mind and Reality – Kant and Lonergan

Immanuel Kant (1724-1804) realised that human knowing was not simply a matter of seeing what is “already out there now”.⁷⁹ There is a subjective component of knowing: the

⁷⁴ C.S. Lewis, *Surprised by Joy: The Shape of My Early Life* (New York: Mariner Books, 2012), 220.

⁷⁵ Morelli, *Lonergan Reader*, 222.

⁷⁶ Mathews, *Lonergan’s Quest*, 257.

⁷⁷ Robert E. Cushman, *Therapeia: Plato’s Conception of Philosophy* (Westport, CT: Greenwood Press, 1958), 44.

⁷⁸ Josef Pieper, *Enthusiasm and Divine Madness: On the Platonic Dialogue ‘Phaedrus.’* Trans. Richard and Clara Winston (South Bend IN: St Augustine’s Press, 2000), 75.

⁷⁹ Helminiak, *Brain, Consciousness, and God*, 55, 436.

knowing subject contributes to its knowledge of objects. He writes in the preface to the 1787 edition of *The Critique of Pure Reason*:

We here propose to do just what Copernicus did in attempting to explain the celestial movements. When he found that he could make no progress by assuming that all the heavenly bodies revolved round the spectator, he reversed the process, and tried the experiment of assuming that the spectator revolved, while the stars remained at rest. We may make the same experiment with regard to the intuition of objects. If the intuition must conform to the nature of the objects, I do not see how we can know anything of them a priori. If, on the other hand, the object conforms to the nature of our faculty of intuition, I can then easily conceive the possibility of such an a priori knowledge.⁸⁰

His solution was to say that the human mind has built-in categories such as space, time, substance and causality, that structure our experience and determine how the world appears to us. We cannot avoid this filtering; the raw and unintelligible data of experience is arranged into a world of substances that occupy space and time and are causally related to each other. Space, time, substances, causality – in reality, these might not exist at all, but they are part of *our* reality. Human knowing is limited to the world of phenomena, of how things appear to us.

While Kant recognised the subjective component of human knowing, he still adopted a confrontational model where reality is known through extroverted sense perception. Kant's position was that "our nature is so constituted that our *intuition* can never be other than sensible. That is, it contains the only mode in which we are affected by objects."⁸¹ Kant would have us believe that human powers of theoretical knowing are cut off from the world, unable to access anything but the categorised or filtered sense data that comes from objects. While our senses make contact with objects, our intelligence does not, according to Kant.⁸² Order, relationships, patterns, unities; these are the objects of intelligence, and they do not belong to the objective order of reality but are grasped in the phenomenal world. The laws of nature discovered by Newton are "not something known in the world, but something conceptual in our minds."⁸³ There is a chasm between our ideas and things as they are in themselves. As Stewart observes, "if once "things" and the "mind" become conceptually separated, they fall into two separate spatial spheres, into an inner and an outer world,

⁸⁰ Kant, *Critique of Pure Reason*, Preface to the 2nd Ed. Trans. J.M.D. Meiklejohn, University of Adelaide Ebook.

⁸¹ Kant, *Critique of Pure Reason*, B75 A51. Quoted in Mathews *Lonergan's Quest*, 257.

⁸² Mathews, *Lonergan's Quest*, 257.

⁸³ Mathews, *Lonergan's Quest*, 269.

between which there is no intelligible causal connection. And the conflict constantly grows sharper.”⁸⁴ The assumption that objectivity equals extroversion and that the real is “already out there now” leads to the separation of objects and thought. What causal connection could possibly exist between the world of ideas and the spatiotemporal world of material objects “already out there now”?

Lonergan rejects Kant’s view that the understanding is *directly* related to objects only through sensible intuition. Kant had yet to undergo an intellectual conversion after which he would recognise that reality is more than what our senses can access and our imagination can picture. Kant’s mistake was to miss that in theoretical knowing, “the form of the desired conforms to the form of the desire, not to sensible intuition.”⁸⁵ That is, what we know does not only take the form of tangible objects that we can perceive – that is what we know on the first level of consciousness. What we know is what is grasped by insight and judgment too – immaterial, invisible relationships and unities. Lonergan’s great insight, which built on Aristotle and Aquinas, was to see that our desiring minds are potentially related to the totality of what there is: not just to sense impressions of objects, but to their inherent intelligibility too. The mind desires to know being, and this goes beyond what we can picture or imagine. We know an empirical dimension of reality when we use our senses. We know an intelligible dimension through our understanding. And finally, “in a true judgment a full, proper cognitional relation is established with a known object or fact in the world; we come to affirm the existence of a fact, situation, state of affairs.”⁸⁶ There are no chasms between thought and ultimate reality, because it is the one reality that is experienced, understood and affirmed. Reality *is* sensible and intelligible. Thought and reality are intimately related.

In Lonergan’s analysis, there is no conceptual separation between “things” and “mind”, such that their connection is unintelligible. As Lonergan says, “...to know means to know being, and to know being includes knowing objects and subjects.”⁸⁷ The desire and its object, being, are both prior to all experiencing, thinking and judging. Both the universe and the knower have being – this is given. This is a different starting point to Kant’s from which to attack the problem of transcendence, of how a knower grasps a known. In Lonergan’s own words:

How does the knower get beyond himself to a known? The question is, we suggest, misleading. It supposes the knower to know himself and asks how he can know

⁸⁴ William Stewart, ‘Notes on Lonergan’s Grace Course,’ 32. Quoted in Mathews, *Lonergan’s Quest*, 251.

⁸⁵ Mathews, *Lonergan’s Quest*, 269.

⁸⁶ Mathews, *Lonergan’s Quest*, 270.

⁸⁷ Lonergan, *Insight*, 340.

anything else...[W]e contend that, while the knower may experience himself or think about himself without judging, still he cannot know himself until he makes the correct affirmation, I am. Further, we contend that other judgments are equally possible and reasonable, so that through experience, inquiry, and reflection there arises knowledge of other objects both as beings and as being other than the knower. Hence, we place transcendence, not in going beyond a known knower, but in heading for being within which there are positive differences and, among such differences, the difference between object and subject. Inasmuch as such judgments occur, there are in fact objectivity and transcendence...⁸⁸

The problem is not: "I know my sense perceptions, but how do I know if they correspond to anything objective outside my head?" In order to recognise this distinction between subjective and objective, one has made (at least) the judgments "I am" and "I am not this computer", and to have made judgments, one must first have experienced and understood. Objects and subjects are both in being, and are known through correct judgments. The reason we created for ourselves the problem of the bridge between the knower's intellectual knowledge and objects is because we assumed that knowing is a form of extroversion, and that the totality of reality is a fully-formed palpable body lying out there in the world, waiting to be encountered by the subject.

The universe is a realm of meaning, not just bodies "out there". It really and truly *is* intelligible. That does not make sense if we are committed to the real being just physical bodies, because intelligibility is another kind of reality. But if we discard that suffocating premise, we find that the real is intelligible, and sometimes perceivable too. Not all kinds of being are perceptible, subatomic particles for instance. If we were to regard the real as experienced, understood and affirmed, then the existence of non-physical kinds of being would take its place alongside the claims of modern science to invisible and imperceptible subatomic particles, energy fields, etc. If we can clear up our epistemology, we find that both these kinds of claims come from the same source: the human mind and its desire to know.

⁸⁸ Lonergan, *Insight*, 377.

Chapter 2 – The Meaning of Matter

This chapter examines Nagel's analysis of the origins of our concepts of mind and matter and argues, with Lonergan, that there are deeper principles informing these concepts, namely an extroverted notion of objectivity, which assumes that reality is "already out there now" and that knowing it is like "taking a good look" at it.⁸⁹ Nagel is aware that the modern concept of matter has a history, and that it is the cause of the mind-body problem, but arguably he is not aware of the extroverted notion of objectivity, and therefore neither is he aware of all the content of the concept "matter". This is important to the overall thesis because it enables us to identify the source of the strengths and weaknesses of Nagel's thought about the mind and his proposed dual aspect monist theory of integrating the mind into the physical world.

The chapter will proceed by examining how the separation between thought and reality that occurred with the rise of nominalism assumed an extroverted notion of objectivity (2.1), how this influenced Galileo's distinction between primary and secondary qualities (2.2) and Descartes' distinction between mind and matter (2.3), and finally it will examine some contemporary responses to Cartesian principles (2.4) which will shed light on the strength of Nagel's critical awareness of the history of "matter".

2.1 The Rise of Nominalism

The predominance of the extroverted notion of objectivity since early modern philosophy traces back to the rise of nominalism where thought and reality were separated.⁹⁰ Though there have been representatives of this notion of objectivity since the pre-Socratics, the rise of nominalism gave the notion greater momentum. Nominalism tends to hold that universals are just names or concepts in the mind with no corresponding extra-mental reality. It separates thought and reality ontologically. This separation did not happen all at once, however. Dupré argues that ancient and early medieval philosophy held that there was no separation between thought and reality, that "to know consists in becoming in some way what one knows."⁹¹ The beginnings of separation, according to Dupré, can be found in the

⁸⁹ Lonergan, *Insight*, 251-2.

⁹⁰ "It eventually became a major presupposition linking such disparate figures as Scotus, Ockham, Descartes, Locke, and Kant." Eugene Webb, *Philosophers of Consciousness* (Seattle: University of Washington Press, 1988), 59.

⁹¹ Louis Dupré, "The Emergence of Objectivity", *Passage to Modernity: An Essay in the Hermeneutics of Nature and Culture* (New Haven: Yale University Press, 1993), 80.

Scholastic position, which was that “the ideal *species* through which we know is itself not an object of knowledge but merely an instrument for knowing the real—*hoc quo cognoscitur* (that through which we know).”⁹² This development still involved a unity between the knower and reality, for Aquinas would invoke Aristotle’s authority for ideas such as *intelligibile in actu est intellectus in actu* (the intelligible in act is the intellect in act).⁹³ The major separation occurs with the rise of nominalism at the end of the Middle Ages. John Duns Scotus endows universals with an ideal reality of their own. No longer are ideas just an instrument for knowing the real; now they possess a kind of “objective being” themselves.⁹⁴ With Scotus, concepts possess a degree of independence from the realities they represent. This is natural given an extroverted notion of objectivity, for although, according to Scotus, we know what is intelligible, what is presented in sense data is not actually intelligible.⁹⁵ Objective knowing being a matter of encountering what is actually there, our conceptual knowledge must not really come from reality directly. Keeping to his convictions about extroverted objectivity, he aligned the medieval notion of abstraction with an extroverted notion of objectivity to account for the fact of our conceptual knowledge. On this, Lonergan writes: “[The second step of] the Scotist theory of abstraction... consists in intellect taking a look at a conceptual content produced in the intellect by the unconscious co-operation of the intellective and the imaginative powers of the soul.”⁹⁶ In this way, Scotus conceives of abstraction that produces conceptual content that does not come from sensible being. For him, conceptual content is a mental reality, distinct from extra-mental reality. The extroverted notion of objectivity raises its head whenever we presume that objective knowing is a matter of encountering what is actually there to be seen or intuited. A separation of the knower and reality will generally involve an extroverted notion of objectivity. If thought is one thing, and reality is another, then thoughts represent – but are not directly united with – the reality that is “already out there now” with respect to the knower. William of Ockham made mental acts even more independent of reality than Scotus did. For Ockham, intuitive cognition is the source of true knowledge; that is, only the primary intuition of a particular object corresponds to an external reality. Intuitive cognition allows us to apprehend the existence of an object, and generally depends on an object to cause this intuition in us.⁹⁷ The only exception is in the

⁹² Dupré, *Emergence of Objectivity*, 80.

⁹³ Dupré, *Emergence of Objectivity*, 80.

⁹⁴ Dupré, *Emergence of Objectivity*, 80.

⁹⁵ To clarify by contrast, Aristotle and Aquinas both affirmed that the intellect apprehends the intelligible in the sensible, and the universal in the particular. Lonergan, *Insight*, 406. Aristotle: “mind grasps the forms in images. Aristotle, *On the Soul*, III, 7.

⁹⁶ Lonergan, *Insight*, 412.

⁹⁷ Ockham, *Sent. I*, Prologue, q. 1, in *Five Texts on the Mediaeval Problem of Universals: Porphyry, Boethius, Abelard, Duns Scotus, Ockham*, ed. and trans., Paul Vincent Spade (Indianapolis, Ind.: Hackett, 1994).

case of God causing the intuition without the presence of an external object. Abstract cognition, on the other hand, does not apprehend real existence. It occurs after the primary intuition of a single object, and can occur even in the absence of the object. Abstract cognition does not relate us to real objects. Universal concepts have no reality outside of the mind. They are mental objects that *represent* the real world. Intuitive cognition is the only mode by which we contact real objects. Even then, thought is so separated from reality that God could conceivably cause the mind to know things intuitively that had no basis in reality.⁹⁸ Concepts are radically immanent for Ockham, such that knowing is “entirely established within the mind.”⁹⁹ His denial of metaphysical universals, and his ontology of only particulars “already out there now”, makes him a nominalist.

One step further and the reliability of Ockham’s intuitive cognition can be called into question. If God could conceivably cause our intuitions, then on what grounds are we *certain* that our intuitions are ever connected to an external object? Descartes was to consider the view that the mind can only know with certitude its own ideas. The challenge for Descartes becomes to establish the grounds for certainty that our thoughts do match the world, and he has to find this within the mind. His philosophy, as well as that of his predecessors, presumes an extroverted model of objectivity, which Webb calls the “perceptualist paradigm of knowing”:

The perceptualist paradigm of knowing was perhaps the most fundamental assumption of the philosophical epoch of which Hegel marked the close.... It eventually became a major presupposition linking such disparate figures as Scotus, Ockham, Descartes, Locke, and Kant. Its characteristic tenet was that the object one knows is a thing “out there,” entirely separate from the individual who knows it; the knower looks over at it across a gap that is both physical and ontological, and if he gives it a good look and nothing distorts his vision, he receives accurate impressions of it. The major problem from the point of view of such an epistemology is, of course, how to be certain the object is really there or that its impressions are accurately transmitted across the gap...¹⁰⁰

This model of objectivity carries through to modern philosophy and influences the development of the mechanistic philosophy that accompanies the scientific revolution of the 16th and 17th centuries.

⁹⁸ Dupré, *Emergence of Objectivity*, 81.

⁹⁹ Dupré, *Emergence of Objectivity*, 81.

¹⁰⁰ Webb, *Philosophers of Consciousness*, 59.

2.2 Galileo: Primary and Secondary Qualities

Modern philosophy begins roughly in the seventeenth century.¹⁰¹ Feser argues that “early modern philosophy is defined more than anything else by its rejection of the fundamental metaphysical and methodological assumptions of the medieval Scholastic tradition.”¹⁰² According to Dupré, it is more than just a plain rejection of Scholasticism; the seeds were sown in Scholastic epistemologies and they flowered with nominalism. Whereas in Aristotelian and Scholastic thought, knowing involves a unity between thought and reality, this is not so for Scotus, Ockham and the early moderns. The extroverted notion of objectivity, which separates thought and reality, also causes a shift in the concepts of causality and matter, which we can see in Galileo’s distinction between primary and secondary qualities.

However, Feser has a point. Fundamental Aristotelian metaphysical notions were rejected or reinterpreted to account for the results of the Scientific Revolution. There are four kinds of explanation in Aristotelianism, known as the four causes: material, formal, efficient and final. An individual existent (“substance”) like a tree is a composite of matter and form. It is intelligibly structured by its form, and matter individuates this form to make it exist in a particular place.¹⁰³ Form, being an intelligible reality, cannot be identified with anything material, because it is constituted by non-material and invisible relations between elements of the thing. But grasping the material cause and formal cause is not enough to fully understand a substance. The final cause is the purpose or function of the substance. Its efficient cause is what brings a substance into existence or initiates changes in it. All these kinds of cause concern a certain kind of intelligibility; they are each a certain kind of explanation in response to the question, “Why is this substance the way it is?” For Aristotle, causality was about understanding and explanation, not the observation of perceivable spatiotemporal processes, although observation of processes can lead to the insight that there is causation.

With the rise of modern science, Galileo shifted attention to material and efficient causes to explain the phenomena of the natural world: matter and motion. The historian of science, John Henry, summarises the changing principles of explanation:

In its strictest forms the mechanical philosophy was primarily characterized in terms of a restricted range of explanatory principles. All phenomena were to be explained in terms of concepts employed in the mathematical discipline of mechanics: shape, size,

¹⁰¹ Feser, *Locke*, 9.

¹⁰² Feser, *Locke*, 9.

¹⁰³ Martin, *Medieval Philosophy*, 98.

quantity, and motion. The logic of this kind of explanation tended to lead to a restricted theory of causation, conceived only in terms of contact action. The mechanical philosophy saw the workings of the natural world by analogy with machinery; change was brought about by (and could be explained in terms of) the intermeshings of bodies, like cogwheels in a clock, or by impact and the transference of motion from one body to another.¹⁰⁴

In other words, the basic ideas of efficient and material causes were retained, but no longer understood as intelligible principles of explanation. The material cause morphed from being an intelligible principle of individuation that never existed in its own right, into an imaginable spatiotemporal body in its own right. The efficient cause morphed into mechanical “contact action”, an easily imaginable kind of cause that operates on easily imaginable bodies in space. Lonergan calls this “the image of the transmission of effort through contact.”¹⁰⁵ But conceiving of causation as a force between imaginable bodies risks losing sight of the nature of causation as an intelligible reality, not a picturable one. As C.S. Lewis said, a law of nature never *did* anything.¹⁰⁶ Things behave according to laws of nature. We cannot see or even imagine what a law of nature looks like. They are intelligible relations between things in the universe.

The logic worked itself out when David Hume in the eighteenth century denied altogether that causation was real because it could not be seen or imagined. All we see are events occurring after each other, but we do not see a *cause*. His view is still prominent today. For instance, the contemporary philosopher of mind, David Chalmers, echoes Hume: “external evidence only gives us access to regularities of succession between events; it does not give us access to any further fact of causation.”¹⁰⁷ Hume and Chalmers support Lonergan’s argument that causation is invisible to the senses, but not to the intelligence. For that matter, neither is it the senses that grasp the “regularities of succession between events”, but intelligence. Regularities are not simply given in data; they are grasped by insight.

The rejection of formal and final causes, and the focus on matter and motion as the source of sufficient explanations for all the phenomena of the physical world, is a symptom of the shift to an extroverted model of objectivity. The intelligibility of causation is overlooked, and thus a central assumption of scientific work is rendered unreal by David Hume.

¹⁰⁴ John Henry, *The Scientific Revolution and the Origins of Modern Science* (New York: Palgrave, 2002), 69.

¹⁰⁵ Helminiak, *Brain, Consciousness, and God*, 142.

¹⁰⁶ C.S. Lewis, “The Laws of Nature”, in *God in the Dock: Essays on Theology and Ethics*, ed. Walter Hooper (Grand Rapids, Michigan: Wm. B. Eerdmans Publishing, 1970), 73.

¹⁰⁷ Chalmers, quoted in Helminiak, *Brain, Consciousness, and God*, 143.

Nagel attributes the creation of the mind-body problem to these changes to the conception of matter: “The modern mind-body problem arose out of the scientific revolution of the seventeenth century, as a direct result of the concept of objective physical reality that drove that revolution.”¹⁰⁸ Nagel credits Galileo and Descartes with the modern concept of objective physical reality.¹⁰⁹ John Henry explains that in the thought of Galileo: “A distinction was made between what were considered to be the real properties of bodies (size and shape, motion or rest) and merely secondary qualities, caused by the former, such as colour, taste, odour, hotness or coldness, and the like.”¹¹⁰ Galileo and others who adopted the distinction between primary and secondary qualities tended to treat the latter as unreal, because they described how the world appeared to us, not how it is in itself. Nagel describes what the world in itself consists of for these thinkers: “It was essential to leave out or subtract subjective appearances and the human mind -- as well as human intentions and purposes -- from the physical world in order to permit this powerful but austere spatiotemporal conception of objective physical reality to develop.”¹¹¹ With this conception of objectivity, colour was reduced to surface reflectance properties, sound to waves in a medium, heat to the motion of molecules. Colour, sound and heat appear *to us* to be outside our minds in real things, but they turn out to be projections of the mind that do not correspond to anything in objective, mind-independent reality. Thus matter is that which exists independently of the mind; matter is what is really there, whether or not an observer is looking.

In this analysis Nagel shows that he is aware of some of the conditions that led to this new concept of objective reality. His critique of materialism (which will be considered in chapter three) is supported by this analysis of how the meanings of mind and matter were established. Arguably, Nagel does not clearly grasp the implications of the shift to a new paradigm of knowing some centuries before Galileo that also led to the new concept of matter. In the new paradigm of knowing, one tends to see knowing as a matter of reflecting or describing the “already out there now” – the real. But insight is not a form of extroversion, so it cannot be objective in the same way as the “already out there now”. The rejection of intelligible realities from objective reality means we will fail to recognize the explanatory laws of nature as insights into abstract relations, and treat them as descriptions of what is “already out there now” instead. For example, when Galileo discovered the law of falling bodies, he was, in Lonergan’s view, grasping abstract relationships that constitute an

¹⁰⁸ Nagel, *Mind and Cosmos*, 35-36.

¹⁰⁹ Nagel, *Mind and Cosmos*, 35.

¹¹⁰ Henry, *Scientific Revolution*, 69.

