RECONCILING QUINEAN AND NEO-ARISTOTELIAN METAONTOLOGY

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Abstract

In recent decades the Quinean paradigm of metaontology has been exposed to wide-ranging criticism. Some authors have attempted to *deflate* the Quinean project claiming that ontological investigations are altogether futile, while others aimed at providing *alternatives* to Quineanism. One such proposal is that of neo-Aristotelianism, a fairly recent school of thought advocated by Kit Fine, E. J. Lowe, Jonathan Schaffer, and many others, who employ a broadly Aristotelian approach in order to replace Quinean metaontology. I argue that neo-Aristotelianism is not a genuine alternative to Quineanism. That is to say, Quineans can accept the main tenets of neo-Aristotelianism and incorporate them into their own outlook thus improving it. In other words, neo-Aristotelianism does not succeed in overcoming or transcending Quineanism.

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Introduction

During the last few decades a novel school emerged in metaphysics and metaontology called *neo-Aristotelianism* (Tahko 2012a, 1; Novotný and Novák 2014, 1). Neo-Aristotelians such as Kit Fine, the late E. J. Lowe, and Jonathan Schaffer often posit themselves in opposition to *Quineans*, the representatives of the allegedly dominant view of contemporary metaontology originating from W. V. Quine's works (esp. Quine 1948). Neo-Aristotelians claim that Quineanism is a fallacious account of what ontology is, and they can provide a viable alternative.

In the following I argue that this claim is false; neo-Aristotelianism is not a genuine alternative to Quineanism. There is no genuine choice to be made between them; the Quinean does not have to revoke her basic metaontological commitments in order to adhere to the main neo-Aristotelian doctrines, nor needs the neo-Aristotelian think of herself as an antagonist of the Quinean. Their opposition is illusory in that all the main neo-Aristotelian tenets can be accommodated within Quineanism. Thus the neo-Aristotelian proposal fails to transcend the Quinean. If it is able to solve the latter's problems, it is its saviour; if it is not, it is its companion in distress.

My aim with putting forward my argument is twofold. First, I would like to contribute to the deeper understanding of the current metaontological scene which, I believe, is divided along illusory lines. Second, through reflecting on this topic we can gain insight into the nature and the challenges of one of the grandest undertakings of contemporary philosophy, namely, ontology or metaphysics. This discussion, I hope, is not only instructive as to how to understand the specific schools in question, but also enables us to see it more clearly what obstacles ontology and metaontology faces in the twenty-first century.

The plan of the present discussion is as follows. In Chapter 1 I define the basic concepts concerning the field to which this investigation belongs, i.e. metaontology. Chapter 2 and 3

characterize Quinean metaontology. Their aim is to dispel some widespread misunderstandings concerning it, and to provide a proper account of this tradition. In Chapter 4 I set out to define neo-Aristotelianism and describe its two main branches in more detail.

The pivotal part is Chapter 5 in which I put forward my argument to the effect that neo-Aristotelianism is not a genuine alternative to Quineanism. I do so by showing that the neo-Aristotelian answers to the main challenges Quineanism faces can all be incorporated into Quineanism properly understood. This, in my view, suffices to show that the neo-Aristotelian proposal cannot transcend Quineanism. The two views are not in principle irreconcilable; the Quinean can appropriate the neo-Aristotelian solutions and all the theoretical assumptions they presuppose without ceasing to adhere to her own views. In the Conclusion I briefly explain the significance and consequences of the claim I defend here.

Chapter 1 – Ontology, metaphysics, and metaontology

The present investigation belongs to the field of metaontology. Metaontology is the study of another philosophical discipline, ontology. In this chapter I define these notions as well as the cognate concept of metaphysics. Ontology, as its name suggests, is the study of being. While most fields of human inquiry are concerned with being or beings in one way or another, ontology is specific in that it asks certain kinds of philosophical questions about being or beings. What these questions are, however, as well as how they ought to be answered, is far from obvious. The investigation of these latter issues belongs to the second-order discipline of metaontology.

There are two main philosophical questions about being or beings that may be examined by ontology. The first is "what is being?" In other words: what is it for anything to exist at all? There are a number of questions connected to this problem. Is the word "to be" or "to exist" univocal, or there are different meanings to it? Are there different ways of being corresponding to the different meanings of the word? As we will see, often these questions are not addressed on the level of first-order ontology, but rather on that of metaontology.

The other question is much more commonly thought of as the proper subject matter of ontology. This is simply "what is there?" There are in fact numerous interpretations of what it means for ontology to be the study of what there is. The question might simply mean: what does exist? It is quite clear that human beings, chairs, and stars do, while witches and ghosts do not. But there are more complicated issues. Are there any non-physical mental substances, unexemplified universals, mind-independent moral truths, and so on? Ontology has to find out about their existence.