¹¹¹ Nagel, *Mind and Cosmos*, 35-36.

explanation. However, he thought he was simply *describing* how substances “out there” actually are beyond our experience of them, i.e. their primary qualities. Indeed, Galileo thought objective reality is composed of imaginable particles that have extension and motion. His universe is an aggregate of imaginable parts, and the laws of nature govern its behaviour.¹¹² So to his mind the laws of nature described what was “already out there now”, and he failed to notice that his imagination was demanding that these abstract laws of nature describe something solid and tangible. When he was in the intelligent mode of consciousness, he pandered to the experiential mode of consciousness that asked for something “already out there now” to encounter. Lonergan’s comment on this attitude is:

The perennial source of nonsense is that, after the scientist has verified his hypothesis, he is likely to go a little further and tell the layman what, approximately, scientific reality looks like! Already, we have attacked the unverifiable image; but now we can see the origin of the strange urge to foist upon mankind unverifiable images.¹¹³

Images are unverifiable because they are nothing more than presentations of sense data. Verification implies intelligence. Insights can be verified, but although they depend upon data for their occurrence, they are constituted by unpicturable relations. Scientific reality is unpicturable; and reality “out there” as it appears to the senses is neither intelligent nor reasonable. The “strange urge” to posit something imaginable as the object of scientific explanation is based on what our imagination demands, not on reasonable affirmation. And it is the same “urge” that influences the concept of matter in the thought of Galileo, Descartes, and Nagel too.

Galileo interprets the distinction between primary and secondary qualities through an extroverted model of objectivity, through how things appear to us. By regarding some qualities as attributable to the actual substance, and others as subjective sensations in the mind, the subject is removed ontologically from the reality that it knows; knowing becomes “taking a look” over at the reality “already out there now”.¹¹⁴ Physical reality tends to be those qualities that can be quantified precisely, and subjective qualities such as an object’s colouring, which are immune from quantification, are considered to be a part of the mental world.¹¹⁵ We are left with a picture where a thought about a quantifiable property of an object is a representation or *description* of the real physical substance “already out there now”.

¹¹² Lonergan, *Insight*, 131.

¹¹³ Lonergan, *Insight*, 253.

¹¹⁴ “Taking a look” is analogous to our sense perception encounter of an object that is really there. One cannot find unities and relations, which are invisible, lying “already out there now”. They have to be grasped by a leap of insight.

¹¹⁵ Dupré, *Emergence of Objectivity*, 76.

Dupré argues that this picture – where primary qualities are the real and objective things while secondary qualities are just the subject’s apprehension of them – gives unwarranted priority to spatial intuition:

To discount any but the primary qualities in defining what is real in our knowledge of nature favours spatial intuition over all others. Undoubtedly, spatial qualities are the ones that lent themselves to the kind of mathematical analysis that the new concept of science required. But this provides no ground for granting these qualities an ontological priority over the so-called secondary ones, as if they alone defined the essence of the natural world.¹¹⁶

To favour spatial intuition is to adopt an extroverted notion of objectivity, because it favours those qualities that are *actually there in space*, not the ones that are the product of perception.

Galileo’s distinction could be contained within a richer notion of objectivity, as Lonergan does with his distinction between description and explanation, between “the kind of cognitional activities that fix contents by indicating what they resemble and, on the other hand, the kind that fix contents by assigning their experientially validated relations.”¹¹⁷ For Lonergan, both kinds of cognitional activities can attain objectivity because they are verifiable: “Both experiential and pure conjugates are verifiable, and in so far as either are verified, they possess an equal claim upon reasonable affirmation. It follows that Galileo’s repudiation of secondary qualities as mere appearance is a rejection of the verifiable as mere appearance.”¹¹⁸ When we use experiential conjugates, we are *describing* how the world appears to us, and we verify this with the content of an experience. When we use an explanatory conjugate, we are *explaining* how things are related to each other and we verify this with “experientially validated relations”, that is, with other insights that are in turn verified by experience.¹¹⁹ There is also an explanation of description – it is the account of how things give rise to perceptual experiences in us, that is, how things are related to us. But experiential conjugates will be considered mere appearance if one interprets them through the extroverted notion of objectivity, for then reality is that which is “already out there now”, which a sensation is not. Scientific progress then becomes, for Galileo, reduced from merely apparent secondary qualities to their real source in primary qualities. For Lonergan, on the other hand, scientific progress moves from experiential conjugates to explanatory conjugates, but does not deny the reality of experiential conjugates. Both kinds of conjugates are real,

¹¹⁶ Dupré, *Emergence of Objectivity*, 77.

¹¹⁷ Lonergan, *Insight*, 339.

¹¹⁸ Lonergan, *Insight*, 85.

¹¹⁹ Lonergan, *Insight*, 339.

because both can be verified. The one existing thing enjoys a variety of properties, or conjugates. There are many kinds of things that have an equal claim on our rational affirmation, and thus are equally real. The real is that which can be correctly affirmed in judgment.

So while Nagel argues that the distinction between primary and secondary qualities gave us a new concept of matter as lacking secondary qualities, the concept also draws on what Lonergan calls an extroverted notion of objectivity. This notion is based on the common sense expectation that to be real means to be “already out there now”, and knowing it is an encounter between the subject and the object. Intelligible realities, such as Aristotle’s four causes, are invisible relationships, and are not known in an extroverted manner. Therefore, Galileo excludes intelligible realities, in addition to secondary qualities, from the concept of matter, or objective physical reality.

2.3 Descartes: Mind and Matter

Spurred on by the success of the new mechanistic science, Descartes wanted a quantitative, mathematical description of the world in its material dimensions.¹²⁰ Building on Galileo’s conception of matter as the bearer of primary qualities, matter was conceived as extension in motion. The mind itself was understood to be outside measurable spatiotemporal reality.

Dupré argues that the separation of thought and reality in nominalism is the background to Descartes’ theory of knowing as representation of the world. In the third Meditation, Descartes reveals this separation:

Now, in order that an idea may contain one particular objective reality rather than another, it must undoubtedly receive it from some cause, in which is to be found at least as much formal reality as this idea contains objective reality. For if we suppose that something is to be found in the idea which is not to be found in its cause, this must then come from nothing...¹²¹

There is objective reality (the reality of idea in the mind), on the one hand, and formal reality (the reality of actual existence), on the other. Real objects cause ideas in our minds. The mind is a mirror in which we can see the reflection of the true nature of things. As a

¹²⁰ Dupré, *Emergence of Objectivity*, 76.

¹²¹ René Descartes, “Third Meditation,” in *Discourse on Method and The Meditations*, trans. F.E. Sutcliffe (London: Penguin Books, 1968), 120.

representationalist, all ideas are going to be a representation or description of *something else* that is ontologically distinct to the idea. The ideal order and natural order are different.

Mind quite naturally becomes a substance in its own right due to the split between the ideal order and the natural order at the heart of Descartes' representationalism. If thought and reality can have no assumed ontological coherence, then the ideas of the mind do not grasp the very being of reality itself but instead they become a describing of what *is* out there – physical substance. For Descartes, the job of the mind is to describe the quantifiable properties and regularities or laws of matter using mathematics. However, since mental ideas possess an “objective reality” of their own different to the “formal reality” of the natural world, and since to be real is to be “already out there now”, then there must be a mental substance, *res cogitans*. Mind, having been excluded from the physical world, re-enters the world of being as *res cogitans*.

Nagel agrees with what he takes to be Descartes' core insight: “The true philosophical point consists not in Descartes' conclusion that he exists..., nor even in the discovery of something absolutely certain. Rather, the point is that Descartes reveals that there are some thoughts which we cannot get *outside* of.”¹²² Nagel takes this to mean that subjectivism has to bow out in the end, that the human mind has the capacity to use reason in an objective way, whose validity does not come from some external justification but from its own authority.¹²³ Descartes, in the opinion of Lonergan and Nagel, correctly saw that human intelligence is a faculty over and above the senses that cannot be reduced to mere operations of the material brain. However, they both reject Descartes' notion that what is grasped by intelligence must therefore be a mental substance in its own right.

Nagel's issue with substance dualism is that:

...it postulates an additional, non-physical substance without explaining how *it* can support subjective mental states whereas the brain can't. Even if we conclude that mental events are not simply physical events, it doesn't follow that we can explain their place in the universe by summoning up a type of substance whose sole function is to provide them with a medium.¹²⁴

Also, dualism says that mind and brain belong to different worlds, but thinks that a unified solution to the mind-body problem should be attempted.¹²⁵

¹²² Thomas Nagel, *The Last Word* (New York: Oxford University Press, 1997), 19.

¹²³ More on this in chapter four.

¹²⁴ Nagel, *View From Nowhere*, 29.

¹²⁵ Nagel, *Mind and Cosmos*, 49.

Lonergan's reason for rejecting dualism is it fails to recognize the two distinct kinds of knowing and thus puts side by side mental and material substances when they should be two different kinds of reality in one substance. Lonergan states that: "Cartesian dualism was the juxtaposition of the rational affirmation, *Cogito, ergo sum*, and of the "already out there now real" stripped of its secondary qualities and of any substantiality distinct from spatial extension."¹²⁶ Descartes agrees with Lonergan that there are two kinds of knowing – Descartes thought animal extroversion yields objectivity (matter) and that human insight also does (ideas/mind). But he failed to see that they are distinct kinds of knowing. Lonergan explains:

For rational affirmation is not an instance of extroversion, and so it cannot be objective in the manner proper to the 'already out there now'. On the other hand, the flow of sensible contents and acts is neither intelligent nor reasonable and so it cannot be knowledge of the type exhibited by science and philosophy.¹²⁷

Rather than distinct forms of knowing that grasp different kinds of realities in a single thing, they grasp polar opposite kinds of substances whose connection to each other is difficult to conceive.

This is because Descartes' dualism between thought and matter is based on perception and imagination, on an extroverted notion of objectivity. It is not based on what can be reasonably affirmed. He affirms, with Nagel and Lonergan, that reason can attain objectivity (*cogito ergo sum*), but then it is so natural for our imagination to require that for something to be real, it must be something "already out there now".¹²⁸ Indeed, Descartes thought that ideas are innate – they are built-in at birth. Adapting Lonergan's language, innate ideas are "already in here now". They already fully exist in the mental world and knowing them is a matter of bringing them to the forefront of our awareness. So there is mental substance (*res cogitans*) and material substance (*res extensa*), and they exist together. Not only does Descartes use perception-based thinking (i.e. an extroverted notion of objectivity) to decide that *res extensa* and *res cogitans* together make up the universe of being, he determines the properties of matter in the same way. Adopting Galileo's perception-based distinction between primary and secondary qualities, matter possesses primary qualities like size, motion and shape because they exist whether or not *an observer is looking*.

¹²⁶ Lonergan, *Insight*, 413.

¹²⁷ Lonergan, *Insight*, 414.

¹²⁸ Using the perception analogy again to illustrate this view: when we see something real, it is because it is really there. Similarly, when we *know* something real, it must be constituted independently of the knower, waiting to be discovered or encountered by a subject.

Descartes' notions of mind and matter are reifications of abstractions. Elementary knowing is constituted completely by experience. It is extroverted because it is oriented outwards towards something that already exists. It encounters body, the "already out there now real", which is reality *only to the extent* that experience gives us data. According to Lonergan, it is a mistake to reify this single slice of being into *res extensa*. Likewise, the judgment, "I think, therefore I am", affirms an intelligible reality that is neither "already in here now" or "already out there now" but in the data of consciousness *potentially* and made actual by a subject when it gains an insight into this data.¹²⁹ Intelligibility is partly subject-constituted. There is no meaning without a subject; so there is no meaning "already" anywhere. It is thus a mistake to reify it into an independent existent of its own, *res cogitans*. In addition to these considerations, the reification of matter is a mistake because the spatiotemporal physical world is ultimately something to be explained, for it is how things appear to us and it is thus potentially intelligible.¹³⁰

Conceiving of objectivity as extroversion leads either to material reductionism, idealist reductionism or dualism: either all mental phenomena must be reduced entirely to physical events and processes (as Hobbes did), or all matter must be reduced to mental phenomena (as Berkeley did), or the mental and material are juxtaposed as two different kinds of substance, which is what Descartes did. One needs the notion of insight – a non-extroverted form of knowing – if the ideal order and the natural order are to be objective and exist without dualism. Reductionism, says Lonergan, is due "to the tendency to conceive the real as a subdivision of the 'already out there now'. When that tendency is rejected, reductionism vanishes."¹³¹ If objectivity is extroversion, it is not possible to conceive how the ideal order and natural order can co-exist harmoniously without dualism, or without the reduction of one to the other.

The concept of matter is loaded with presuppositions, including the fact that just as much as Descartes' concept of mind, matter is still the reification of an abstraction. Nagel is aware that matter was defined by the removal of mental properties from objects, but with Lonergan we see the deeper principle of extroverted objectivity at work in both concepts. This is an important finding, because anyone who works on the mind-body problem risks

¹²⁹ See 1.2 "Cognitive Structure", subheading "Understanding", then "Relationship of the Subject and Object in Experience and Understanding" for explanation of this point.

¹³⁰ Things *appear* coloured to us, and this data was explained (but not explained away as *mere* appearance) by optics and physics, in the form of an account of the relation between objects and us. Similarly, the physical world appears in a spatiotemporal array to us, and this data was explained with Einstein's General Theory of Relativity. Descartes conceives matter as his perception presents it to him, not as his intelligence does.

¹³¹ Lonergan, *Insight*, 257.

perpetuating a principle – of which they may be unaware – that makes it difficult to imagine a unifying solution without the reduction of mind to matter or vice versa.

2.4 Contemporary Responses to Cartesian Principles

In *The Concept of Mind*, Gilbert Ryle argues that Descartes' central principles "are unsound and conflict with the whole body of what we know about minds when we are not speculating about them."¹³² Ryle suggests we give up thinking about the mind as some kind of non-physical substance, as a "Ghost in the Machine".¹³³ This was the view that Simon Blackburn suggests that Nagel adopts, in his review of Nagel's *Mind & Cosmos*.¹³⁴ But this suggestion betrays an ignorance of the presuppositions informing the concepts of mind and matter.

Ryle says it is a mistake to think that this metaphor of two worlds actually corresponds to two different kinds of existence in polar opposition to each other, such that "what has physical existence is composed of matter, or else is a function of matter [and] what has mental existence consists of consciousness, or else is a function of consciousness."¹³⁵ Ryle calls it a "category-mistake", which occurs when one thinks that a word belongs to the wrong logical category.¹³⁶ It is a confusion of language. Take Ryle's example of the boy who watches the marching parade of an army division. After his dad points out battalions, batteries and squadrons, he asks when the division was going to arrive? The boy thought that a division was another thing like the battalions, etc., which he was watching. He did not understand that a division is a collective name for all the components that had been pointed out to him. In the case of mind, argues Ryle, we assumed that mind and matter belonged to the same category: "Minds are things, but different sorts of things from bodies."¹³⁷ Since matter is an extended and moving substance in space and time, then mind, being a kind of substance¹³⁸ like matter, must be non-extended and non-moving:

The workings of minds had to be described by the mere negatives of the specific descriptions given to bodies; they are not in space, they are not motions, they are not

¹³² Gilbert Ryle, *The Concept of Mind* (Chicago: The University of Chicago Press, 1949), 11.

¹³³ Ryle, *Concept of Mind*, 15.

¹³⁴ Simon Blackburn, "Thomas Nagel: a philosopher who confesses to finding things bewildering", review of *Mind and Cosmos*, by Thomas Nagel, *NewStatesman*, November 8, 2012.

¹³⁵ Ryle, *Concept of Mind*, 13.

¹³⁶ Ryle, *Concept of Mind*, 16.

¹³⁷ Ryle, *Concept of Mind*, 19.

¹³⁸ Ryle is conceiving of matter and mind as "already out there now" aspects of reality.

modifications of matter; they are not accessible to public observation. Minds are not bits of clockwork, they are just bits of not-clockwork.¹³⁹

Here Ryle has picked up on a small part of the story of the origins of the modern concepts of mind and matter: that they have connected definitions. He characterizes mind as a label for what we have no idea about, one that takes its meaning from matter.

Ryle argues that because it is nonsense to think of consciousness as an immaterial thing, as a wisp of invisible substance that is mysteriously connected to the brain, we should use consciousness adjectivally rather than as a noun. For example, we do things more or less consciously; he has been knocked unconscious. This is quite close to what Lonergan would say – that consciousness is a quality of cognitional acts – except that Ryle would only be happy to grant that there is some kind of empirical consciousness; he would not be aware of the cognitional acts to which intelligent and rational consciousness applies. Ryle advocates a form of behaviourism – mental states are not special processes or substances of their own kind, but are round about ways of referring to some physical behaviour.¹⁴⁰ It is the reduction of the mental to the physical.

Ryle has jettisoned Descartes' concept of mind, but he has carried on with his concept of matter as "already out there now", even if he does not realise this. He seems to take for granted the meaning of matter, and construes Descartes' mental reality as getting its meaning from the neutral and obvious meaning of matter. The concepts of mind and matter are not obvious in their meaning. First, both matter and mind, conceived as distinct substances, are the product of the reification of abstractions. They were defined together, in opposition to each other. Matter is not the primary, neutral concept. This is what Nagel notices. He understands that something was removed from the physical world to derive the concept of matter. Our understanding of the material world depends on subtracting from it "...as an object of study everything mental – consciousness, meaning, intention or purpose."¹⁴¹ Further, the background assumption of extroverted objectivity informs the meaning of both concepts. Nagel does not seem aware of the implications of this background assumption, and this will continue to influence his thinking about mind and matter.

¹³⁹ Ryle, *Concept of Mind*, 20.

¹⁴⁰ Ryle, *Concept of Mind*, 297.

¹⁴¹ Thomas Nagel, "The Core of 'Mind and Cosmos'", *New York Times*, August 18, 2013.

Matter: a term without meaning?

Noam Chomsky claims that there is no common conception of body that has carried on from Cartesian thought:

There is no longer any definite conception of body. Rather, the material world is whatever we discover it to be, with whatever properties it must be assumed to have for the purposes of explanatory theory. Any intelligible theory that offers genuine explanations and that can be assimilated to the core notions of physics becomes part of the theory of the material world, part of our account of body.¹⁴²

But as Feser observes, much of the meaning of matter was negative content.¹⁴³ Matter was *not* the secondary qualities of colour, sound, heat, smell, taste. These qualities exist *qua* quality in the mind, even though they have a material counterpart that gives rise to the quality in the mind of an observer. Nagel picked up on this. Another negative aspect of the meaning of matter is that it does not contain final or formal causes, which is a rejection of realities that are grasped in a non-extroverted manner.

Although, as Chomsky said, the positive content of matter may have evaporated or become unclear, still the negatives define it to some extent today. And as we have seen, the negatives are the cause of the mind-body problem. Most philosophers today renounce Cartesianism but nevertheless inherit its principles: extroverted objectivity, which leads to envisaging reality as “already out there now” and knowing as encountering it. For example, the common sense view of knowing reality is shared by contemporary philosophers. John Searle says “we perceive the real world.”¹⁴⁴ For Searle, there is no need for intelligence to grasp the real. All that is real is there to be perceived: “In the normal perceptual situation, you just see the object directly. Your perception reaches right up to the object.... When you’re looking at the object at point blank range in good light, you directly see the object.”¹⁴⁵ Another major figure who buys into a perception-based model of knowing is Chalmers. He is uncomfortable with the picture of the world that physics presents us, for the reason that it is “too lacking in substance to *be* a world.”¹⁴⁶ The laws of nature and the objects of physics are simply the definition of relationships between things: “Reference to the proton is fixed as the thing that causes interactions of a certain kind, that combines in certain ways with other

¹⁴² Noam Chomsky, *Language and Problems of Knowledge* (Cambridge: MIT Press, 1988), 144.

¹⁴³ Feser, *Locke*, 23-5.

¹⁴⁴ Cited in Helminiak, *Brain, Consciousness, and God*, 47.

¹⁴⁵ Cited in Helminiak, *Brain, Consciousness, and God*, 47.

¹⁴⁶ Chalmers, *The Conscious Mind*, 304.

entities, and so on; but what is the thing that is doing the causing and combining?”¹⁴⁷ But what about the substantial feel of the world as we see it? Chalmers suggests that there might be microphenomenal properties that add up to produce the properties that we experience, like redness or solidity. According to Helminiak, “...by positing these microphenomenal properties in the entities of physics, Chalmers now has bodies to relate in that causal flux, dots of matter that could be connected by causal lines, as it were—and all could be pictured.”¹⁴⁸ Chalmers’ imagination demands that the ultimate explanations of physics include something substantial. He has not had an intellectual conversion to see that reality is more than what can be perceived and imagined.

Nagel, too, inherits some of the principles of the Cartesian tradition, and we will find that his attempts to make consciousness a component of reality are stifled by these lingering principles. As Gilson observes, “...in each instance of philosophical thinking, both the philosopher and his particular doctrine are ruled from above by an impersonal necessity.... Philosophers are free to lay down their own sets of principles, but once this is done, they no longer think as they wish—they think as they can.”¹⁴⁹ Perhaps Nagel’s thought on the nature of mind could be advanced with another set of principles.

This analysis shows us the source of the strengths and limitations of Nagel’s thinking about the place of mind in the natural world. One of his strengths is the awareness that the contemporary concept of matter was created by removing mind-dependent qualities. His limitations in thinking about the nature of consciousness will stem from his lack of awareness of what Lonergan calls an extroverted notion of objectivity. This notion is based on the common sense expectation that to be real means to be “already out there now”, and knowing it is an encounter between the subject and the object.

¹⁴⁷ Chalmers, *The Conscious Mind*, 153.

¹⁴⁸ Helminiak, *Brain, Consciousness, and God*, 50.

¹⁴⁹ Etienne Gilson, *The Unity of Philosophical Experience* (San Francisco: Ignatius Press, 1999), 243.

Chapter 3 – Consciousness

This chapter examines Nagel's views on the irreducibility of consciousness to the physical conception of objectivity (3.1). He mounts his argument by focusing on the designation of matter as mind-independent by thinkers like Galileo and Descartes. Mind was declared to be a different kind of substance when it was removed from the concept of the physical world, but it is precisely this reason that makes it impossible to reduce mental phenomena to matter. Nagel thinks that if consciousness resists physicalist explanation, there must be a mistake in the physicalist conception of objectivity. He supposes it to be a mistake about overextending one particular form of objectivity, but this chapter will argue that it is a mistake about the conception of knowing and objectivity in general (3.2).

3.1 The Physical Conception of Objectivity

Unlike Ryle and Chomsky, Nagel is aware that our concept of matter takes its meaning from the developments in the 16th and 17th centuries. The meaning given to matter was precisely the opposite of mind, and Ryle understands this much. But matter does not have an obvious, neutral meaning, such that mind was speculative and obscure, as Ryle implies. In Nagel's analysis, matter refers to those features of the world that are observer-independent, whereas mind refers to those that are observer-relative. Colours, sounds, heat, etc., as they *appear to us* are considered subjective, observer-relative phenomena, whereas their physical natures (particle motions, wave activity) that give rise to these appearances are considered to be objective, observer-independent phenomena. The "physical conception of objectivity" developed in response to this realisation that the world is not what our senses tell us it is.¹⁵⁰ The conception of objectivity that developed says that phenomena have an ultimately material or physical nature. Nagel realises that the material world has been defined as that which is independent of our senses – however, this is not an obvious, but rather a contentious definition.

In his famous paper, "What is it like to be a bat?" Nagel argues that the mind cannot be explained with the tools of physical objectivity. Materialists try to give an external, observer-independent explanation of internal, observer-dependent phenomena, thus pronouncing mental phenomena entirely reducible to physical events. This, he argues, is insufficient to account for the phenomenon of mind.

¹⁵⁰ Nagel, *View From Nowhere*, 14.

For Nagel, the scientific viewpoint that grasps primary qualities is a genuine perspective on our world, but it cannot pretend to grasp all of reality, because of the origins of that viewpoint. In short, the mistake of materialism is to assume that the scientific picture is the whole picture, to assume that one particular conception of objectivity is suitable for all of reality. Those who think like this forget that their concept of matter depends on the subtraction of mental realities from the picture of reality, and then suppose that matter is all there is. Matter is not the neutral concept upon which mind depends for its meaning. Both are defined in opposition to each other. Matter is what mind is not, and vice versa. The materialists propose to reject one half of the opposition, but given the origins of the definition of the terms, this is a philosophically problematic proposal.

In his paper, Nagel argues that much of reality has an objective character that we can explain in terms of physical processes and events. Lightning, for instance, could be understood to some degree by someone without senses using the concepts of physics:

The objective nature of the things picked out by these concepts could be apprehended by [a Martian] because, although the concepts themselves are connected with a particular point of view and a particular visual phenomenology, the things apprehended from that point of view are not: they are observable from the point of view but external to it; hence they can be comprehended from other points of view also, either by the same organisms or by others.¹⁵¹

The materialist claims that all phenomena have an objective nature which we can explain in terms of physical processes and events. Paul Churchland, in his textbook *Matter and Consciousness*, propagates this belief that the reductions performed by science uncover the real objective nature of a phenomenon:

The red surface of an apple does not *look* like a matrix of molecules reflecting photons at certain critical wavelengths, but that is what it is. The sound of a flute does not *sound* like a sinusoidal compression wave train in the atmosphere, but that is what it is. The warmth of the summer air does not *feel* like the mean kinetic energy of millions of tiny molecules, but that is what it is. If one's pains and hopes and beliefs do not *introspectively* seem like electrochemical states in a neural network, that may be only because our faculty of introspection, like our other senses, is not sufficiently penetrating to reveal such hidden details.¹⁵²

The reader can hear the overtones of extroverted objectivity coming through strongly: the *real* world is hidden behind its appearances to us. But there is something left out of a picture

¹⁵¹ Nagel, *Bat*, 443.

¹⁵² Paul M. Churchland, *Matter and Consciousness*, 3rd Ed. (Cambridge, UK: MIT Press, 2013), 15.

of reality that is entirely physical events and processes. There is an irreducibility to qualitative properties that Churchland does not seem to consider. In any reduction of secondary qualities to primary ones, the phenomenal nature of the secondary quality is not reduced – only the underlying cause has been identified. Swinburne identifies the missing slice of reality in attempted reductions:

But this reduction has been achieved at the price of separating off the phenomenal from its causes, and only explaining the latter. ... It siphoned them off to the world of the mental. But then, but when you come to face the problem of the sensations themselves, you cannot do this. If you are to explain the sensations themselves, you cannot distinguish between them and their underlying causes and only explain the latter.¹⁵³

So according to Swinburne, the fact that not all phenomena can be reduced to an objective physical basis is a necessary implication of the nature of the reduction.

We can see this in more detail if we remember that the division between material and mental phenomena was made with reference to a subject. We have made a division in the “already out there now” based on a subject’s experience of it. We have divided it into the physical and the appearance caused by the physical. The *appearance* cannot be physical, even though it may correspond to activity in the brain. We declared that there is a non-physical dimension to it when we excluded it from the physical world. We cannot turn on the appearance in the brain and treat it as purely physical, as something the true nature of which we can discover by treating it objectively. Its physical counterpart of neural patterns would be there, but there would be no mention of *colour as sensed* in that explanation. The reductionist’s tool was designed for appearances of the world to our sense organs, but the experience of colour that resides in our mind is not part of the world of sense. We are aware or conscious of the experience of colour in our brain, but we do not *sense* it like we sensed the colour in the first place. To what organ is the colour now just appearance? If we are going to analyse away the very experience of colour in the brain as a subjective phenomenon, what is the subject of this appearance? Churchland thought that our faculty of introspection operates in a similar way to our senses, and thus is just as liable to deceive us about the true nature of things.¹⁵⁴ But according to Swinburne and Nagel, what we find inside our minds is the unreduced qualitative part of a sense experience. As Lonergan says, sense data are not themselves sensible, just like mathematical intelligibility is not itself quantitative.¹⁵⁵ The

¹⁵³ Richard Swinburne, *The Evolution of the Soul* (Oxford: Clarendon Press, 1986), 191.

¹⁵⁴ Churchland, *Matter and Consciousness*, 15.

¹⁵⁵ Lonergan, *Insight*, 395.

appearance itself remains unexplained. There is something about appearances that are irreducibly subjective, and the tools for understanding subject-independent reality are not going to work here. Nagel writes: “What is the analogue in this case to pursuing a more objective understanding of the same phenomena by abandoning the initial subjective viewpoint toward them in favor of another that is more objective but concerns the same thing?”¹⁵⁶ For Nagel, consciousness consists in appearances. There is something about this appearance which will be missed by any attempt to explain it so that it is part of the external, observer-independent world. Recalling the origins of the distinction between primary and secondary qualities, we can see that whatever it is about secondary qualities that made them different in kind to primary qualities, *that* is going to be the thorn in the materialist’s side.

So, according to Nagel, consciousness resists the reduction that works on other natural phenomena because it is *perspectival* in character. Reducing it – removing perspectival elements so that it is seen from an objective point of view – would miss this most important characteristic of consciousness. The phenomenal part of sense experience is intrinsically connected to a perspective, or point of view. As Nagel explains:

It is impossible to exclude the phenomenological features of experience from a reduction in the same way that one excludes the phenomenal features of an ordinary substance from a physical or chemical reduction of it—namely, by explaining them as effects on the minds of human observers. If physicalism is to be defended, the phenomenological features must themselves be given a physical account. But when we examine their subjective character it seems that such a result is impossible. The reason is that every subjective phenomenon is essentially connected with a single point of view, and it seems inevitable that an objective, physical theory will abandon that point of view.¹⁵⁷

What is this connection between subjective phenomena and points of view? Nagel says that to experience a qualitative property is to know “what it’s like”. Someone who is born blind will never know what it’s like to see blue. No amount of explanation in terms of physical brain movements will ever give a blind person the knowledge of what it’s like to experience blue. An explanation of conscious experience from the outside cannot explain what it’s like to be the one whose conscious experience it is. Similarly, Nagel claims that it is impossible for a human to know what it is like to be a bat.¹⁵⁸ If I try to imagine detecting my environment with sonar, sleeping upside down and flying with wings, I would be imagining

¹⁵⁶ Nagel, *Bat*, 444.

¹⁵⁷ Nagel, *Bat*, 437.

¹⁵⁸ Nagel, *Bat*, 443.

what it would be like for me to behave like a bat, but not what it is like *for a bat*. In subjective experience, content is inseparable from the form of understanding. One cannot understand what it is like to be a bat unless one is a bat.

Irreducibly Subjective Phenomena

Nagel's conclusion is that there are subjective phenomena that can only be known from a particular subject's point of view, and not from the point of view of the physicalist conception of objectivity. Only from the point of view of a bat can the "feel" or inner subjective character of being a bat be known. Therein lies the problem for physicalist conceptions of the world. A physical picture of the world is without points of view and without sensible features. These were relegated to the mind, which contains all that is not quantifiable and thus not part of the physical world as it is in itself. The subjective character of conscious experience cannot be captured in an account of the physical activities of the brain. Nagel says:

...it is hopeless to try to analyse mental phenomena so that they are revealed as part of the 'external' world. The subjective features of conscious mental processes — as opposed to their physical causes and effects — cannot be captured by the purified form of thought suitable for dealing with the physical world that underlies the appearances.¹⁵⁹

The method of reduction that we apply to the physical world, which redefines the feel of heat as molecular motion, cannot be applied coherently to the "feel" itself. Conscious experience just *is* the "feel" or appearance. To reduce this appearance to material constituents would be to ignore the phenomenon, not to explain it. Nagel writes: "If the subjective character of experience is fully comprehensible only from one point of view, then any shift to greater objectivity — that is, less attachment to a specific viewpoint — does not take us nearer to the real nature of the phenomenon: it takes us farther away from it."¹⁶⁰ The reductive method treats appearances as essentially mind-dependent or subjective, which is why they are immune to explanation in entirely mind-independent or objective terms. The immunity stems directly from the original division of the world into these two kinds of phenomena. The contemporary philosopher, Swinburne, sees the same connection: "The very success of science in achieving its vast integrations in physics and chemistry is the very thing which has made apparently impossible any final success in integrating the world of the mind with the

¹⁵⁹ Nagel, *View From Nowhere*, 15.

¹⁶⁰ Nagel, *Bat*, 444-5.

world of physics.”¹⁶¹ In other words, “the way the world is includes appearances, and there is no single point of view from which they can all be fully grasped.”¹⁶² There is no objective viewpoint that can capture all subjective experiences.

If Nagel is right, this has enormous implications for science. Science, then, cannot give us a complete picture of reality with its present reductive tools. Roger Scruton criticises Nagel for thinking he has stumbled upon a fact that science cannot account for, when all he has discovered is knowledge by acquaintance:

Thomas Nagel erroneously assimilates this kind of knowledge [of “what it’s like”] to knowing *that*, arguing that there is something *that* I know, when I know what fear is like — a ‘subjective’ fact that cannot be listed in the scientific inventory of the world. But there is no such fact. The knowledge involved here is a matter of first-person acquaintance...¹⁶³

Scruton’s criticism seems accurate, as “subjective facts” are incomparable with scientific facts. Nagel uses the term “facts” imprecisely, taking it to include both the intellectual facts of science and the “facts” of perceptual experience. For example, Nagel speaks of “facts about what it is like *for* the experiencing organism”.¹⁶⁴ “What it is like” to be an organism is an internal feeling, a kind of experience, but Nagel considers it a fact. Nagel asserts that the subjective “feel” of being a kind of organism is the “essence of the internal world”.¹⁶⁵ The bundling together of perceptual and intellectual facts is probably because Nagel does not see that description and explanation pertain to different kinds of being, to sense data and intelligibility respectively.¹⁶⁶ Nagel demonstrates an inadequate awareness of the structure of consciousness: there are far more dimensions to our consciousness than just the “feel” of perceptual experience, and awareness of these gives us clarity about the different kinds of knowing.

With this clarification from Lonergan, we see that Scruton is saying that knowing “what it’s like” is not a new *intellectual* fact like those discovered in science. However, Nagel is aware that “what it’s like” is a different kind of fact to intellectual fact, which is precisely why he argues that these facts cannot be captured by present physicalist concepts. A fundamental characteristic of consciousness is knowing “what it is like” to experience

¹⁶¹ Swinburne, *Evolution of the Soul*, 191.

¹⁶² Nagel, *View From Nowhere*, 26.

¹⁶³ Roger Scruton, *Modern Philosophy: An Introduction and Survey*, (Indiana: Pimlico, 2004) 326-27.

¹⁶⁴ Nagel, *Bat*, 442.

¹⁶⁵ Nagel, *Bat*, 445.

¹⁶⁶ Helminiak observes that it is a common mistake amongst thinkers in the philosophy of mind to focus on examples from sense-perception and not specifically intellectual or volitional ones: “Nagel’s, Chalmers’s, and virtually all treatments of consciousness focus on perceptual experience as the supposed paradigmatic instances of human consciousness.” Helminiak, *Brain, Consciousness, and God*, 216.

phenomena, and this can only be known by *being* the creature in time and space; no amount of detailed objective physical explanation can replace the existential experience. Granted, it is not an intellectual fact, but it is part of reality in some sense, and Nagel thinks this points toward the need to expand our conception of physical objectivity. So Nagel might agree with Scruton that “subjective facts” cannot be counted in the scientific inventory of the world, but this is precisely why we need to revise what counts as the physical world that science describes.

Working within his tradition’s principles, and aided by his identification of the original subtraction of the mental from objective reality, Nagel has argued that our consciousness is not reducible to the physical processes that underlie them. This means that there are some phenomena we cannot get outside of to give an objective explanation. On this point, Nagel could be helped with some clarification from Lonergan. Lonergan says that the subject experiences data from the first-person perspective, and understands and explains from the abstract viewpoint of physics. Both viewpoints are legitimate, as long as we realise that they are distinct kinds of knowing: “...it would be a mistake to suppose that explanation is the one true knowledge; not only does its verification rest on description but also the relations of things to us are just as much objects of knowledge as are the relations of things among themselves.”¹⁶⁷ What we see from the first-person perspective and the abstract viewpoint of physics are both objects of knowledge, according to Lonergan. Nagel’s insight that the subjective character of experience, “what it’s like”, is beyond objective schemes supports Lonergan’s claim that data are not replaceable by explanatory knowledge. Experiential data are not actually intelligible, but only potentially so. Explanation draws out relations within data, but never explains the data *qua* data. Therefore, science, which is engaged in the explanation of these data, cannot be a complete account of all layers of reality because data are given and prior to explanation. Nagel echoes this point: “The world just *isn’t* the world as it appears to one highly abstracted point of view...”¹⁶⁸ A purely conceptual, objective account of reality would not account for the reality of the subjective point of view, or in Lonergan’s terms, the experiential consciousness. This poses a problem for ever integrating subjective points of view into a larger objective picture – perhaps the project is destined to fail. This point will be explored further in section 3.2.

Nagel claims that appearances are an altogether different *kind* of thing to the spatiotemporal world captured in the concepts of physics. They are qualities. They are precisely what was subtracted from the mind-independent world in the beginning. In Nagel’s

¹⁶⁷ Lonergan, *Insight*, 345.

¹⁶⁸ Nagel, *View From Nowhere*, 25.

view, they are immune to being removed from existence altogether. But the physical conception of objectivity has had so much success and is so “irresistibly attractive” that these obstacles have not blocked the attempt to capture everything in this particular net and deny the reality of anything that slips through the gaps.¹⁶⁹ As C.S. Lewis observed, we “cut nature to size” and treat as illusory anything that cannot be so reduced by our abstraction of nature.¹⁷⁰ “As a result,” says Nagel, “the philosophy of mind is populated with extremely implausible positions.”¹⁷¹ But the success of the method does not show that all of reality is susceptible to physical explanation, because it has only succeeded with those aspects of nature that are susceptible of prediction and control. The same methods will not work in some areas, either because different methods of objective understanding are needed, or because some things are irreducibly subjective.¹⁷² But the motivation behind physicalism is to think about the world in a way that makes everything — atoms and mind — something that is “really there”.¹⁷³ The physical conception of nature that we have inherited from Descartes does not capture everything about nature. We need to expand our tools, our methodology, if we want to understand consciousness. Nagel suggests that we pursue an expanded conception of objectivity, one that makes room for mind in the world, rather than forcibly apply the physicalist conception of objectivity to an unsuitable phenomenon.

3.2 Analysis of Nagel’s Epistemology

The subject and its conscious activities is in being, and Nagel is trying to show this from within his own tradition, where for something to count as real it must be “really there” – a surprisingly similar phrase to Lonergan’s “already out there now”.¹⁷⁴ If consciousness resists physicalist explanation, he reasons that there is a mistake in the physicalist conception of objectivity. Nagel supposes this to be a mistake about overextending one particular form of objectivity, when really it is a mistake about the conception of knowing and objectivity in general.

In Nagel’s thought, “subjective” means “the pre-reflective, personal commitments of a particular person.”¹⁷⁵ “Pre-reflective” means that the commitments have not yet been put through critical analysis. Our immediate experience of the physical world is pre-reflective.

¹⁶⁹ Nagel, *View From Nowhere*, 15.

¹⁷⁰ Lewis, *Abolition of Man*, 69-71.

¹⁷¹ Nagel, *View From Nowhere*, 15.

¹⁷² Nagel, *View From Nowhere*, 87.

¹⁷³ Nagel, *View From Nowhere*, 16.

¹⁷⁴ Nagel, *View From Nowhere*, 16.

¹⁷⁵ Alan Thomas, *Thomas Nagel*, (Stocksfield, UK: Acumen Publishing, 2009), 11.

From this subjective viewpoint, the world appears to us in a certain way; for example, it is coloured. We gather knowledge about our environment from this viewpoint. But we are parts of a bigger world, and we can broaden our understanding if we examine why things appear to us in the way they do. We would discover the relation between us and the world which gave rise to our previous, subjective understanding. Thus we have a “new conception that includes a more detached understanding of ourselves, of the world, and of the interaction between them.”¹⁷⁶ Through objective advances we transcend the peculiarities of our human viewpoint and take in the world as it is in itself. If there is such a thing, the “completely objective intrinsic nature” of a thing would be that which is as far away “from a strictly human viewpoint” as possible.¹⁷⁷ But the original “form of understanding” does not lose its reality; it must find a place in a complete understanding of reality because “...we and our personal perspectives belong to the world.”¹⁷⁸ By seeking objectivity, we seek a perspective that transcends our subjective point of view.

Nagel’s subjective-objective sliding scale helps to place the subject in reality because it highlights the origins of all objective viewpoints as a transcending of a subjective viewpoint that is still a “form of understanding”, but one that is tied to a point of view. He writes: “...the distinction between more subjective and more objective views is really a matter of degree, and it covers a wide spectrum... The wider the range of subjective types to which a form of understanding is accessible—the less it depends on specific subjective capacities—the more objective it is.”¹⁷⁹

According to Nagel, physics is more objective than morality, which is more objective than private life. Nonetheless, the more objective does not necessarily generate a truer picture of a phenomenon: “A great deal is essentially connected to a particular point of view, or type of point of view, and the attempt to give a complete account of the world in objective terms detached from these perspectives inevitably leads to false reductions or to outright denial that certain patently real phenomena exist at all.”¹⁸⁰ For Nagel, subjectivity and objectivity are different perspectives on reality, and the truest picture is sometimes closer to the subjective end and sometimes closer to the objective end. Objectivity for Nagel is not primarily in terms of real or not real – it is in terms of how we see things. To illustrate further, Nagel thinks the maximally objective viewpoint aims to be from no point of view in particular.¹⁸¹ This is

¹⁷⁶ Nagel, *View From Nowhere*, 5.

¹⁷⁷ Nagel, *Bat*, 443.

¹⁷⁸ Nagel, *View From Nowhere*, 6.

¹⁷⁹ Nagel, *View From Nowhere*, 5.

¹⁸⁰ Nagel, *View From Nowhere*, 7.

¹⁸¹ Thomas, *Thomas Nagel*, 33.

different to Lonergan, for whom objectivity is a true judgment about what is. True judgments transcend us, but they grow from the stem of the subject, for “objectivity is authentic subjectivity”.¹⁸² For Lonergan, achieving objectivity is to know being, and this is always better than not to know it. For Nagel, being more objective does not always result in better understanding. A prime case of this is consciousness, because consciousness *is* the subject’s point of view.