Another way to understand this question is as follows: what are the most general categories under which different entities fall? On this construal, ontology is concerned with "carving nature at its joints" (Sider 2011, 1). Its aim is to reveal which groupings of entities are the

most genuine, which reflect their true nature. The task of ontology is to reveal the ultimate nature of reality through disclosing the most general categories of being.

This characterization of ontology is reminiscent of the definition of another philosophical discipline, namely, metaphysics. Metaphysics is famously defined by Aristotle as the study of being qua being (see Wedin 2009), that is, the study of being in terms of its most general and most genuine categories. Indeed, in today's literature ontology and metaphysics are often not differentiated and many authors hold that they are one and the same enterprise. After all, both metaphysics and ontology are concerned with finding the most ultimate truths about reality.

Although I do believe that an intelligible distinction between metaphysics and ontology can be made – and for the purposes of a more detailed discussion it should – in the following I will not employ it. Setting metaphysics and ontology apart would complicate the discussion to a great extent, so much so that it would be counterproductive in the present case. For this reason I will defer to the common practice in the literature and use "ontology" and related terms, e.g. "ontological", "ontologist", interchangeably with "metaphysics", "metaphysical", "metaphysician" etc.

While it is fairly uncontroversial that ontology is the study of being, it is not at all clear what this means exactly. In recent decades the theoretical interest in the nature and methods of ontology, that is, in the questions of *metaontology* has dramatically increased. One reason for that, according to many authors, is that the authority a hitherto dominant metaontological paradigm has been shaken. This dominant paradigm is commonly identified with *Quineanism*. According to the widespread narrative of the revival of metaphysics in the middle of the twentieth century it was W. V. Quine's 1948 essay "On What There Is" that "single-handedly made Ontology a respectable subject" (Putnam 2004, 78–79) thus ending the rule of logical empiricism which was severely hostile to ontology.

Although the historical accuracy of this narrative is widely disputed (see Price 2009; Soames 2009), it is true that many scholars take Quineanism to be the standard or default view in metaontology. In recent decades, however, numerous authors questioned whether this dominance is justified. More and more philosophers have launched attacks against Quineanism, or what they perceived as Quineanism, and attempted to formulate their own views concerning the nature and method of ontology. Authors, such as Eli Hirsch (2011), Thomas Hofweber (2009), and Stephen Yablo (1998) argue that the Quinean research programme of metaphysics is futile. They attempt to *deflate* the Quinean or ontological project. Some of the critics, however, take another line claiming that while ontology conceived in the Quinean way is vain, the metaphysical enterprise in general is not.

The most prominent of this kind of *constructive criticism* of Quinean metaontology is arguably what we may call *neo-Aristotelianism* represented by Kit Fine, E. J. Lowe, Jonathan Schaffer, and others. These authors believe that Quineanism faces serious difficulties that cannot be overcome from within its own framework. Their solution is to abandon Quineanism and to embrace a "broadly Aristotelian" (Fine 2012a, 8) conception which is capable of surmounting these challenges and providing an alternative, better understanding of what ontology is and how it should be studied. It is an important part of neo-Aristotelianism that it posits itself in stark opposition to Quineanism, thinks of itself as an alternative (Tahko 2012a, 1).

In my view, however, this conviction is not tenable. The neo-Aristotelian proposal as to what ontology and its methods are is not genuinely different from that of the Quinean. The Quinean can incorporate the main neo-Aristotelian tenets; this shows that there is no real conflict between the two, despite the fact that it is true that neo-Aristotelians advocate views not traditionally advocated, though in principle acceptable, by Quineans. Before I put forward my argument, I need to make clear what neo-Aristotelianism and Quineanism really are. This is the topic of the next three chapters.

Chapter 2 – Vulgar Quineanism and its critiques

In this and the next chapter I examine Quinean metaontology. While it is widely accepted that Quineanism is the dominant paradigm in metaontology, it is not always clear what Quineanism actually is. Is it just Quine's views on ontology? Is it a subset of those views? Is it completely different from them? In the following I take Quineanism to be a *tradition* within metaontology rather than the views of Quine. I have two reasons for doing so. First, Quine's views on ontology are not coherent; there is a gap between the early and the later Quine – I will come back to this issue in the next chapter.