Alan Thomas points out that Nagel’s conception of objectivity as a movement towards a perspective-free *view* of reality is closely related to his conception of reality as “an underlying unity”. Thomas explains what Nagel means by this unity: “A world made up solely of perspectives (if we could make sense of that idea) would, we think, be a fractured, multiple reality. That is not our intuitive understanding of what we mean by real. Reality is unified and substantial.”¹⁸³ Nagel says his realism about a substantial physical world of which we are a part makes sense of objectivity as a method of understanding: “...there is a connection between objectivity and reality—only the supposition that we and our appearances are parts of a larger reality makes it reasonable to seek understanding by stepping back from the appearances in this way...”¹⁸⁴ Nagel’s realism is based on an extroverted notion of objectivity; reality is substantial, “already out there now”, which we view from different perspectives. Objectivity consists in stripping away the human perspective to gain a more “accurate view of the real nature of things.”¹⁸⁵

If the world is a “unified and substantial whole”, then it is natural to expect that there exists a conception of it that is maximally perspective-free.¹⁸⁶ It would be a view from nowhere in particular. Whether *we* as humans are capable of attaining to it is another question. Nagel’s perspectival approach to objectivity has the implication that human beings cannot understand reality in a unified way. We are “complex beings without a naturally unified standpoint.”¹⁸⁷ According to Nagel, although reality is substantial and unified, the problem is that *we* are limited and our ways of understanding reality are not unified: “[there are] ways in which the two standpoints cannot be satisfactorily integrated, and in these cases I believe the correct course is not to assign victory to either standpoint but to hold the opposition clearly in one’s mind without suppressing either element.”¹⁸⁸ The danger is that

¹⁸² Lonergan, “Understanding and being”, 179. See also “Accuracy of Knowing” subheading under 1.2 Cognition Structure.

¹⁸³ Thomas, *Thomas Nagel*, 3.

¹⁸⁴ Nagel, *View From Nowhere*, 4.

¹⁸⁵ Nagel, *Bat*, 444.

¹⁸⁶ Thomas, *Thomas Nagel*, 3.

¹⁸⁷ Nagel, *View From Nowhere*, 3-4.

¹⁸⁸ Nagel, *View From Nowhere*, 6.

our impulse to discover a unified objective picture that contains all of reality will lead to the reduction of intrinsically subjective phenomena. The most conspicuous case of this is consciousness. The external objective standpoint of physics cannot contain the subjective human standpoint. The two viewpoints have to exist uneasily side by side if we are to avoid illegitimately reducing one of them.¹⁸⁹

There seems to be a problem: Nagel hopes that we can understand consciousness better by pursuing a new objective conception that makes mind part of the world as well as matter (explored in chapter five). But he also seems to think that “what it’s like” is tied *essentially* to the subjective point of view, such that it seems doubtful that it can be fully captured in an objective conception of any kind. The conflict of the subjective and objective viewpoints may be a symptom of limitations in Nagel’s thought.

Nagel and Lonergan both make the argument that the subjective viewpoint is real, but Nagel argues for it on the basis that this perspective is essentially connected to a point of view, while Lonergan argues for its reality based on it being reasonably affirmed. Lonergan has a richer notion of objectivity, one which resolves the subjective and objective viewpoints because objectivity is authentic subjectivity. Through Lonergan’s eyes we can see that Nagel’s subjective and objective viewpoints conflict because of his notion of the real as “already out there now”. Lonergan writes of the incoherence of this conflict: “...there is an incoherent realism, half animal and half human, that poses as a half-way house between materialism and idealism and, on the other hand ... there is an intelligent and reasonable realism between which and materialism the half-way house is idealism.”¹⁹⁰ Nagel’s epistemology is half animal and half human, because it recognises the validity of both kinds of knowing but neither kind in its fullness. Materialism recognises only animal knowing, idealism at least recognises the role of the subject in knowing, but Lonergan’s realism goes beyond idealism to critical realism, an approach where knowing is an activity of subjects understanding and judging the given data from reality. In Lonergan’s analysis, Nagel’s perspectival approach is confusing description with explanation, which leads to the two kinds of knowledge competing for the one picture of the world. Nagel has identified that how things are related to us is equally as real as how things are related to each other. But because objectivity is defined as a perspective-free viewpoint, there is necessarily conflict between subject and object. This means that the unification of the subjective point of view in a larger objective conception is impossible; not only the physicalist conception of objectivity, but any further advances in conceptions of objectivity based on on extroverted principles.

¹⁸⁹ Nagel, *View from Nowhere*, 4.

¹⁹⁰ Lonergan, *Insight*, xxviii.

This problem would be resolved by re-conceiving objectivity in terms of correct judgments, rather than an accurate look. This would ensure the reality of the subjective viewpoint, because the relation between objects and me are “experientially validated relations.”¹⁹¹ That the tree is brown is a relation between me and the tree that is verified by experience. The need to reduce the experience of colour to an illusory appearance does not arise, because we have not defined reality as that which is really “already out there now”. In this case there would be no conflict between subjective and objective viewpoints. The relation between objects and me are real, just like the relations between objects and other objects are real, because both can be verified when judgment weights up the evidence. Reality is not just what is “already out there now”; it can also be intelligently understood and rationally verified.

¹⁹¹ Lonergan, *Insight*, 339.

Chapter 4 – Reason

In this chapter we will examine Nagel's views about reason and intelligibility. We will find the return of the theme that reality contains some irreducibly subjective phenomena. Nagel's argument for the irreducibility of our cognitive faculties pushes beyond existing concepts of objectivity as extroversion by trying to incorporate phenomena that are subjective but also real (4.1, 4.2). However, due to the issue of the relation between thought and reality, which Nagel himself identifies, we see that further renovation of the concept of objectivity is necessary. Nagel has made a start already: the focus on the givenness and unquestionability of the structures of reason. However, he does not possess clearly the concept of insight and this limits his ability to expand objectivity in a way that makes both matter and intelligibility parts of reality (4.3, 4.4). His concepts need help from the Aristotelian-Thomistic tradition, the very tradition rejected with the rise of modern science. With Lonergan, we can push objectivity beyond perception-based models and throw off the self-imposed restriction that reality is only what can be encountered or imagined.

4.1 Inner Authority of Reason

In *The Last Word* and *Mind & Cosmos*, Nagel states his convictions about reason and its imperviousness to external explanation. In the *Last Word*, he sets up the discussion with a clear question:

[Do understanding and justification] come to an end with objective principles whose validity is independent of our point of view, or do they come to an end within our point of view—individual or shared—so that ultimately, even the apparently most objective and universal principles derive their validity or authority from the perspective and practice of those who follow them?¹⁹²

What is at stake in answering this question is nothing less than whether our understanding grasps some objective order, or whether it is in the end a product of our perspective.

Reason's Immunity to External Explanation

Some claims, upon reflection, may turn out to be a product of our perspective, our culture, our epoch. For example, by furthering our understanding of optics we came to see

¹⁹² Nagel, *The Last Word*, 3.

that colour is a product of our perspective on the world, and that colours are not physically “out there” in objects. A moral claim, such as “it is wrong to lie”, may come to be understood (although many would disagree) as entirely a product of our culture and upbringing, one which holds no objective validity outside our conditioned perspective. These are examples of reasoning which, in light of the discovery that they are perspectival, may come to be no longer regarded as holding objective validity.

Subjectivists about reason attempt to show that our reasoning is always bound to our perspective. Thinkers of this kind claim our reasoning manifests “historically contingent and culturally local habits of thought and have no wider validity than that.”¹⁹³ But we cannot have this attitude towards all forms of reasoning. One cannot be a subjectivist about everything without undermining one’s own claim. To claim that anything is subjective, we have to step outside to show that it was in fact perspectival, and in doing so we make a claim about the relation between us and the world using objective, non-perspectival reasoning. Nagel explains:

The subjectivist always has something *further* to say, which does *not* fit into this framework but is supposed to be a comment on the significance and ultimate basis (in human practices) of the whole thing. And that comment simultaneously contradicts the true content of the original statements of reason, and contradicts itself by being intelligible only as an objective claim *not* grounded merely in our inescapable responses.¹⁹⁴

This approach to refuting subjectivism has been used since the founding of philosophy, when Plato pointed it out to the Sophists. Nagel says this objection is “as old as the hills, but [it] seem[s] to require constant repetition.”¹⁹⁵ He summarises the core idea: “claims to the effect that a type of judgment expresses a local point of view are inherently objective in intent: They suggest a picture of the true sources of those judgments which places them in an unconditional context.”¹⁹⁶ It seems that the subjectivist cannot avoid making at least one objective claim.

In Nagel’s analysis, every claim that a domain of thought is subjective implies an outer objective framework. Take for example the subjectivist’s claim about scientific reasoning being subjective. The claim cannot be made that one form of thought is bound to

¹⁹³ Nagel, *The Last Word*, 14.

¹⁹⁴ Nagel, *The Last Word*, 67.

¹⁹⁵ Nagel, *The Last Word*, 15.

¹⁹⁶ Nagel, *The Last Word*, 14.

our perspective without simultaneously mapping a bigger picture of how things really are apart from our perspective:

Experience by itself does not produce scientific theories, and the reasoning that does produce them cannot be regarded by us as merely a more elaborate species of subjective impressions. To think that, we would have to take up the view from still farther outside ourselves, and the construction of any such view would have to rely on some thoughts that claimed objective validity in their turn.¹⁹⁷

Claiming that our scientific reasoning is subjective would involve making a claim about the true relation between our reasoning and the world which gave rise to such subjective impressions. One has to rely on genuine reasoning to create an objective picture in order to make any subjective claim. Similarly, a sceptic who tells me that a morality of individual rights is really just an instrument of male domination will force me to reconsider, in light of this claim, “whether the reasons for respecting individual rights...can be sustained, or whether they disguise something that is not a reason at all. And this is a new moral question. One cannot just *exit* from the domain of moral reflection: It is simply there.”¹⁹⁸ That is to say, one cannot escape moral reasoning by claiming that it is all subjective. Instead, one has to rely on genuine moral reasoning to decide whether one *ought* to give up respecting the dignity of individuals in light of the findings that cultural influences are involved.

Whether the reasoning relied upon in the outer objective frameworks is merely another form of perspectival reasoning is another question. It is possible and consistent to take the radical position that *most* domains of thought are perspectival in the end. But according to Nagel it is not possible to think this about the basic norms of reasoning that were used to formulate such a claim:

To get outside of ourselves at all, in the way that permits some judgments to be reclassified as mere appearances, there must be others that we think *straight*. Eventually this process takes us to a level of reasoning where, while it is possible to think that some of the thoughts might be mistaken, their correction can only be particular, and not a general rejection of this form of thought altogether as an illusion or a set of parochial responses.¹⁹⁹

It is for this reason that Nagel thinks that reason’s authority does not stem merely from our subjective perspective. He states:

¹⁹⁷ Nagel, *The Last Word*, 23.

¹⁹⁸ Nagel, *The Last Word*, 21.

¹⁹⁹ Nagel, *The Last Word*, 19-20.

There are some types of thoughts that we cannot avoid simply *having*—that it is strictly impossible to consider merely from the outside, because they enter inevitably and directly into any process of considering ourselves from the outside, allowing us to construct the conception of a world in which, as a matter of objective fact, we and our subjective impressions are contained.²⁰⁰

When we have these most basic thoughts, we cannot explain them away with other factors or reasons. We just have them. They are unavoidably part of how we think. Nonetheless, not all thoughts are *mere* psychological events, for that would be to think something that claims to tap into an objective order of truth. This would be like saying that all thoughts are merely reflections of our perspective, except for this thought which grasps what the bigger picture really is. Nagel accepts that psychological events are part of what goes on when we think.²⁰¹ But to let the external view dominate completely and ignore the inner authority of reason would undermine itself.

We cannot get completely outside of reason because any external explanation employs reason which is taken to have objective validity, not just a product of our perspective. C.S. Lewis put it vividly: “it is as if we took out our eyes to look at them.”²⁰² Nagel has come close to Lonergan’s position on the givenness of the norms of thought. We cannot avoid using our reason, and any attempt to reduce its authority to psychological events presupposes our reason to formulate and make the claim with the intent of objectivity. As Lonergan says: that the subject experiences, understands and judges is not open to revision. To begin to doubt this would be to employ those very same conscious operations. For Lonergan, the subject’s conscious operations are given, just as being is given. Objectivity is achieved by being faithful to the given norms of thought, rather than reducing norms of thought to external explanations, robbing them of their true objectivity in an attempt to capture their physically objective nature. The reality of reason is known from *inside*. That does not make it subjective and unreal. Nagel’s insight is that a phenomenon is not unreal just because it cannot be placed in an external picture. Reason is not mathematically quantifiable, or extended in space and time. It is a phenomenon that resists external “looks” and whose true nature is accessible only from the experience of the subject.

The subjectivist cannot be right. Not only is reasoning unavoidable, and at some level valid since it will always claim that something is objectively the case; there is a further thing

²⁰⁰ Nagel, *The Last Word*, 20.

²⁰¹ Nagel, *The Last Word*, 25.

²⁰² C.S. Lewis, “The Poison of Subjectivism,” in *Christian Reflections*, ed. Walter Hooper (Cambridge, UK: Eerdmans Publishing, 1994), 72.

to consider – the intrinsic authority of reasoning. If we look at a particular attempt to explain reason from the outside, we will find that reason has an authority of its own that cannot be explained away from any external standpoints. It is analogous to Nagel’s treatment of consciousness – we may be able to form a more objective picture of its nature with new concepts, but there will always be something that eludes all external “looks”, namely the subjective character of experience that is inseparable from a point of view.

Reason’s Intrinsic Authority

In *Mind & Cosmos*, Nagel pays specific attention to the evolutionary external explanation for reason. When we employ our reasoning powers to draw the conclusion of a syllogism, we intuitively think this conclusion is valid because the inner laws of logic demand it. We are obeying the norms of thought and we think we have grasped the truth directly. But a complete evolutionary explanation of reason would claim that reason is reliable not on the strength of the inner norms of thought themselves, but because evolution has selected the logical norms of thought for their survival value.

Our perceptual consciousness (senses, emotions, appetites) does not pose the same difficulty, according to Nagel: “perception is not a form of insight: I do not grasp the presence of the tree immediately, even though it may seem so prior to reflection.”²⁰³ We experience the world through our sense organs, which means that the light rebounding from the tree has a journey to go before it becomes an image on our retina. Our senses, emotions and appetites relate us to the surface of our environment – they put us into contact with the immediate appearances and stimuli. Success and failure of our senses is measured by how well we avoid dangers, find food, move about in an environment, etc. This is the whole of reality for animals incapable of rational thought. For them, “objectivity extends no farther than this. Their lives are lived in the world of appearances, and the idea of a more objective reality has no meaning.”²⁰⁴ Humans, on the other hand, trust that our senses give us reliable information about the world most of the time, but we can recognise that they might be mistaken. We can pull back from the data of experience and question their reliability. But we can also justify our reliance on our perception by reflecting on its evolutionary history, which would have selected our sense organs for their reliability in informing us about our environment. Nagel thinks that if we can leave our inadequate materialistic understanding of consciousness behind and re-conceive it in a non-reductive way, then it is plausible in

²⁰³ Nagel, *Mind and Cosmos*, 82.

²⁰⁴ Nagel, *Mind and Cosmos*, 73.

principle that it will be susceptible to an external, evolutionary explanation. It is plausible to step back from these appearances and recognise that the reason we can trust them most of the time is that they have been selected for their reliability.

However, after grasping a logical inference, we cannot reflect on the matter and see that the reason we can be sure of the inference is because evolution has selected the laws of logic for their survival advantage. This would take all the weight out of the inference. It would no longer be a universally valid inference, but one that manifests the local contingencies of our evolutionary history. The evolutionary explanation of reason itself relies on reason's validity. When we propose the explanation, we intend it as universally valid, as true without qualifications such as "it is valid for my mental equipment that has been selected over time". Evolution makes a claim about how things really are, but the content of the claim undercuts our ability to make such universally valid claims. We cannot pull back from the results of basic reasoning: "We reject a contradiction just because we see that it is impossible, and we accept a logical entailment just because we see that it is necessarily true."²⁰⁵ When we have *understood* that something is the case, we have "grasped the truth directly."²⁰⁶ That is, reasoning has an inner authority; the grounds for its reliability do not come from an external explanation, such as its evolutionary history. We do not think "my reason is reliable because it has an evolutionary history"; we think "my reason is reliable because it grasps what is real". Thus Nagel states that: "thought moves us beyond appearance to something that we cannot regard merely as a biologically based disposition, whose reliability we can determine on other grounds."²⁰⁷ Thus evolution cannot be the whole story, for this story relies on given norms of thought whose validity does not derive from the evolutionary story: "To explain our rationality will require something in addition to what is needed to explain our consciousness and its evidently adaptive forms, something at a different level."²⁰⁸ So evolution could conceivably be adapted to a richer idea of physical reality that includes mental phenomena, but it is much more difficult to see how it could be adapted to include a complete explanation of our capacity to reason.

If this is true, the source of reason's authority is mysterious. As Nagel says: "Something has happened that has gotten our minds into immediate contact with the rational order of the world, or at least with the basic elements of that order, which can in turn be used to reach a great deal more."²⁰⁹ Nagel makes the comparison between perception and

²⁰⁵ Nagel, *Mind and Cosmos*, 83.

²⁰⁶ Nagel, *Mind and Cosmos*, 80.

²⁰⁷ Nagel, *Mind and Cosmos*, 81.

²⁰⁸ Nagel, *Mind and Cosmos*, 81.

²⁰⁹ Nagel, *Mind and Cosmos*, 83.

reasoning: “In ordinary perception, we are like mechanisms governed by a (roughly) truth-preserving algorithm. But when we reason, we are like a mechanism that can see that the algorithm it follows is truth-preserving.”²¹⁰ When we reason and understand, there occurs a grasp or insight in the intelligent subject which cannot be a mere composite of particle movements in the brain: “Rationality...cannot be conceived of, even speculatively, as composed of countless atoms of miniature rationality.”²¹¹ This is because an account which reduces rationality to the physical “omits the understanding of the content and the grounds of thought and action essential to reason. It could account for behavioural output, but not for understanding.”²¹² Nagel sees that any external explanation, such as a reductive physicalist account, will exclude the possibility of the subject’s intelligent activities. In *The Last Word*, Nagel makes a similar point: “...the authority of the most fundamental kinds of thought reveals itself only from inside each of them and cannot be underwritten by a theory of the thinker.”²¹³ Reason, in Nagel’s view, possesses an inner authority whose objectivity is only accessible from the point of view of the subject.

We can see why Nagel has become unpopular with the prevailing materialistic intellectual culture.²¹⁴ If he is right, then his claims would have radical implications. He is claiming that there is a phenomenon that cannot be understood externally in terms of contingent cultural and social factors or physical events in the brain. In what way is reason objective, then? Nagel is moving away from prevailing conceptions of objectivity. He wants to count as real the phenomenon of reason which cannot be understood externally. He wants to make a place for the subject in reality. He acknowledges the reality of the subject’s own “understanding of the content”.²¹⁵ This harkens back to chapter three, where Nagel saw that one actually has to *be* the subject in order to access some realities. There is no knowing without a subject or point of view, but knowledge can still be objective.

Nagel claims that without a subject there is no understanding, and that therefore our concept of objectivity has to be expanded to make sense of the fact that the hidden order of nature is only grasped by a subject. What is understood does not lie out there in the world waiting to be encountered in a passive way like our senses encounter their object. There occurs a grasp in the subject when it follows the norms of reason. Most of the time we can tell the difference between being rational and being irrational. Being rational is not a

²¹⁰ Nagel, *Mind and Cosmos*, 83.

²¹¹ Nagel, *Mind and Cosmos*, 87.

²¹² Nagel, *Mind and Cosmos*, 87.

²¹³ Nagel, *The Last Word*, 26.

²¹⁴ Andrew Ferguson, “The Heretic”.

²¹⁵ Nagel, *Mind and Cosmos*, 87.

mechanical operation but something we grasp is the case. In other words, Nagel is moving towards the idea that reality is more than body, more than the material world “already out there now”. Part of the real is the “rational order of the world” and also the subject who mysteriously is able to grasp it. What reason grasps is invisible; it is not mediated to our minds in a mechanical fashion like sense perception. However, he does not possess clearly the concept of “insight” and this limits his ability to expand objectivity in a way that makes both matter and intelligibility part of reality (this limitation is explored further in 4.3 and 4.4).

4.2 The “Order of Reasons”

Nagel thinks that reason is different in kind to the senses because it enables us “to transcend the perspective of the immediate life-world given to us by our senses and instincts, and to explore the larger objective reality of nature and value.”²¹⁶ Furthermore, given the existence of this faculty, he thinks it follows that “there are objective, mind-independent truths of different kinds: factual truths about the natural world, including scientific laws; eternal and necessary truths of logic and mathematics; and evaluative and moral truths.”²¹⁷ In other words, with reasoning it is possible to grasp things that are true regardless of our perspective, language, culture or moment in history. Given that we must submit to reason as the unarguable context within which any rational discussion must occur, what are the implications? This section examines whether it follows that “...we [can] affirm that the authority of reason is something independent, something of which the hierarchy of our thoughts is an appropriate reflection...”²¹⁸ Nagel thinks it does. Simon Blackburn, who critiques Nagel’s position, is not comfortable with the idea of a given “order of reasons” that is prior to our thinking and reasoning.²¹⁹

The context of Blackburn’s critique is Nagel’s claim that we cannot get completely outside our thoughts and give them an external explanation. In other words, Nagel thinks that all second-order claims, or attempts to explain thought entirely from the outside, end up being first-order claims:

Thought itself has priority over its description, because its description necessarily involves thought. ... And in general, every external view of ourselves, every understanding of the contingency of our makeup and our responses as creatures in the

²¹⁶ Nagel, *Mind and Cosmos*, 71.

²¹⁷ Nagel, *Mind and Cosmos*, 85.

²¹⁸ Nagel, *The Last Word*, 16.

²¹⁹ Simon Blackburn, “Review of Thomas Nagel, *The Last Word*,” *Philosophical Review* 107, no.4 (1998): 654-5.

world, has to be rooted in immediate first-order thought about the world. However successfully we may get outside of ourselves in certain respects, thereby subjecting ourselves to doubt, criticism, and revision, all of it must be done by some part of us that we haven't got outside of, which simply *has* the thoughts, draws the inferences, forms the beliefs, makes the statements.²²⁰

Thomas summarises: "The idea seems to be that since we cannot escape our most fundamental rational commitments, there is no meta-level standpoint from which we can assess them. Therefore, any putative assessment has to take place on the same level and is, in fact, another of our first-order commitments."²²¹ According to Thomas, "this position looks like a form of philosophical dogmatism with all the attendant risks of begging the question."²²²

Blackburn also thinks that Nagel has made an error. That is:

[T]here are only first-order claims, and philosophers purporting to enter second-order claims are in fact putting forward their own first-order claims, which are typically less plausible than those with which they compete ... But a good part of Nagel's book flirts with a different, second-order response ... that which talks of our 'submitting to the order of reasons rather than creating it' ... A true minimalist would ... say that here too we have only ritualistic metacommitments, denying that there is any space for the vision to occupy. We can see why this is so if we put it in terms of what we can call Ramsey's ladder. This takes us from p to it is true that p, to it is really true that p, to it is really a fact that it is true that p, and if we like to it is really a fact about the independent order of things ordained by objective Platonic normative structures with which we resonate in harmony that it is true that p. For the metatheoretical minimalist, Ramsey's ladder is horizontal. The view from the top is just the same as the view from the bottom, and the view is p.²²³

From this perspective it can be argued that the thrust of Nagel's argument leads towards a picture where our thoughts are made true by a standard external to us. In order to preclude this conclusion, Blackburn has to show that it begs the question. According to Blackburn, Nagel does this when he denies that second-order claims about reason are possible, while making a second-order claim about reason.

²²⁰ Nagel, *The Last Word*, 65-6.

²²¹ Thomas, *Thomas Nagel*, 57.

²²² Thomas, *Thomas Nagel*, 57.

²²³ Blackburn, "Review of *The Last Word*", 654-5.

By “ritualistic metacommitments” Blackburn refers to the conditioning that our biological makeup and cultural context contribute to our impression that reasoning contacts some objective order outside itself. They are “ritualistic” because they are human products or rituals, and “metacommitments” because they create the bigger context in which our rational commitments seem to be universally binding and justified. What is Blackburn claiming? There is no order of reasons to which our reason must conform. The objective, universal and seemingly necessary claims of reason are just a fact about the way we think – ritualistic metacommitments – and nothing more. They seem to demand an external authority to justify their universality and necessity, but *really* they are products of our point of view and biological makeup. It is true that we cannot escape our fundamental rational commitments, but that does not justify hypothesizing an order of reasons outside of our minds. Blackburn makes this argument by challenging Nagel’s reasoning, which goes from the fact that we cannot escape using reason, even to debunk itself, to the conclusion that there is an independent order of reasons to which our minds conform. Blackburn has to counter this conclusion, while reckoning with the unavoidability of using reasoning with objective intent in any claim that he makes.

First, we need to clarify what Nagel’s position is. There are first-order claims (claims that assume the validity of reason: force equals mass multiplied by acceleration) and there are second-order claims (claims about how reason is or seems valid, claims about its relation with the world, but claims which also assume the validity of reason). Any second-order claim, whether it tries to debunk reason or not, will end up competing with first-order claims. It “cannot claim automatic precedence.”²²⁴ It will go into the mix of other hypotheses that await judgment in the court of reason. Any claim that purports to limit the scope of reason, such as Kant’s transcendental idealism, will have to compete with other rational claims.²²⁵ On this topic, Nagel writes: “The second-order theories cannot avoid competition with the content of what they are trying to reduce or debunk.” To illustrate: “The proposal that scientific reasoning tells us nothing about reality is itself a hypothesis about the world and cannot simply stop us from thinking, any more than a psychological reductionist theory of mathematics or ethics can stop us from thinking about arithmetic or right and wrong.”²²⁶ Nagel’s insight is that thinking and reasoning is prior to all hypotheses about the world, even those hypotheses that seek to discredit reasoning. Similarly, the second-order theory that says our reason submits to an independent order of reasons is itself open to questioning and

²²⁴ Nagel, *The Last Word*, 22.

²²⁵ This is assuming that it is true that Kant’s theory is not provable *a priori*.

²²⁶ Nagel, *The Last Word*, 96.

reflection and revision, and in that sense it is on the same playing field as the content which it is seeking to explain. All claims must face the court of reason. Reason is the judge of first-order claims and second-order claims. There is no meta-level that escapes the use of reason, as Thomas said.²²⁷

One initial point to make, in defence of Nagel, is that making a second-order claim about an order of reasons does not pose the same problem as that which faces the subjectivist who makes a second-order claim about reason. The subjectivist's second-order claim seeks to completely explain the phenomenon of reason from outside, thus removing the apparent inner authority of reason. To regard reason as a purely subjective phenomenon, we have to take a more external view of ourselves and our reason. This external view relies on reasoning that we take to be valid. Nagel's order of reasons is not a debunking explanation, so it does not face this problem of inconsistency. It never pretended that it would escape this judgment by the court of reason.

What we cannot do, however, is *fully* place reason within an external picture or second-order claim. Nagel's order of reasons would not be a fully external explanation because it would have a place for the subject's act of understanding and the inner authority of reason which can never be fully explained from outside.²²⁸ It is pushing at the boundaries of existing concepts of objectivity. It blurs the distinction between first-order and second-order claims. It is partly a second-order claim, a claim about how our reason is made valid, but in another way it is not because it does not pretend to be a complete external picture of reason. So does Nagel's position beg the question? It depends on the background metaphysical assumptions. It would if the only valid kind of position is an external one; that is, if we assume the real is "already out there now" and objectivity is extroversion. It would not beg the question if we do not assume that objectivity is extroversion, and make room for objective subjectivity.

Now, to apply this to a Blackburn's specific criticism: if objectivity is extroversion, Nagel does beg the question. For then Blackburn could put to Nagel's view the question, why does your implicit second-order theory about the "order of reasons" survive the conversion to first-order? An order of reasons is a mind-independent standard that makes our reasoning true or false. When we claim that a particular bit of reasoning is made true by an order of reasons, we make a second-order claim. If all second-order claims are really first-order ones, then this second-order claim succumbs to the same fate. Nagel says, Blackburn continues, that we

²²⁷ Thomas, *Thomas Nagel*, 57.

²²⁸ For this discussion, refer back to subheading "Reason's Intrinsic Authority" in section 4.1 Inner Authority of Reason.

cannot hop completely outside of reason to a meta-level standpoint from which to assess it, yet he “flirts” with this idea of an “order of reasons”. This “order” has no “space” to occupy, for according to Nagel’s own argument there is no space for second-order claims.

Blackburn’s criticism seem accurate if we assume an extroverted notion of objectivity. If this notion were true, then there would be no “space” for this “order of reasons” to occupy. But Nagel is pushing the limits of current assumptions about objectivity. Nagel is saying that reason is irreducibly subjective – meaning it is unable to be viewed and explained externally – yet also real with its own inner authority. He is finding that the subject and its faculties is objective and real. It is true that the second-order claim about an order of reasons does not get outside of reason so as to be on a different plane to first-order claims. But one might ask: why does one have to have a view from nowhere, from no subject, in order to know reality? Blackburn wants to account completely for reason with an external picture (a second-order claim). This is understandable, given the assumption that objectivity equals extroversion, which would require that all phenomena be accounted for in a description of the “already out there now.” Nagel realises that reason is not susceptible to extroverted conceptions of objectivity, but he also knows that it is nonetheless real. Thomas is concerned that Nagel’s position is “begging the question,”²²⁹ but perhaps this is precisely Nagel’s great insight – all claims, including his own, must face the court of reason. There is something we cannot get outside of, something that we have to take as given; there is something objective about the subject. We cannot get completely outside of the subject’s reasons, but they are nevertheless objective. There is indeed no “meta-level standpoint” from which we can assess our rational commitments, if meta-level standpoints are external “looks” at the phenomenon of reason.²³⁰ But we can make reasonable conclusions based on the inner data of our consciousness that there is an “order of reasons”, or an order which we discover rather than create. It would not be a reasonable conclusion, based on the inner data of consciousness, that our reasonable consciousness is unreal. Our concept of objectivity needs to make room for phenomena that belong to the subject, like sense experience and reason. So Blackburn’s critique is correct, if objectivity is extroversion, which in turn highlights Nagel’s insight about the limitations of existing concepts of objectivity.

It is important to note that Nagel’s “order of reasons” is not the order of innate ideas like Descartes envisaged, and he is not a foundationalist in the sense that there must be certain knowledge upon which to build all other knowledge. Here his rationalism departs from Descartes: he insists on the certainty of our forms of thought, not necessarily of the

²²⁹ Thomas, *Thomas Nagel*, 57.

²³⁰ Thomas, *Thomas Nagel*, 57.

content of thought which will humbly remain open to correction and revision. Nagel writes: “We don’t take these capacities to be infallible, but we think they are often reliable, in an objective sense, and that they can give us knowledge.”²³¹ However: “not everything can be revised, because something must be used to determine whether a revision is warranted—even if the proposition at issue is a very fundamental one.”²³² The unrevisable is the structure of consciousness, although he has not yet recognised all the differentiations within consciousness. Reason is given – we cannot escape it. Reason is objective, but it is known from the point of view of the subject, not by “looking” from an external standpoint. There is something objective about the subject.

In summary, a second-order claim that is fully external in nature, that relies on an extroverted notion of objectivity, would fall prey to Blackburn’s critique. However, a second-order claim, one that seeks to understand it not externally but internally, using a richer notion of objectivity, will survive Blackburn’s critique. This is not really any longer a second-order claim in the sense that Blackburn meant it. However, it is an explanation that grapples with the facts of what is, and does not seek to bring one kind of explanation to every kind of reality. So on the assumption that objectivity is extroversion, Nagel’s arguments about the irrefutability of subjectivist claims beg the question; but we can read it as an attempt to push beyond the limitations of existing concepts of objectivity. Nagel is saying that there is something irreducibly subjective (in that it cannot be understood externally) yet also real. He is blurring the lines between objective and subjective. Nagel is well on the way to grasping that objectivity is not attained by looking, but by insight and judgment.

Can Nagel go from the unavoidability of the court of reason to the claim that it has its own authority external to us? The answer must be negative, if objectivity is extroversion. There is no space for the external standard to occupy. The answer, though, is affirmative, if objectivity is what can be reasonably affirmed by the subject.

4.3 Perspectival Knowing & Scepticism

Nagel is pushing at the boundaries of existing concepts of objectivity, but his thought experiences limitations that can, arguably, be dealt with by taking into account what Lonergan discusses as the nature of insight. An example of the limitations of his thought is found in his discussion of scepticism. While we have the capacity for objectivity, according to Nagel, we nevertheless live in the shadow of scepticism. This is because there will always

²³¹ Nagel, *Mind and Cosmos*, 72.

²³² Nagel, *The Last Word*, 65.

be the subject behind the lens, and so the resulting picture could yet be perspectival. Thus we advance in objectivity, but we never can be certain that a conclusion has finally transcended all perspectival influences. This creates a seemingly unresolvable tension: he insists that we have the capacity to reason in a non-perspectival way (4.1), yet we cannot know for certain if we are indeed reasoning in a non-perspectival way. The shadow of scepticism seems to diminish the significance of our capacity to reason in an objective way. This section will argue that it is his adoption of an extroverted model of objectivity that creates this tension.

It is precisely our ability to seek objective conceptions of ourselves and the world that keeps alive the possibility of scepticism. Seeking a more objective conception means transcending our perspective. In Nagel's words: "But if initial appearances are not in themselves reliable guides to reality, why should the products of detached reflection be different?"²³³ Nagel understands that there is no knowing without a subject, i.e. there is no "view from nowhere".²³⁴ There will always be a subject "behind the lens":

We cannot accept [the] appearances uncritically, but we must try to understand what our own constitution contributes to them. To do this we must try to develop an idea of the world with ourselves in it, an account of both ourselves and the world that includes an explanation of why it initially appears to us as it does. But this idea, since it is we who develop it, is likewise the product of interaction between us and the world, though the interaction is more complicated and more self-conscious than the original one. If the initial appearances cannot be relied upon because they depend on our constitution in ways that we do not fully understand, this more complex idea should be open to the same doubts, for whatever we use to understand certain interactions between ourselves and the world is not itself the object of that understanding. However often we may try to step outside of ourselves, **something will have to stay behind the lens**, something in us will determine the resulting picture, and this will give grounds for doubt that we are really getting any closer to reality.²³⁵ [emphasis added]

Dancy argues that Nagel moves from "something will have to stay behind the lens" to "something in us will determine the resulting picture" without justification: "The fact that something will have to stay behind the lens does not show that any individual feature or features of that something will determine the resulting picture."²³⁶ It is conceivable that one's

²³³ Nagel, *View From Nowhere*, 67.

²³⁴ Nagel, *The View from Nowhere*.

²³⁵ Nagel, *View From Nowhere*, 68.

²³⁶ Jonathan Dancy, "Contemplating One's Nagel," *Philosophical Books* 29, no.1 (1988): 9–10.

lens does not distort reality. However, taking Dancy's critique on board, even if Nagel were wrong to assume that the mere fact of being a subject implies that the picture *is* distorted, his sceptical conclusion still seems available. Nagel is saying that the "grounds for doubt" can never be banished altogether. One's lens may not in fact determine the resulting picture, but how would one ever know this with such certainty that the possibility of scepticism is removed? Given the split between thought and reality that exists in any extroverted model of objectivity,²³⁷ how can one be sure that one's lens offers a clear vision? How are we to be certain that "impressions are accurately transmitted across the gap..."?²³⁸ It is the central problem for any epistemology modelled on an extroverted model of objectivity. And because one can never know that one's lens is reliable without getting outside oneself and taking up new view through the same lens, there will always be grounds for doubt.

The extent of the shadow of scepticism is powerfully revealed in the case of physics, because, being so independent of the way the world appears to our senses, physics is the best contender for an "absolute conception" of the world.²³⁹ According to Thomas, Bernard Williams and Nagel think in a similar way on this topic. Williams defines an absolute conception as one that is "maximally independent of our perspective and its peculiarities."²⁴⁰ Thomas elaborates on the idea of an absolute conception: "It is paradigmatically a conception of reality that modern mathematicized physics expresses and it is not from any point of view in particular."²⁴¹ And he continues: "Both Nagel and Williams claim that physics can supply an absolute conception of this kind."²⁴² However, Nagel's point about scepticism is that we can never be sure that even the viewpoint of physics is independent of our perspective and particularities. It is always possible that the viewpoint of physics is perspectival, an illusion caused by the relation of the world to our capacities to think and theorise, because physics, "since it is we who develop it, is likewise the product of interaction between us and the world."²⁴³ Nagel points out that Kant's transcendental idealism, if true, would make the viewpoint of physics perspectival, because it accesses the *phenomena*, the world as it appears to us, not the *noumena*, the world as it is in itself.²⁴⁴ Nagel argues, however, that when considering the truth of Kant's position "we are entitled to employ the forms of reasoning which the theory purports to disqualify as ways of determining what the world is really like—

²³⁷ See 2.1 The Rise of Nominalism.

²³⁸ Also quoted in section 2.1 The Rise of Nominalism. Eugene Webb, *Philosophers of Consciousness*, 59.

²³⁹ Nagel, *View From Nowhere*, 15.

²⁴⁰ Bernard Williams, *Descartes: The Project of Pure Inquiry* (Harmondsworth: Penguin, 1978), 65.

²⁴¹ Thomas, *Thomas Nagel*, 33.

²⁴² Thomas, *Thomas Nagel*, 33.

²⁴³ Nagel, *View From Nowhere*, 68.

²⁴⁴ Nagel, *The Last Word*, 93.

and we cannot avoid regarding them in precisely the way the theory forbids.”²⁴⁵ So while Nagel thinks Kant does not prove that physics *is* a perspectival form of reasoning, nevertheless, Kant’s position will “remain as a skeptical possibility,” and always will unless one can take up a viewpoint outside that of physics that demonstrates that our lens did not prevent physics from accessing the world as it is in itself.²⁴⁶ That new viewpoint, however, would still be the “product of interaction between us and the world,”²⁴⁷ and so at least the *possibility* remains of doubting that it is free of perspectival influences.

On an extroverted notion of objectivity, where physics is an “abstract look”²⁴⁸ at a substantial reality “already out there now” whose congruence with our conceptions of it is difficult or perhaps impossible to guarantee, Nagel’s argument for the constant *availability* of scepticism is strong. However, using Lonergan’s notion of insight it may be possible to conceive of a subject behind the lens that does not distort the picture, and thus weaken the threat of scepticism.

Nagel thinks that because there is always a subject doing the knowing, then scepticism is always available; there is always the possibility that the subject is knowing the world in a perspectival way, *even* when it is known from the viewpoint of physics. Yet Nagel does not see that “the products of detached reflection”²⁴⁹ are not liable to revision and correction in the same way that our sense experience is. He treats insights as yet another perspective, another way of looking at what is “already out there now.” Nagel supposes that *reasoning* can be an “elaborate species of subjective impression”,²⁵⁰ but he fails to see that a very different kind of knowing is going on, one that is not perspectival at all because it does not involve any “looking” at anything “already out there now”. Arguably, Nagel would benefit here from Lonergan’s concept of insight. When we grasp intelligibility, it is not open to perspectival distortion in the same way that experience is. “Looking” from the viewpoint of physics is not really looking at reality “out there” at all; physics is engaged in explanation of intelligible relations between things.²⁵¹ Physics is not a *look* at palpable being. An insight is not “already out there now”; its potential for being is actualised by a subject. It grasps the hidden order built into matter. When a subject understands, it is united with the intelligibility

²⁴⁵ Nagel, *The Last Word*, 95.

²⁴⁶ Nagel, *The Last Word*, 95.

²⁴⁷ Nagel, *View From Nowhere*, 68.

²⁴⁸ Lonergan, *Insight* 415.

²⁴⁹ Nagel, *View From Nowhere*, 67.

²⁵⁰ Nagel, *The Last Word*, 23.

²⁵¹ To clarify the meaning of “looking” here: looking in the experiential sense has a spatiotemporal and ontological separation between the subject and object. In acts of understanding, such as those that produce the theories of physics, there is no spatiotemporal or ontological separation between the subject and object. The very intelligibility of the object is made the subject’s own, such that there is a unity of subject and object.

of the object. There is no space or time for the distortion of this perspective to occur, in the way that our experience can be distorted by distance and in the presence of heat, for example.²⁵² Certainly, we often are deceived by aspects of how things appear to us and will understand wrongly. But this is a particular, not a general, critique of our ability to arrive at things in themselves. We correct those errors and biases by experiencing further and reflecting and judging anew. Insights are not a perspective on reality open to perspectival distortion, for they are in no sense a *picture* or a way of “looking” at reality. We must not fall into the trap of thinking that physics tells us how the world really *looks* apart from our observation of it. It is this kind of mistake that leads Nagel to suppose that even the picture given to us by physics could be an “elaborate species of subjective impression.”²⁵³

What if, as Kant claimed, our understanding cannot transcend the sense data structured by the mind’s categories? Would not the insights of physics end up being perspectival despite the fact they grasp invisible relationships and are not open to distortion in the same way that experience is? This question goes to the heart of Lonergan’s philosophy. It is nothing less than the question of whether we can know the world as it is in itself. Lonergan says it is a misleading question because it is set up on an extroverted model of objectivity. It supposes that reality is something substantial and “already out there now” whose true nature lies behind how it appears to us. If only we can strip away all the perspectival influences, we can have a non-distorted *picture* of reality.²⁵⁴ Lonergan has a different approach: “[W]e place transcendence, not in going beyond a known knower, but in heading for being within which there are positive differences and, among such differences, the difference between object and subject. Inasmuch as such judgments occur, there are in fact objectivity and transcendence...”²⁵⁵ When we experience, understand and judge, we transcend ourselves and know things as they are in themselves. For Lonergan, our minds are intrinsically related to being prior to any distinction between subject and known object:

...the critical problem...is not a matter of moving from within outwards, of moving from a subject to an object outside the subject. It is a problem of moving from above

²⁵² Experience can sometimes mislead us: the bent oar under the water; a mirage. However, experience is not a distorted picture of what *matter is in itself*. As discussed in chapter two, we cannot picture or imagine what matter is in itself, for things in themselves are defined by unpicturable unities and relations, according to Lonergan. Therefore, physics, which explains the relations between things, is not open to perspectival distortion in the same way that our experience of an oar is. We can only picture how things *appear*, not their relations with other things. So to treat experience as a distortion of how things really *look* is a grand misunderstanding of what physics is grasping.

²⁵³ Nagel, *The Last Word*, 23.

²⁵⁴ Though, of course, Kant thought it impossible for the understanding to escape the perspectival influences. Freedom and aesthetic judgment offer a route out of perspectival influences, in his view, but the understanding cannot.

²⁵⁵ Lonergan, *Insight*, 377.

downwards, of moving from an infinite potentiality commensurate with the universe towards a rational apprehension that seizes the difference between subject and object in essentially the same way that it seizes any other real distinction.²⁵⁶

In this way, the problem of discovering the reality lying beyond my experience of it is replaced with the problem of correctly experiencing, understanding and judging. The real is the verified, and not somehow constituted by objects beyond my experience of them. By becoming aware that our knowing is not extroverted, but involves insight and judgment also, one can argue that in physics the subject grasps the real, which is what can be verified.

In light of these considerations, Nagel's approach to different viewpoints on a scale from subjective to objective is problematic. The viewpoint of physics is not a more objective *picture* of reality; it is actually the abstractive viewpoint of explanation, one which cannot be pictured because it grasps intelligible being. The content of the subjective viewpoint can be pictured because it concerns sense data. To Nagel's credit, as discussed in chapter three, he does not let this more objective picture of reality replace the subjective one of how things appear to us. Still, his conceptual tools do not help him explain why or integrate the two viewpoints together. With Lonergan's help, we can suggest that description and explanation give us access to different layers of the one reality. These are not two competing pictures of the one reality, but two different modes of knowing the same reality. Explanation grasps intelligible being, description concerns sensible being. Both are real because both are verifiable.

To summarise these findings: Nagel recognises the role of the subject in knowing when he says there will always be a "subject behind the lens," for there is no knowing without a knower, but the invisible relations grasped through experience, understanding and judgment are not perspectival. To think otherwise would be to misunderstand the nature of insight and to adopt an extroverted model of objectivity. As discussed in chapter three, Nagel puts his objective-subjective conceptual tool to good use in defending the irreducibility of some aspects of the subjective point of view to a more objective one, but he is limited by the tools of his tradition, which conceives of knowing on an extroverted model, as transcending a point of view on the "already out there now". Nagel's sliding scale from the subjective point of view to more objective points of view does not help him make sense of *what* exactly is grasped at a more objective viewpoint. It does not allow him to conceive of intelligibility as part of the real. Objectivity for Nagel is about overcoming our perspective, but the

²⁵⁶ Lonergan, *Verbum: Word and Idea in Aquinas*, (Notre Dame, IN: Notre Dame University Press, 1967), 88.

mathematical intelligibility of physics, or any kind of intelligibility for that matter, is not a perspectival sort of reality, according to Lonergan.

With these clarifications about the nature of insight, it seems the shadow of scepticism need not loom over human knowing, and there need not be such tension with Nagel's insistence that we can reason in a non-perspectival way.²⁵⁷ Curiously, there is a similar tension in Lonergan's thought: he says we have the capacity to achieve objectivity through authentic subjectivity, but the results of our knowing are always open to revision.²⁵⁸ It is different to Nagel's case, however. Nagel thinks we have the capacity to reason in a non-perspectival way; however, entire classes of reasoning can be subjected to the doubt that they tell us *anything whatsoever* about the world in itself beyond our perspective.²⁵⁹ With clarification from Lonergan about the nature of insight, Nagel may be able to retreat from the shadow of general scepticism and instead redirect this humility about our capacity to know to the accuracy of particular cases of knowing.

4.4 The Intelligibility of the World – A Mystery

We saw in 4.1 & 4.2 that Nagel is pushing the limits of existing notions of objectivity. We have seen in 4.3 that he lacks the concept of insight and that this limits his ability to make sense of what the abstract viewpoint of physics actually grasps. For Nagel, mind and reality are never surely in contact because the possibility of scepticism is always lurking.

Now we will consider further how Nagel tackles the mind-world relationship. How is it possible for thoughts to be about real things? *What* do we know when we know? If Nagel wants to make sense of the congruence between mind and reality he must give up on an extroverted concept of objectivity. He needs to expand his realism from animal realism to human realism, from extroverted objectivity to objectivity as the compound of what is known in experiential, reasonable and rational consciousness – a richer notion borrowed from the Aristotelian-Thomistic tradition.

²⁵⁷ Nagel's views on scepticism were worked out in *The View from Nowhere* (1986), but a later publication, *The Last Word* (1997), revealed his developed views on the authority of reason. The latter book has a more positive approach to scepticism. While the sceptic can cast doubt on the objectivity of a domain of thought – morality for instance – his arguments do not automatically assume precedence, but compete with other moral reasoning within that domain. Scepticism is on an equal playing field with non-sceptical views, and it is subject to the same reasoning that it purports to debunk as perspectival. Nagel does not remove the possibility of scepticism, but the possibility of objective reasoning in the domains of logic, science and ethics is more promising. See Nagel, *The Last Word*, 21.

²⁵⁸ See subheading "The Accuracy of Human Knowing" under 1.2 Cognitive Structure.

²⁵⁹ This casts doubt on the actual significance of the possibility of non-perspectival reasoning, since we do not know for certain when we have achieved it.

Intelligibility

Nagel's resistance to the materialists' reduction of any difficult elements of reality shines forth again. He has made his arguments for the irreducibility of consciousness and reason to the physicalist conception of objectivity. Now he defends the intelligibility of nature, despite the difficulty of making sense of this fact. We will first consider his view on the intelligibility of nature, then address the question of how it is possible for our thought to grasp this hidden order.

In Nagel's view, the domains of logic, mathematics, science and ethics all possess their own intelligibility, but science is a unique domain with the most far-reaching and obvious intelligibility:

Science is driven by the assumption that the world is intelligible. That is, the world in which we find ourselves, and about which experience gives us some information, can be not only described but understood. That assumption is behind every pursuit of knowledge, including pursuits that end in illusion. In the natural sciences as they have developed since the seventeenth century, the assumption of intelligibility has led to extraordinary discoveries, confirmed by prediction and experiment, of a hidden natural order that cannot be observed by human perception alone. Without the assumption of an intelligible underlying order, which long antedates the scientific revolution, those discoveries could not have been made.²⁶⁰

He thinks the only compelling way to make sense of the hidden intelligible order that is progressively uncovered by the physical sciences is to confess that reality itself is intelligible, not that this order is a projection of the human mind: "It seems to me that one cannot really understand the scientific world view unless one assumes that the intelligibility of the world, as described by the laws that science has uncovered, is itself part of the deepest explanation of why things are as they are."²⁶¹ The difficulty is in making sense of these convictions metaphysically. There is an ontological gap between our objective concepts and reality. Objective concepts are not caused in us by any objects. They are the product of our mental activity. How can abstract concepts have anything to do with concrete reality? Nagel admits that he does not know: "I have no idea what unheard-of property of the natural order this might be. But without something fairly remarkable, human knowledge is unintelligible."²⁶² Nagel does not appear to take into account the split between thought and reality, with its

²⁶⁰ Nagel, *Mind and Cosmos*, 16.

²⁶¹ Nagel, *Mind and Cosmos*, 16.

²⁶² Nagel, *View From Nowhere*, 85.

corresponding extroverted notion of objectivity, which was part of the formation of the modern physicalist concept of objectivity. It is precisely an extroverted notion of objectivity that makes it unintelligible what the natural order is and how our minds grasp it.

Thought and Reality: Kant and Nagel

As to the question of how our thinking can grasp the hidden order of nature, it is useful to consider Nagel's critique of Kant's transcendental idealism. It will be argued that both Nagel and Kant assume that objectivity is extroversion. Their thinking reveals the limitations of assuming that the real is "already out there now." On their principles, we cannot connect thought and ultimate reality.

Kant and Nagel approach the problem of human knowledge from different directions. Kant begins with thought and reality unified. He performs a transcendental deduction – our mind and reality must be such and such a way in order to make sense of how our knowing works. Kant, following Hume, makes a clear distinction between two components of empirical human knowing: sensibility (*Sinnlichkeit*) and understanding (*Verstand*).²⁶³ The data of experience come in via the senses, and in themselves they do not contain the relationships grasped by the understanding. Intelligible relations, such as causal relations, are not "already out there now" in sense data, therefore they must be in the mind.

Therefore, according to Kant, the mind *must* contain categories that construct an ordered phenomenal world out of the unintelligible raw experience. Thus the understanding is given an object – an object constructed out of sense data and the categories of the mind. It cannot be any other way given that the subject does truly understand relations in data and that reality is limited to a body "already out there now".²⁶⁴ The implication is that the understanding is limited to the phenomenal world; it cannot know anything other than this mixture of the mind's categories and sense data. The noumenal world – the world as it really is apart from the human perspective – is inaccessible to empirical knowing, because human concepts cannot escape the influence of the innate categories of the mind.²⁶⁵ Not only secondary qualities are a product of the human perspective; for Kant, primary qualities are too.

²⁶³ Robert Hanna, "Kant's Theory of Judgment", *The Stanford Encyclopedia of Philosophy* (Winter 2017 Edition), Edward N. Zalta (ed.), URL: <https://plato.stanford.edu/archives/win2017/entries/kant-judgment/>.

²⁶⁴ See Lonergan's analysis of Kant: Lonergan, *Insight*, 339-342.

²⁶⁵ In Kant's analysis, the noumenal world is accessible to practical knowledge.

Nagel does not accept Kant's limiting of the scope of understanding to the phenomenal world:

To accept transcendental idealism we would have to cease to regard our ordinary forms of thought as being about the world at all, and I think we cannot do that. We cannot be prevented from considering transcendental idealism as a minimalist theory of reality, which therefore forces us to consider whether it is true or not.

In thinking about the question, we are entitled to employ the forms of reasoning which the theory purports to disqualify as ways of determining what the world is really like—and we cannot avoid regarding them in precisely the way the theory forbids. We will ask whether this hypothesis is more plausible, on the evidence, than the alternatives.²⁶⁶

Nagel holds to the primacy of reasoning over any attempts to restrict it and lessen its scope: “Here, as elsewhere, reasoning in its own right defeats efforts to depict it as subordinate to something else that discredits its pretensions. It rears up its head to pass judgment on the very hypothesis that was designed to put it in its place.”²⁶⁷ This is supported by Lonergan's thesis about the primacy of the given structures of consciousness over any questions and theories about it.

Nagel approaches the problem of thought and reality from the opposite end to Kant. He realises that reason is prior to all theorising about reason, and begins from there. “The problem then will be not how, if we engage in it, reason can be valid, but how, if it is universally valid, we can engage in it.”²⁶⁸ He does not limit the scope of reason for the sake of working out a solution to the unity of thought and the world as Kant did. Kant approaches the problem of knowing by resolving this question first, and then finding that reason is limited. Kant limits our knowing because he thinks it is the only way to make sense of the unities and relations in our intellectual knowing. We come to know non-existent unities and relations in the raw data of experience, because our minds filter and structure the experience, creating potential unities and relations to be discovered. Our intellectual knowing is limited to this structured experience; we cannot get beyond it. Nagel does not begin by unifying thought and reality, nor does he make reason perspectival and limited; but he has no idea how our mind is related to the intelligible order. Rather, he begins with the convictions that we are capable of knowing the world more objectively and that reality is a substantial whole, but he concedes that the connection is a mystery.

²⁶⁶ Nagel, *The Last Word*, 94-5.

²⁶⁷ Nagel, *The Last Word*, 95.

²⁶⁸ Nagel, *The Last Word*, 75.

Arguably Nagel has not made this issue central enough to his thought, such that he overlooks the issue in other thinkers. In Hurley's analysis of Nagel, she argues that Nagel misunderstands that Wittgenstein and Davidson are dealing with an issue prior to knowledge and truth.²⁶⁹ Thomas, too, supports this interpretation: "Wittgenstein and Davidson are concerned with the broader issue of representation and what Kant called the issue of 'objective validity'. The relevant question is: how can it so much as be the case that we can have thoughts that represent an objective reality?"²⁷⁰ However, although Nagel does not make this question a starting point in his philosophy, there is no doubt that he feels its bite very keenly: "We seem to be left with a question that has no imaginable answer: How is it possible for finite beings like us to think infinite thoughts—and even if they take priority over any possible outside view of them, what outside view can we take that is at least consistent with their content?"²⁷¹ In other words, how is it possible that the subject can transcend his perspective to acquire objective knowledge? It is not a problem to make sense of how we know things from the subjective point of view – it is the immediate data of our environment, gained through our senses. But why should the products of detached reflection, expressed in abstract concepts and mathematical equations, happen to match up with reality?

I would suggest that Nagel sees the issues very clearly. He is aware of the priority of reason. He is aware that limiting it theoretically does not curb its priority, and of the need for a potentially limiting theory to face the court of reason for judgment. He is aware of the difficulty of accounting for the intellectual knowing of reality on the assumption that the real is "already out there now" and that knowing it involves encountering it as it is, although he does not use this language:

When we use our minds to think about reality, we are not, I assume, performing an impossible leap from inside ourselves to the world outside. We are developing a relation to the world that is implicit in our mental and physical makeup, and we can do this only if there are facts we do not know which account for the possibility. Our position is problematic so long as we have **not even a candidate for such an account.**²⁷² [emphasis added]

This "relation to the world" is what makes our thought yield knowledge. Without a link between thought and reality, there would be no knowing, but only thinking. The nature of this link eludes Nagel, because he is trying to picture it as a phenomenon of the natural order,

²⁶⁹ Susan Hurley, "Intelligibility, Imperialism and Conceptual Schemes," *Midwest Studies in Philosophy* 17 (1992): 89-108.

²⁷⁰ Thomas, *Thomas Nagel*, 45.

²⁷¹ Nagel, *The Last Word*, 74.

²⁷² Nagel, *View From Nowhere*, 84.

when in fact we have moved into the realm of the unpicturable. Since for Nagel all knowing is on a sliding scale from subjective to objective, he does not grasp that intellectual knowing is something different in kind to the physical mechanism of experiential knowing (the subjective viewpoint); he does not grasp the unpicturable nature of the mental relation between us and the world when we are engaged in intellectual knowing. He is aware that there is a distinction between experience and understanding: "... the world in which we find ourselves, and about which experience gives us some information, can be not only described but understood."²⁷³ However, he does not clearly see that intellectual knowing is a formal grasp of invisible unities and relations, which means that he does not grasp the problem that Kant was trying to solve. According to Lonergan, "Kant rightly saw that animal knowing is not human knowing."²⁷⁴ Kant's analysis brings to light that part of human knowing is the intellectual grasp of unities and relations. If these relationships are real, as Nagel implies in his defense of reason and the intelligibility of the world, in what sense are they real? On the assumption that objectivity is extroversion, they can only be real if their possibility is contributed by our inbuilt mental categories, thus limiting intellectual knowledge to how things appear to us, to *our* world.

If Nagel distinguishes the kinds of conscious activities more carefully, instead of just focussing on experiential consciousness, he may find the answer to the problem of the bridge which separates thought from reality. With Lonergan, we should think of data as potentially understood, as intelligible. An insight is the actualisation of the real potential of the data to be understood. Insight explains how intellectual knowledge can be of things themselves, not just of phenomena. It is true, as Kant and Hume saw, that data are not *actually* intelligible. The unities and relations are not simply given in the data; they are not simply "out there", fully formed and actual. But the insight into the potentially intelligible data grasps intelligibility that is a different kind of being to the data of experience. It is intelligible being. The intelligibility pertains to data, yet it is a different kind of being. The puzzle as to how intellectual knowledge is possible when it begins in experience (in which unities and relations are not simply given) is solved, but we have had to recognise that our contact with objects is not just through Kantian sensible intuition, but also through non-extroverted modes like understanding and judgment. Intelligibility is real, just as data are real.

If we recognise that intelligibility is real, then our notion of the real as exclusively "already out there now" has to go. What we understand about things is just as real as what we palpably experience about them, according to Lonergan. Intelligibility is a non-material

²⁷³ Nagel, *Mind and Cosmos*, 16.

²⁷⁴ Lonergan, *Insight*, 414.

dimension of being that is not “out there” waiting to be stumbled upon, but needs to be grasped by a mind. The thing in itself is not *behind* the veil of perception, but is grasped through insights into the experience of the thing itself. There is no physical gap between the knower and the thing in itself. The thing in itself is the thing as *explained*. The only reason we thought of the thing in itself as behind the veil of perception is that we thought of knowing as taking a look at what is actually out there. On this view, the thing in itself, the thing as it really is apart from how it appears to us, is some *thing* or object out there. But the thing in itself is actually defined by intelligible relations, not by what it “looks” like apart from our experience of it.²⁷⁵ The thing in itself is not a palpable lump of substance but a set of intelligible relations.

Conclusions

Seeing the way Kant and Nagel approach the problem of knowing sheds light on the limitations of their tradition. We cannot have extroverted objectivity and unite thought and ultimate reality.

To his credit, Nagel does not give up on intellectual knowing just because he cannot think of a candidate that would make sense of this relation of concepts to reality. He humbly accepts it as a mystery. The fact that the world is intelligible leads him to his “guiding conviction [that] mind is not just an afterthought or an accident or an add-on, but a basic aspect of nature,” which leads him to conjecture that the stuff of reality is both physical and mental in nature.²⁷⁶ He supposes that if mind were a fundamental constituent of reality, this might help us to make sense of how thought and reality match up.

But this suggestion, while it goes beyond a materialistic metaphysic, still conceives of the real as “already out there now.” As long as the real is conceived on an extroverted model, intellectual knowing will be a mystery; it will be impossible to bring intelligible thought into contact with concrete reality. What Nagel does is to reveal the limitations of assuming that the real is substantial and “already out there now.” His findings reflect the separation of thought and reality in the early modern period and the adoption of a perspectival notion of objectivity. To make sense of science, and of knowing in general, we need to expand our notion of objectivity. Nagel suggests we expand our current concept of physical objectivity,

²⁷⁵ Bernard Williams, another significant philosopher of mind, conceives of reality in this way: “how things look from the ‘objective’ standpoint is how they are.” Bernard Williams, “Terrestrial Thoughts, Extraterrestrial Science: Review of Hilary Putnam, *Realism with a Human Face*,” *London Review of Books* (7 February 1991): 12-13.

²⁷⁶ Nagel, *Mind and Cosmos*, 15.

but a deeper expansion is needed that makes sense of how invisible unities and relations can be real and grasped by minds. This issue will be explored further in chapter five.

Chapter 5 – Be Attentive, Be Intelligent, Be Reasonable

In chapters one through four we have explored Lonergan’s cognitional theory, used this to analyse the history of the meaning of mind and matter, examined Nagel’s views on the irreducibility of consciousness and reason to the physicalist conception of objectivity, and we have argued that he is limited by the notion of extroverted objectivity.

Given Nagel’s insights into the irreducibility of mind and his awareness of the origins of mind and matter, how do we place mind in the world? How do we understand its nature? Nagel, aware of the removal of secondary qualities from the world, tries to add them back in with his preferred approach, a dual-aspect theory or monism. But with Lonergan’s help, we can see that Nagel’s theory, as well as materialist and dualist theories, all succumb to the idea that the real is “already out there now” which renders the problem of accounting for mind within the world impossible.

5.1 The Need for a New Objective Conception

Nagel is unafraid to recognise the reality of mind and face the difficult problems that this recognition creates. He expresses his attitude toward the task that he has set himself: “I do not feel equal to the problems treated in this book. They seem to me to require an order of intelligence wholly different from mine. Others who have tried to address the central questions of philosophy will recognise the feeling.”²⁷⁷ Nagel thinks that it is impossible, in principle, to reduce consciousness and reason to entirely physical causes, and that we should start to seek alternatives to the present physicalist picture of our world. His most recent sketch of possible alternatives was in 2012 in a book called *Mind & Cosmos: Why the Materialist Neo-Darwinian Conception of Nature is Almost Certainly False*. It received a wave of negative reviews. Many reviewers accused him of attacking science and pandering to creationists, when he was only attacking the unscientific uses to which materialism has been put.²⁷⁸ The lamentations that Nagel had “tripped over the Bible and fallen on his face”²⁷⁹ were odd because *Mind & Cosmos* was not a revelation of a new position that Nagel had taken up – from the 1974 article “What is it like to be a bat?” to *The Last Word*, Nagel has been criticising the prevailing naturalistic conception of the world. The reaction, he says, is

²⁷⁷ Nagel, *View from Nowhere*, 12.

²⁷⁸ Andrew Ferguson, “The Heretic”.

²⁷⁹ Andrew Ferguson, “The Heretic”.

most likely due to the fear that if we reject evolutionary naturalism, there is no viable secular alternative.²⁸⁰

Nagel argues that materialist reductionism is an incomplete picture: given that consciousness and reason are real and irreducible to matter, the existing evolutionary explanation of the mind which rests on materialism cannot be the whole story. He still thinks that evolution is the best explanation of our material composition. The existence of consciousness “seems to imply that the physical description of the universe, in spite of its richness and explanatory power, is only part of the truth...”²⁸¹ Far from attacking science, Nagel thinks evolutionary theory is most likely true; he simply wants a broader picture, one where mind is as fundamental as gravity and the laws of physics. Thus he states: “The fundamental elements and laws of physics and chemistry have been inferred to explain the behaviour of the inanimate world. Something more is needed to explain how there can be conscious, thinking creatures whose bodies and brains are composed of those elements.”²⁸² In other words, Nagel prefers: “...[the] hypothesis that biological evolution is responsible for the existence of conscious mental phenomena, but that since those phenomena are not physically explainable, the usual view of evolution must be revised. It is not just a physical process.”²⁸³ If this hypothesis is true, it will radically alter our picture of reality:

If psychophysical reductionism is ruled out, this infects our entire naturalistic understanding of the universe, not only our understanding of consciousness.

Beginning with biology, and seeping down to our conception of the basic constituents of reality, it makes the currently standard materialistic form of naturalism untenable, even as an account of the physical world, simply because we are parts of the world.²⁸⁴

To advance our understanding of a world containing consciousness as well as matter, we need to reassess the physicalist conception of objectivity.

In one way Nagel’s theory is plausible: his proposal asks that we change our conception of what is real to include, somehow, mind and points of view. However, by “real”

²⁸⁰ “The priority given to evolutionary naturalism in the face of its implausible conclusions about other subjects is due, I think, to the secular consensus that this is the only form of external understanding of ourselves that provides an alternative to theism...” Nagel, *Mind and Cosmos*, 29. In another place, Nagel opens up about how much he hungers for an alternative conception of the world to theism, which still makes room for consciousness: “I am talking about something much deeper—namely, the fear of religion itself. I speak from experience, being strongly subject to this fear myself: I want atheism to be true and am made uneasy by the fact that some of the most intelligent and well-informed people I know are religious believers. It isn’t just that I don’t believe in God and, naturally, hope that I’m right in my belief. It’s that I hope there is no God! I don’t want there to be a God; I don’t want the universe to be like that.” Nagel, *The Last Word*, 130-131.

²⁸¹ Nagel, *Mind and Cosmos*, 35.

²⁸² Nagel, *Mind and Cosmos*, 20.

²⁸³ Nagel, *Mind and Cosmos*, 49.

²⁸⁴ Nagel, *Mind and Cosmos*, 43.

he means “already out there now.” With Lonergan, we see that we cannot understand the reality of mind without a deeper reassessment of what we mean by real. Nagel’s proposal is only aimed at fitting experience and appearances back into our picture of reality, not intelligence as Lonergan understands it. On the assumption that the real is “already out there now,” there is no way he can make intellectual content part of reality in addition to matter and bridge the chasm between thought and being. So Lonergan’s call to “be attentive” to the full range of data of consciousness reveals a fundamental flaw in Nagel’s approach.²⁸⁵ We will now turn to some prominent theories of mind and analyse them in light of Lonergan’s cognitional theory to show that together with Nagel’s proposed monism they succumb to an extroverted notion of objectivity. We will collect the relevant data for these theories, examine the explanations, and judge these theories for fit with the data.

5.2 The Data – “Be Attentive”

Nagel, aided by his awareness of the origins of the concept of matter, works against the unwarranted bias given to matter over mind. He suggests we start from scratch and accept that this world includes physical and mental phenomena, without assuming that there is only one sort: “If we want to understand the world as a whole, we must start with an adequate range of data, and those data must include the evident facts about ourselves.”²⁸⁶ What are the given data to be explained? What data are all the different theories of mind trying to account for? Some of the important data are:

- We have sense experience of the world, experiences which contain colours, sounds, tastes, etc. Nagel captures this datum under the term “subjective point of view.”²⁸⁷
- We have a capacity to reason, to transcend our own point of view and discover the way the world is apart from how it appears to us. Lonergan differentiates more carefully between intelligent and rational levels of consciousness here; between the activities of understanding and judging.
- We have a physical brain.
- There is a close relation between mind and brain. When someone is knocked on the head, he cannot plot his revenge or do times tables until he regains consciousness.

²⁸⁵ Lonergan, *Method in Theology*, 53.

²⁸⁶ Nagel, *Mind and Cosmos*, 20.

²⁸⁷ Nagel, *Mind and Cosmos*, 61.

5.3 The Explanations – “Be Intelligent”

In this section we will examine different explanations of the data: reductive physicalism, non-reductive physicalism, epiphenomenalism and dualism. According to Nagel, most explanations of mind:

...are essentially verificationist, i.e., they assume that all that needs to be said about the content of a mental statement is what would verify or confirm it, or warrant its assertion, from the point of view of an observer. In one way or another, they reduce mental attributions to the externally observable conditions on the basis of which we attribute mental states to others. If successful, this would obviously place the mind comfortably in the physical world.²⁸⁸

In order to fit mind in the physical world, these theories “...leave out something essential, without which there would be no mind. And what they leave out is just what was deliberately left out of the physical world by Descartes and Galileo in order to form the modern concept of the physical, namely, subjective appearances.”²⁸⁹ Lonergan adds that not just subjective appearances, but also the intelligent and rational levels of consciousness, are left out by reductionist theories of mind.

As covered in chapters three and four, in Nagel’s view, any physicalist or epiphenomenalist theory cannot make sense of irreducibly subjective appearances, nor of the faculty of reason, because these phenomena resist external explanation in principle: “...the physical sciences will not enable us to understand the irreducibly subjective centers of consciousness that are such a conspicuous part of the world.”²⁹⁰ The exception to Nagel’s diagnosis is a dualist picture of mental and physical substances, because it does not deny the existence of mind. According to Nagel, dualism is often adopted on the grounds that there is no way that physical atoms can be arranged to create subjectivity, “so something else must be added, which may as well be called the soul, and this is the bearer of mental properties, the subject of mental states, processes, and events. No matter how closely it interacts with the body, it is something different.”²⁹¹ An example of this position in contemporary philosophy of mind is David Chalmers. He posits matter and consciousness as the two natural principles that pervade the universe. He insists that it is a “naturalistic dualism” and that there is no

²⁸⁸ Nagel, *Mind and Cosmos*, 38.

²⁸⁹ Nagel, *Mind and Cosmos*, 40.

²⁹⁰ Nagel, *Mind and Cosmos*, 42.

²⁹¹ Nagel, *View From Nowhere*, 29.

spiritual or otherworldly quality to consciousness.²⁹² It is a natural phenomenon, but different to material phenomena. The main objection to dualism, according to Nagel, is that:

...it postulates an additional, non-physical substance without explaining how *it* can support subjective mental states whereas the brain can't. Even if we conclude that mental events are not simply physical events, it doesn't follow that we can explain their place in the universe by summoning up a type of substance whose sole function is to provide them with a medium.²⁹³

Dualists see that it is impossible to make sense of the material brain supporting subjective mental states, so they posit that another *substance* must then be the answer to the problem. Any kind of substance is going to be equally mysterious as to how it can support consciousness. Furthermore, dualism splits the universe in two, so pursuing a dualistic picture “would abandon the hope for an integrated explanation. Indeed, substance dualism would imply that biology has no responsibility at all for the existence of minds.”²⁹⁴ Lonergan's critique of dualism was explored in (2.3), but the thrust of it was that dualism results when one thinks that both kinds of knowing, explanation and description, are real, but one adopts an extroverted model of objectivity.

The pursuit of an integrated explanation leads us to varieties of reductive physicalism and epiphenomenalism. These theories sacrifice the reality of the mind to gain a unified picture where there is only one kind of reality: matter. The thrust of reductive physicalist theories is to maintain that all mental phenomena can, in principle, be reduced to physical processes and events. Epiphenomenalist theories tend to acknowledge that the brain and consciousness are different; however, they pull back from dualism by denying any independent reality to the mind by stripping it of causal power and imagining it as a mere by-product or projection of the brain. Both these kinds of theories are inadequate, according to Nagel, because they ignore the reality of subjective appearances, which are a mysteriously different kind of reality to matter. The difficulty for Nagel is, how can one avoid dualism, reductive physicalism and epiphenomenalism?

On a Lonerganian analysis, an extroverted model of objectivity dominates all these attempts to make sense of the data. In the analysis that follows, we will draw out this element.

²⁹² David Chalmers, “Facing up to the problem of consciousness,” in *Explaining consciousness—the “hard problem”*, edited by J. Shear (Cambridge, MA: The MIT Press, 1997), 20.

²⁹³ Nagel, *View From Nowhere*, 29.

²⁹⁴ Nagel, *Mind and Cosmos*, 49.

Reductive or eliminative physicalism

Reductive or eliminative physicalism denies that there is any unique quality to consciousness. Consciousness is “nothing but” physical processes in the brain. It is the view “...that only the physical world is irreducibly real, and that a place must be found in it for mind, if there is such a thing. This would continue the onward march of physical science, through molecular biology, to full closure by swallowing up the mind in the objective physical reality from which it was initially excluded.”²⁹⁵ Reductive physicalism denies the given data of empirical, intelligent and rational consciousness, and presumes that there is only one kind of reality, which Lonergan calls “bodies”—the merely sense-perceived “already out there now” aspects of reality. The overlooking of intelligent consciousness leads to the mistaking of a thing for a body; all objects are just spatiotemporal matter “out there” and the unities in data that we take to be individual things are just subjective products of the mind.

This same mistake influences the thinking of two prominent physicalists about mental realities. Although Daniel Dennett and Douglas Hofstadter do not think that irreducibly mental phenomena exist, in their speculations about mind they seem to only think about the mind in terms of an “already out there now” kind of reality. On the supposition that the real is “already out there now”, like Descartes and Ryle, they conceive of mind as something extra in reality, though non-material, that we could metaphorically “look” at. They write:

Imagine a soul-free universe, a mechanistic universe with nary a speck of free will or consciousness to be found, not a perceiver anywhere. ...In this universe, then, are swarming many distinct, tightly knit, self-sufficient little objects, each one with an internal representational system of enough complexity as to engender a deep, rich self-image. ...[I]n fact, of course, this is just a cold universe and the objects that populate it are just robotlike, rule-bound machines, moving around in deterministic ... trajectories, and kidding themselves that they’re exchanging meaningful ideas when in reality they’re just mechanically chattering back and forth by emitting and absorbing long trains of empty, hollow, meaningless electromagnetic or perhaps acoustical waves.²⁹⁶

²⁹⁵ Nagel, *Mind and Cosmos*, 37.

²⁹⁶ Douglas R. Hofstadter and Daniel C. Dennett, *The Mind’s I: Fantasies and Reflections on Self & Soul* (Brighton: Harvester Press, 1981), 386.

They fall into the trap of picture-thinking²⁹⁷ about mind, imagining that we can simply extract certain mental realities – soul, free will and consciousness – and the physical world will be unaffected. They imagine the mind to be a different kind of “body” to matter. With Lonergan, we see that the mind is a different reality, not a different kind of “body” that could conceivably be removed without a physical trace. One cannot imagine the mind not to be there, such that the brain remains as it is. Where there is a human brain with a certain structure, there is a mind. The brain’s material structuring entails an intelligibility, which is the mind—in fact, without the human being’s actual conscious activities being impaired due to brain damage, we would not know what its various structures are for. It is only through our knowledge of our conscious operations, like understanding, planning the future, deciding, and use of language, that we can come to understand what various parts of the brain support these activities.

A further point: the authors think that subjects could exchange ideas that are not meaningful. They strongly juxtapose meaningfulness or mind with physical events. It does not make sense to imagine that the sounds that we take to mean words could be actually empty and meaningless. Meaning is not something extra; it is potentially present in matter, and actually present when another mind grasps the meaning. A pattern of electromagnetic waves is meaningful. Trees are meaningful. Matter is meaningful. Meaningfulness, or form, is present potentially in matter. If we mistake things for bodies, we strip matter of meaning. But Dennett and Hofstadter cannot distinguish between a thing and a body. A thing is a non-imaginable, non-material kind of reality, but they are committed to only one kind of reality – physical body. Lonergan says this kind of reduction follows on viewing reality as “already out there now”, for then intelligence is reduced to a pattern of sensations, sensation is reduced to a neural pattern, which is reduced to chemical processes and to subatomic processes.²⁹⁸ The authors reveal their picture-thinking tendencies again in an argument about causation: “For a nonphysical event to make a difference, it must make some physical event happen that wouldn’t have happened if the nonphysical event hadn’t happened. But if we found a sort of event whose occurrence had this sort of effect, why wouldn’t we decide *for that very reason* that we had discovered a new sort of *physical* event?”²⁹⁹ They characterise causation as a

²⁹⁷ Thinking in pictures (or more accurately, letting one’s imagination be the criterion of reality) stems from an extroverted notion of objectivity.

²⁹⁸ Lonergan, *Insight*, 257.

²⁹⁹ Hofstadter and Dennett, *The Mind’s I*, 388.

nonphysical body acting upon a physical body – it is imagined “contact action”³⁰⁰ causation, whereas Lonergan defines causation as an “intelligible relation of dependence”.³⁰¹

At the heart of the reductive physicalist theory is the desire for an integrated explanation of mind and body without admitting realities other than material ones. This requires the reduction of mind to physical events and processes. The mistake is to suppose that a different kind of reality must be a different kind of “body”, which is inevitable given the underlying extroverted notion of objectivity and the overlooking of the intelligent and rational activities of consciousness.

Non-reductive physicalism

Non-reductive physicalism differs from reductive physicalism or materialism because it does not claim that mind is “nothing but” matter, yet everything *is* ultimately physical. Nancey Murphy defends this view. She rejects dualism and eliminative reductionism. We are just bodies, she says, and “there is no additional metaphysical element such as a mind or spirit”,³⁰² but our bodies and complex brains give us “high-level capacities” such as “consciousness, memory, moral character, interpersonal relationships, and, especially, our relationship with God”.³⁰³ We can see that she conceives of the “additional metaphysical element” in a visual manner, as though it is something extra. Non-reductive physicalism has good motivations, and is close to affirming different kinds of realities, but ultimately it is a confusion. One cannot claim that everything is physical while simultaneously claiming that there are “high-level capacities” that are not, in the end, reducible to the physical. The philosophical assumption underlying this view is that there is only one kind of reality – physical body. With this starting point it is impossible to conceptualise what kind of reality these irreducible “high-level capacities” are.

Epiphenomenalism

Epiphenomenalism seeks to explain consciousness as a property of the brain, a by-product or projection that is not a reality of its own. It typically denies any causal power to the mind, because that would make the mind look like an independent reality.³⁰⁴ So in order

³⁰⁰ Henry, *Scientific Revolution*, 69.

³⁰¹ Lonergan, *Insight*, 540.

³⁰² Nancey Murphy, *Bodies and souls, or spirited bodies?* (New York: Cambridge University Press, 2006), iv.

³⁰³ Murphy, *Bodies and Souls*, 6.

³⁰⁴ Helminiak, *Brain, Consciousness, and God*, section 4.7.

to avoid a dualism of two different realities, but at the same time recognising that there is some difference between mental experience and physical objects, epiphenomenalists have to be quite ambiguous about what exactly consciousness is.³⁰⁵ Dennett says consciousness is “not a single wonderful separable thing ... but a huge complex of many different informational capacities.”³⁰⁶ Consciousness is supposed to be a phenomenon different to but created by the brain and nothing else (“a complex of informational capacities”).

It is typical of epiphenomenalists to deny the causal power of the mind. Consciousness is a by-product, a bystander, but the physical brain really runs the show. Dennett says our life is nothing more than “a human body’s journey through life.”³⁰⁷ If the mind had causal efficacy of its own, then this would imply that it is an independent reality: *it* can do something *to* the brain. Epiphenomenalism, in its denial of the causal efficacy of the mind in order to avoid dualism, adopts an picture-thinking notion of causality that Lonergan describes as “the image of the transmission of effort through contact”.³⁰⁸ It is precisely the notion of causality that predominated with Galileo and Newton around the time of the scientific revolution.³⁰⁹ Causality is something that must be explained and understood; it cannot be not seen, as Hume argued. The causal relationship between mind and brain is not an imagined one of push and pull contact; it is rather an understood relationship, an “intelligible relation of dependence”.³¹⁰ The goal of explanation is to define the interrelationships of the essential elements of a thing. A circle as described is a circle as it looks on the paper, but as explained it is an unpicturable definition: the set of infinite points in the same plane, equidistant from a fixed point. This is what the circle *is*; this relationship is the essence of the circle. Similarly, an explanation of the mind will specify the interrelationships between the brain and the mind, and any other relevant elements of the human person, the single thing of which the brain and mind are conjugates.

On a mistaken understanding of the nature of causality as “contact action” between imaginable bodies, epiphenomenalism is forced to consider the mind to be just a side-effect of the physical brain, which really runs the show. To concede that the mind is an independent reality with causal power would lead to dualism, on this understanding of causality. But on a proper understanding of causality as an “intelligible relation of dependence”, the mind can be a different kind of reality with causal efficacy while avoiding dualism. This paves the way for

³⁰⁵ Helminiak, *Brain, Consciousness, and God*, 141.

³⁰⁶ Daniel Dennett, “The Unimagined Preposterousness of Zombies,” *Journal of Consciousness Studies*, no.2 (1995): 324.

³⁰⁷ Daniel C. Dennett, *Consciousness Explained* (Boston, MA: Little, Brown, & Co., 1991), 431.

³⁰⁸ Lonergan, *Insight*, 540.

³⁰⁹ See 2.2 Galileo.

³¹⁰ Lonergan, *Insight*, 540.

understanding how the mind can be a reality of its own (not just a projection of the brain) without dualism.

Nagel's Explanation

Nagel thinks epiphenomenalism, materialism and dualism will not do, but not for the same reasons that Lonergan states. In Nagel's view, the former two theories do not account for irreducibly mental phenomena because they admit only one kind of reality, matter, while dualism implies that biology and consciousness belong to unrelated separate worlds.

Nagel is more attentive to the data than Dennett, Hofstadter, Murphy, and proponents of epiphenomenalism, as he grasps that the data of consciousness entail different intelligibilities to that of matter. Consciousness is "logically distinct" from physical phenomena, he says: "What has to be explained is not just the lacing of organic life with a tincture of qualia but the coming into existence of subjective individual points of view—a type of existence logically distinct from anything describable by the physical sciences alone."³¹¹ He has identified the fact that consciousness is something that cannot be properly understood as physical being, as "physical" is currently understood. Therefore, other ways of understanding [consciousness] must be sought. One way is to enrich the notion of objectivity. But to insist in every case that the most objective and detached account of a phenomenon is the correct one is likely to lead to reductive conclusions. I have argued that the seductive appeal of objective reality depends on a mistake. It is not the given. Reality is not just objective reality. Sometimes, in the philosophy of mind but also elsewhere, the truth is not to be found by travelling as far away from one's personal perspective as possible.³¹²

Some realities, such as consciousness, can only be known (experienced, understood and affirmed) from *inside*, appealing to the data that is only accessible to a subject with a mind. Thus, "the way the world is includes appearances..." and we need an explanation that make appearances part of reality.³¹³

He seeks an explanation of how mind and matter are integrated in a unified world picture – avoiding dualism – while also giving full weight to the different intelligibilities of mind and matter. Nagel's preferred way ahead is to work with the idea that mind is central to the natural order, just as much as matter: "mind is not just an afterthought or an accident or

³¹¹ Nagel, *Mind and Cosmos*, 44.

³¹² Nagel, *View From Nowhere*, 27.

³¹³ Nagel, *View From Nowhere*, 26.

an add-on, but a basic aspect of nature.”³¹⁴ But both mind and matter are tinged with the baggage of their definitions by Galileo and Descartes. Nagel, partly aware of the conceptual roots of mind and matter, tries to re-incorporate the estranged mental properties of the physical world into a new picture of reality. As he wrote, the failed theories “...clearly leave out something essential, without which there would be no mind. And what they leave out is just what was deliberately left out of the physical world by Descartes and Galileo in order to form the modern concept of the physical, namely, subjective appearances.”³¹⁵ This is what he tries to reincorporate. Nagel hopes that a renovated and expanded version of the physical sciences might be able to bring subjective individual points of view into its scope, in the same way that the physical world is within its scope. His approach is to expand what we mean by physical, because adding an extra kind of reality would entail dualism. This approach is strongly based on picture-thinking and extroverted objectivity.

We now turn to Nagel’s consideration of the options for this new approach that incorporates mind in reality. He says that the constitutive account of how complex physical systems are also mental will be either emergent or reductive.

Emergent Account

A property is said to be emergent if it is a new outcome that is not reducible to the properties that led to its emergence.³¹⁶ An emergent account of the mind would claim that mental phenomena emerge in organisms of sufficient physical complexity. Emergence theory preserves a distinction between physical and mental phenomena (i.e., the mental is not reducible to the physical), but “higher-order” principles explain how mental processes have their source in complex physical functions in the brain or central nervous system. There would be no need to radically change our idea about the physical elements of which organisms are composed, but just to discover the principles that link this different reality – mental phenomena – to physical processes, without reducing it. It is explanation of a relationship, not a reduction. But Nagel has problems with this approach:

If emergence is the whole truth, it implies that mental states are present in the organism as a whole, or in its central nervous system, without any grounding in the elements that constitute the organism, except for the physical character of those

³¹⁴ Nagel, *Mind and Cosmos*, 15.

³¹⁵ Nagel, *Mind and Cosmos*, 40.

³¹⁶ Timothy O’Connor and Hong Yu Wong, “Emergent Properties”, *The Stanford Encyclopedia of Philosophy* (Summer 2015 Edition), edited by Edward N. Zalta, URL: <http://plato.stanford.edu/archives/sum2015/entries/properties-emergent/>

elements that permits them to be arranged in the complex form that, according to the higher-level theory, connects the physical with the mental. That such purely physical elements, when combined in a certain way, should necessarily produce a state of the whole that is not constituted out of the properties and relations of the physical parts still seems like magic even if the higher-order psychophysical dependencies are quite systematic.³¹⁷

He acknowledges that new phenomena do emerge at higher levels, such as liquidity from individual molecules: “But the emergence of the mental at certain levels of biological complexity is not like this. According to the emergent position now being considered, consciousness is something completely new.”³¹⁸ It seems like magic because there is something missing – how can “purely physical elements” give rise to something that is more than they are? The way for Nagel to understand mind as a genuine emergence is blocked – if there is “something completely new” that emerges due to complex physical organisation, he can only think of it as a new reality “already out there now.” He has considered theories of emergence that are tangled in an extroverted notion of objectivity. He is trying to imagine a connection between two different kinds of bodies that are “already out there now,” and finds it difficult to imagine how one kind of body can give rise to a completely different kind of body. If the mind were not a body but an intelligible, non-palpable reality, then it might not be such a magical connection. The physical brain is one kind of reality – a spatiotemporal one with perceptual functions – whereas the mind is another kind of reality – a non-spatiotemporal one with intelligent functions. We cannot yet specify the relationships between these two different kinds of realities, but there would not be a blockage to our understanding. We would no longer be imagining how one reality “out there” could give birth to a completely different reality “out there,” but understanding and affirming that two kinds of realities exist in the one “thing,” the person.

Emergence of the latter kind happens in the example Nagel gives about water, although he thinks the emergent property is wetness. The truly emergent reality in the case of water is H₂O from individual hydrogen and oxygen atoms, not the perceptual property of liquidity that results from bundling many water molecules together. The emergent, higher level *reality* is grasped with intelligence; it is not measured by how things feel or look to our senses. H₂O is something “completely new” compared to the individual atoms. The properties of H₂O cannot be deduced from any amount of knowledge about the individual atoms. We have here an example of how different realities emerge without being reducible to

³¹⁷ Nagel, *Mind and Cosmos*, 55.

³¹⁸ Nagel, *Mind and Cosmos*, 56.

their source and how they supervene upon each other without problems of specifying the principles that connect them. However, this only works if we use an intellectual epistemology. Both the reality of hydrogen and oxygen atoms, and the reality of H₂O are grasped with intelligence, not perception.³¹⁹

Nagel is reductive to his bones, and while not rejecting it outright, he is not in favour of an emergent account: “It is hard to give up the assumption that that whatever is true of the complex must be explained by what is true of the elements. That does not mean that new phenomena cannot emerge at higher levels, but the hope is that they can be analyzed through the character and interactions of their more elementary components.”³²⁰ A reductive account would suit this assumption better.

Reductive Account

Nagel wants to deny that consciousness is another kind of reality because he *thinks* that this would entail dualism, but he also wants to say that consciousness is not a merely physical reality. A solution is to adopt a position called monism or dual aspect theory, where there is one kind of reality that is the cause of both the physical and mental characteristics of the universe: “A reductive account will explain the mental character of complex organisms entirely in terms of the properties of their elementary constituents, and if we stay with the assumption that the mental cannot be reduced to the physical, this will mean that the elementary constituents of which we are composed are not merely physical.”³²¹ It is one reality with two aspects. In Tom Sorell’s words, this kind of reality would be “transphysical and transmental”.³²² Nagel writes, “consciousness is in that case not, as in the emergent account, an *effect* of the brain processes that are its physical conditions; rather, those brain processes are *in themselves* more than physical, and the incompleteness of the physical description of the world is exemplified by the incompleteness of their purely physical description.”³²³ So their physical description would only be “only a partial description of them, from the outside...”³²⁴ Nagel goes on to say that “... this reductive account can also be described as a form of panpsychism: all the elements of the physical world are also mental.”³²⁵ They possess a nature that is responsible for both their physical and non-physical

³¹⁹ Helminiak, *Brain, Consciousness, and God*, section 4.9.2.

³²⁰ Nagel, *Mind and Cosmos*, 55.

³²¹ Nagel, *Mind and Cosmos*, 54.

³²² Tom Sorell, *Descartes Reinvented* (Cambridge, UK: Cambridge University Press, 2005), 95.

³²³ Nagel, *Mind and Cosmos*, 57.

³²⁴ Nagel, *Mind and Cosmos*, 57.

³²⁵ Nagel, *Mind and Cosmos*, 57.

characteristics, yet not in a dualistic manner. In another place, Nagel says “there is no evident reason why [points of view] shouldn’t belong to things that also have weight, take up space, and are composed of cells and ultimately of atoms.”³²⁶ First, there is absolutely no evidence for these claims. Secondly, displacing the issue of consciousness to flights of fancy like thinking cells or atoms seems a bit inconsistent, because he critiqued dualism for “...summoning up a type of substance whose sole function is to provide them [mental states] with a medium” when we have no idea “how *it* can support subjective mental states whereas the brain can’t.”³²⁷ Nevertheless, that points of view should belong to every bit the world is the kind of conclusion that follows when mind must be “already out there now” to be real.

He says the theory is “largely hand waving” and it will only show “roughly where the truth might be located, not what it is.”³²⁸ A complete dual aspect theory is not a possibility at the moment because it would require a conceptual revolution. We need concepts that capture non-physical properties, particularly to make sense of how physical and non-physical properties can coexist as one kind of stuff. Saying that the brain has physical and nonphysical properties does not increase our understanding, but is “just a label for the position.”³²⁹ But the position needs labelling because of the twin conviction that consciousness is irreducible to the existing concept of physical reality, and that physical reality is part of the truth.

Nevertheless, Nagel has his doubts about the reductive monist project: “Though it has its attractions as a way of unifying the radically disparate elements that give rise to the mind-body problem, it also has the faintly sickening odor of something put together in the metaphysical laboratory.”³³⁰ Indeed, he has a hunch that the whole approach is wrong from the beginning:

It may be a complete mistake to think that we can learn more about the true constitution of thoughts and sensations, as we can about the true constitution of heat or light. There is something deeply suspect about the whole enterprise of fitting subjective points of view smoothly into a spatiotemporal world of things and processes, and any dual aspect theory is committed to that goal and that picture—the picture of appearances as part of reality. But I can’t say what might be wrong with it. The mind is after all a biological product. When the cat hears the doorbell, this *must* be something going on, literally, in its head, not just in its furry little mind.³³¹

³²⁶ Nagel, *View From Nowhere*, 30.

³²⁷ Nagel, *View From Nowhere*, 29.

³²⁸ Nagel, *View From Nowhere*, 30.

³²⁹ Nagel, *View From Nowhere*, 30.

³³⁰ Nagel, *View From Nowhere*, 49.

³³¹ Nagel, *View From Nowhere*, 31.

However, Nagel puts aside this problem which he doesn't "really know how to formulate" and deals with other problems for monism.³³² This admission points to the heart of the problem: how can we think of the mental as something real in itself while also a biological product to some extent? The realms of the biological and the mental were rent apart with Descartes, and bringing them back together in a harmonious and unifying way looks "deeply suspect." Subjective points of view are a different kind of reality to the physical world. But given that they are real, and that the real is "already out there now," they either must be a different kind of body (dualism) or there must be one kind of body of which physical and mental are both aspects (monism).

Nagel is unable to clearly identify the non-extroverted dimension of human knowing. He comes close when he identifies the subjective point of view, something that is altogether alien to the spatiotemporal world as understood on the physicalist conception. With Lonergan, we can see that the subjective point of view is real – it is the given structures of consciousness – but it is not a *body*. It is not substantial and it does not take up space; it has a different intelligibility to matter. Nagel's insistence on pursuing a naturalistic, monist account that would make subjective points of view *part* of the world "already out there now" reinforces the need to grasp the nature of insight.

5.4 The Judgment – "Be Reasonable"

In light of these considerations of the main theories of mind, the judgment is that all these explanations fail to account for some of the data. When we inquire, "what is the mind?" we find that the data of conscious activities reveal that consciousness has the qualities of sensitivity, intelligence, and reasonableness. These are distinct kinds of cognitional acts that grasp distinct kinds of being. An intelligent explanation must account for these cognitional acts and the realities that they grasp. Failing to do so, all theories will end up reducing intelligence to body "out there".

Monism adds back in the secondary qualities that were subtracted when the physicalist conception of objectivity was created. However, the extroverted notion of objectivity also influenced this physicalist conception, and this shapes Nagel's principles more deeply because it excludes intelligibility from reality. As Gilson observes, "Philosophers are free to lay down their own sets of principles, but once this is done, they no longer think as they wish—they think as they can."³³³ The same principles that limit Nagel's

³³² Nagel, *View From Nowhere*, 31.

³³³ Gilson, *Unity*, 243.

thought on consciousness and reason, also lead to the weakness of monism as an alternative to physicalism.

Nagel's aim with the monist project is to seek another objective advance. An objective advance is to "step back from our initial view of [some aspect of the world] and form a new conception which has that view and its relation to the world as its object. In other words, we place ourselves in the world that is to be understood."³³⁴ The objective advance of early modern science allowed us to transcend our immediate experience of things and understand how things are related to each other. But what would another advance be? Is there anything to transcend? As discussed in chapter four, the viewpoint of physics cannot be transcended in the way Nagel thinks, because it deals in insights and explanation, and explanations are not a perspectival sort of knowing.

Furthermore, monism cannot do anything to restore the objectivity of reason. This is because, as Nagel argues in *The Last Word*, reason grasps real reasons, which are not made real by physical events but have an inner authority. Monism still conceives of the real as "already out there now" and knowing as "taking a look", but intelligible realities are not known through extroversion. The problem of the bridge will remain, because monism cannot provide that elusive property of nature that explains the congruence between thought and reality. To make sense of reasons we need the notion of insight into data.

Monism, along with all the theories of mind considered in this chapter, falls prey to acknowledging only one kind of reality, one that is "already out there now". Nagel suggests we expand what counts as physical, but he needs to expand what counts as real. There is no need for Nagel to accept the natural scientific picture as the only viable picture, although he thinks we must in order for consciousness to be an intelligible element of the universe. There is another way to include mind in the world without resorting to dualism or materialist reductions, all of which Nagel rejects.

The attentive, intelligent, and reasonable approach would say that the scientific picture is not what it thinks it is. Searle says giving up physicalism would give up "the entire scientific worldview that we have spent nearly four centuries to attain", but there is more to this scientific worldview than meets the eye.³³⁵ If our notion of matter is not one based on picture-thinking, but one derived by being attentive, intelligent and reasonable, then matter is a meaningful reality; it is intelligible. Within the world of physical matter there is matter of different kinds: bosons, fermions, atoms, molecules. Matter in different forms "entails

³³⁴ Nagel, *View From Nowhere*, 4.

³³⁵ John Searle, *The Mystery of Consciousness* (New York: The New York Review of Books, 1997), xiii.

different intelligibilities” and it obscures this truth if they are “lumped together under one category, ‘physical matter’...”³³⁶

Nagel needs to search more deeply into the nature of the mind than the content of conscious *experience*. He focuses only on animal consciousness, as in his famous article, “What is it like to be a bat?” He does not grasp the distinctions between levels of consciousness (empirical, intelligent, rational). He needs to experience the data of intelligent inquiry and affirm the intelligent and rational character of his mental operations. Nagel’s hope for a broadened *naturalistic* solution to the mind-body problem is appropriate. A complete world picture that does not reduce points of view to matter, but does not outsource them to another substance in a dualistic manner, is possible. That is Lonergan’s contribution. Lonergan’s “Generalised Empirical Method” includes the data of consciousness in its scope along with the data of physics, chemistry, biology, mathematics and every other instance of human knowledge.³³⁷ It means that “naturalistic” must be understood to designate not just the physical world “already out there now” but the whole universe of being.

5.5 A New Natural Philosophy

A new natural philosophy will not simply be an adding back in of the elements that were removed with early modern philosophy. We need to reassess our epistemology and our understanding of what constitutes the real. The great challenge is to acknowledge that there are different kinds of realities, and to “differentiate realities on the basis of intelligibility, not palpability, visibility, or imaginableness...”³³⁸

At this point it is appropriate to employ Nagel’s insight that the subjective point of view is a different kind of reality to spatiotemporal matter; but at the same time to extend this, using an intellectual epistemology to draw out more fitting conclusions. Being attentive, reasonable and rational, we know that the mind is real and is really distinct from the brain, because if we ask “what is it?” we will have given different answers in each case; thus we judge that they are different realities. The mind is different in kind or intelligibility from the brain, which is bodily, but the mind is not a separate “thing” to the brain, and it does not take up different space. Helminiak writes:

The brain functions such as it does to sustain intelligent mental functioning. But apart from a human mind, there is no intelligence or intelligent functioning to sustain.

³³⁶ Helminiak, *Brain, Consciousness, and God*, section 4.14.3.

³³⁷ Lonergan, *Insight*, 243.

³³⁸ Helminiak, *Brain, Consciousness, and God*, section 4.22.

...The intelligent, then is the constant between brain and mind. ...Intelligence in the human corresponds to intelligibility in the brain. That is, the brain is structured and functions—it entails a discernible ordering—so that it conduces to full-blown intelligence in the human being. Therein lies the link.³³⁹

The brain's structuring entails an intelligibility, which is the mind. It is what Aristotle termed the formal cause – the inherent conditions and relationships that make a thing what it is, grasped by *intelligence*. The mind is not a picturable “body”; rather, “*mind* is simply the name we put on the intelligibility that unifies and makes sense of the mental characteristics.”³⁴⁰

On the attentive, reasonable and rational approach, the human being is comprised of body and mind, which are conjugates of the one *thing*, the one concrete individual. On this view, “mind and body are different realities, different kinds of being, distinct but not separate, and both are equally real, existing as conjugates of the polymorphous human being.”³⁴¹ This only holds if we depend primarily on our intelligence, not our perception or imagination. A tree can be explained, but it can also be described. A subatomic particle can be explained, but it cannot be described. Mass is an explanatory conjugate grasped by intelligence; it is not an experiential conjugate that is sensed. Consciousness is a kind of reality that can be explained, but not described. This situation is familiar in quantum physics where the real is not the picturable, but the verified.³⁴²

To say that the mind and body are different realities that exist as conjugates of the one person is, like monism, a bit of hand-waving. It is a way ahead, not a full explanation. As Helminiak points out, “...we are still far from achieving the much desired, fully scientific, implicitly defined, explanatory account of a thought or of a brain state. We cannot yet specify what they are in themselves.”³⁴³ Yet the attentive, reasonable and rational approach breaks down the obstacles that would forever prevent us making sense of how mind and body are both real, yet different kinds of realities, in one unified picture, without dualism. This is because this approach does not try to imagine the connection between two different imaginable things, which, being real, must be “out there”; rather, it experiences, understands and affirms that two kinds of realities with different intelligibilities co-exist in the one person. The mind-body problem is made a problem by an epistemology that conceives of the real as “already out there now” rather than that which is experienced, understood and affirmed.

³³⁹ Helminiak, *Brain, Consciousness, and God*, section 4.7.

³⁴⁰ Helminiak, *Brain, Consciousness, and God*, 193.

³⁴¹ Helminiak, *Brain, Consciousness, and God*, 360.

³⁴² Lonergan, *Insight*, 425.

³⁴³ Helminiak, *Brain, Consciousness, and God*, 138.

Lonergan's approach avoids all the pitfalls of the three approaches to making mind real that we have examined: dualism, epiphenomenalism and monism. Dualism wants to grant independent reality to mind and matter, and so imagines them to be different bodies "out there" that somehow interact; Lonergan's epistemology grants full reality to mind as well as matter, but it does not insist that all realities are "already out there now"; and thus avoids dualism. Epiphenomenalism wants to grant that mind is somehow different to matter, but not an altogether different reality because that would entail dualism. So it denies causal power to the mind and claims it is a projection or by-product of the physical brain. However, Lonergan's epistemology satisfies the epiphenomenalist's concern that the mind having causal power would entail that the mind is an independent reality by using an intelligent notion of causality as an "intelligible relation of dependence"³⁴⁴, rather than an imaginable "contact action" notion of causality where one imaginable thing, mind, affects a second imaginable thing, brain. Thus the mind and the brain can be fully real as two different realities – not different kinds of body "out there", which are linked in an "intelligible relation of dependence". Monism carries with it the benefit that it tries to avoid the pitfalls of dualism and epiphenomenalism. That is, it attempts to make mind fully real, not just a causally inert by-product of the brain; while also trying to make mind part of the natural order, avoiding a dualism of mind and brain. Thus it posits mind and matter to be two aspects of the one substantial stuff that permeates the whole cosmos. But this approach still falls prey to imagining mind to be a spatiotemporal kind of body, a fact of which Nagel is well aware: "There is something deeply suspect about the whole enterprise of fitting subjective points of view smoothly into a spatiotemporal world..."³⁴⁵ As discussed in chapters three and four, Nagel knows that consciousness, but especially reason, is altogether different to spatiotemporal reality and irreducible to any objective conception in principle. Although Nagel's proposed theory of monism points in promising directions by uniting the insights of the three main theories of mind, it has its own significant limitations that Nagel himself identifies. In fact, it falls prey to the same fundamental error about objectivity as the other theories of mind.

Helminiak, in his book on the fields of neuroscience, philosophy of mind and spiritual experience, sums up Lonergan's approach like this:

... the mind's intelligibility—what there is to be understood about the mind on the basis of inner personal experience, the data of consciousness—is different from that of the brain... [which means that] ...the mind is a reality—that is, a particular kind of

³⁴⁴ Lonergan, *Insight*, 540.

³⁴⁵ Nagel, *View From Nowhere*, 31.

being—in itself. The mind emerges as a higher systematization of the sensate and perceptual functions of the organism and, as such, is different in kind from those functions and from the brain and its organic functioning. Perforce, the mind is distinct from the brain but emphatically not spatiotemporally separate from it.³⁴⁶

Beyond perception-based thinking

Lonergan's analysis of extroverted objectivity that is assumed by so many thinkers in the past and today, paves the way ahead for Nagel's conviction that consciousness and reason are not the same kind of reality as the brain. Lonergan identifies the common sense notion of extroverted objectivity and counters it with a richer picture of the real, comprised of matter, intelligence and existence, known through experience, understanding and judgment. This dissolves the gap between mind and reality because knowing is not a confrontation between spatially and ontologically separated subjects and objects. It is an identity of the subject and the object – authentic subjectivity *is* objective. The real is the verified insight into data. It also solves the subjective-objective tension in Nagel's thought by distinguishing between two kinds of knowing, description and explanation.

³⁴⁶ Helminiak, *Brain, Consciousness, and God*, section 7.2.2.

Conclusion

Thomas Nagel, using the conceptual tools of the analytic tradition, has made important arguments for the irreducibility of consciousness and reason to any objective conception. However, his proposed theory of monism is limited by an unidentified influence in his thinking: the extroverted notion of objectivity.

Chapter one argued, with Lonergan, that the common sense notion of objectivity as extroversion – as encountering what is “already out there now” – is merely animal knowing and not fully human knowing. According to Lonergan’s understanding of the data of consciousness, reality is what can be intelligently understood and rationally verified.

Using Lonergan’s analysis of knowing, chapter two examined Nagel’s analysis of the origins of our concepts of mind and matter. While Nagel’s awareness that the contemporary concept of matter was created by removing mind-dependent qualities is a great strength, this chapter found that he is not aware of the extroverted notion of objectivity that also informed the concept of matter in the 16th and 17th centuries. His lack of awareness of this influence is a major source of his limitations in thinking about the nature of consciousness and how to integrate it into a world picture.

Chapters three and four argued that Lonergan’s thought strengthens Nagel’s arguments for the irreducibility of consciousness and reason. Nagel bases his arguments on the fact that mind-dependent qualities were removed from the concept of matter, thus they cannot be so easily redefined as purely mind-independent in nature, which is what the materialist reduction attempts to do. Nagel pushes at the boundaries of existing notions of objectivity by insisting that the subjective point of view is real. His arguments for the irreducibility of reason also call for a reassessment of notions of objectivity; he argues that reason has an intrinsic authority that can only be accessed from the subject’s point of view. He is close to Lonergan on this point, who says that the structures of consciousness are given and are not reducible to “body”. The analysis of Nagel’s and Kant’s different approaches to the problem of thought and reality reveals the limitations of assuming that the real is “already out there now.”

Chapter five applied a Lonerganian analysis to prominent theories of mind, as well as Nagel’s preferred approach of monism. Nagel, aware of the removal of secondary qualities from the world, tries to add them back in and suggests that there is one substance in the world that has both mental and physical aspects. However, given that all these theories assume that the real is “already out there now”, properly accounting for the nature of consciousness and reason (based on the data of consciousness) and placing it in the world is impossible. Nagel’s

suggestion is to expand our current concept of physical objectivity; however, a deeper expansion is needed that makes sense of how invisible unities and relations can be real and grasped by minds. C.S. Lewis was probably thinking in extroverted notions of objectivity when he asked: “Is it, then, possible to imagine a new Natural Philosophy, continually conscious that the ‘natural object’ produced by analysis and abstraction is not reality but only a **view**, and always correcting the abstraction? I hardly know what I am asking for.” [emphasis added]³⁴⁷ The key is that analysis and abstraction do not give us a *view* of reality “out there”; when we explain, we grasp intelligible being, and this does not compete with our ordinary colourful view of reality, which is being as it is related to us. By carefully distinguishing between the levels of consciousness and identifying the two kinds of knowing, Lonergan enlarges our conception of objectivity and resolves the conflict between the subjective point of view and the viewpoint of physics. The attentive, reasonable and rational approach that he outlines gives us a promising way ahead for understanding the nature of the mind. Rather than imagining the mind as something “already out there now”, the mind can be understood as the intelligibility of the brain’s material structure. This is supported by the fact that different parts of the brain’s structure operate for different conscious activities like using language, planning the future, and deciding. On this view, there is no ghostly mind in the machine, yet mind is real and irreducible to matter.

The strength of the attentive, reasonable and rational approach suggests that future philosophies of mind need to examine their presuppositions more deeply and be open for dialogue with one of the less well-known traditions of philosophy in contemporary scholarship – the Aristotelian-Thomistic tradition, especially as interpreted by Lonergan.

³⁴⁷ Lewis, *Abolition of Man*, 78-9.

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