Second, when critics, e.g. neo-Aristotelians, talk about Quineanism, what they usually have in mind is an actually existing paradigm advocated by the majority of metaontologists. But it is quite clear that Quine's own views as he presented them in his early or later papers are not widely advocated. These views have been extensively criticised and improved by followers of Quine and today's Quineanism is just as much under their influence as they are under Quine's. I discuss who these followers are and what the exact characterization of Quineanism is in Chapter 3. In this chapter I address another important issue.

The tradition of Quineanism is often presented in contemporary metaontological literature in an oversimplified, even caricaturistic way, especially by its critics such as the neo-Aristotelians. In this chapter I briefly outline this simplistic version of Quineanism that I call *vulgar Quineanism* and the main criticisms it faces. This discussion prepares the ground both for the proper characterization of Quineanism, and the argument for the claim that there is no genuine difference between neo-Aristotelianism and Quineanism proper.

What is vulgar Quineanism? Tuomas Tahko, a prominent advocate of neo-Aristotelianism, describes what he holds to be Quinean metaontology in the following way: "According to a Quinean, 'naturalized' conception, metaphysics is continuous with science in its methods and aims. Questions about the nature of reality are to be answered by application of 'regimented

theory'." (Tahko 2012a, 1) Regimenting the scientific theory means identifying its *ontological commitments* by translating it into standard first-order logic and finding those sentences that state that something exists, i.e. the sentences containing variables bound by existential quantifiers (see also Roy and Davidson 2012, 269; Manley 2009a, 293). Hence the famous slogans of Quinean metaontology: "to be is [...] to be a value of a variable" (Quine 1948, 32), and "what we should take there to exist is what our best theory of the world quantifies over" (Eklund 2006, 320).

An example of how vulgar Quineanism works could be the following. It is a scientific fact that protons are constituted by three quarks. Unpacking this claim in terms of first-order logic yields the following proposition: for all xs, if x is a proton, then there is a y_1 and a y_2 and a y_3 such that y_1 , y_2 , and y_3 are quarks, and x is constituted by y_1 , y_2 , and y_3 , and y_1 , y_2 , and y_3 are not identical. Since this sentence states that there are some things that are quarks, it follows that there are quarks. Thus we arrive at an ontological conclusion.

While it is questionable whether anyone actually holds this to be the proper way to do ontology, it is not hard to find philosophers who oppose this view. For example, E. J. Lowe wrote that "Quinean 'ontology' is a travesty of the real thing and more of a threat to genuine ontology than anything issuing from the pens of self-professed antirealists and relativists." (Lowe 2008b, 276) Their reasons for rejecting (vulgar) Quineanism vary greatly. In the remainder of this chapter I present the three most important neo-Aristotelian critiques which I call *the triviality problem, the subject matter problem*, and *the autonomy problem*.

The *triviality problem* is a common neo-Aristotelian argument against Quineanism (see Fine 2009, 158; Schaffer 2009, 348; Tahko 2012b, 27). According to this objection Quineanism renders ontology a trivial matter. If all there is to ontology is spotting existential quantifiers in scientific theories, then, frankly, it is not an especially demanding task. One can quite easily put forward extremely successful ontological arguments in this way. Tahko's

example of a preposterously simplistic argument of this sort is the following (Tahko 2012b, 27):

- (1) The number of winged pigs is zero.
- (2) There is such a thing as the number of winged pigs.
- (3) Hence, there are numbers.

This argument does not appear to be different in kind from the one about the quarks above. In both cases we set out from a scientifically acknowledged fact, clarify what it means or implies in terms of first-order logic and draw the ontological conclusion. But it would be outrageous to think that this argument resolves the thousand years old metaphysical mystery about the existence of numbers.

Tahko of course recognizes that Quineans do not usually engage in this kind of reasoning. But he insists that in their view ontological inquiry is not different in kind from such trivial matters. If all that is needed for pursuing ontology is the capability of translating sentences into first-order logic, and finding the existential quantifiers, then a sufficiently advanced student of logic or linguistics would be more than qualified to resolve the allegedly grand problems of ontology, although finding out about the ontological commitments of some highly complex theories would be potentially time consuming.

Some existence questions are, of course, non-trivial. There is no obvious answer to the question whether or not there is a largest prime number, whether the universal set exists, if there is such a thing as the Higgs boson. These, however, are not philosophical questions. They belong to the realm of special sciences, and as such, should not be conflated with ontology's philosophical task of revealing ultimate truths about reality. Kit Fine acknowledges that there may be existence-questions that are neither trivial nor unphilosophical, but they, he argues, are at any rate not the typical cases of ontological problems (Fine 2009, 158).

The second objection is the *subject matter problem*. It is the concern that Quineanism misidentifies the subject matter of ontology. On the Quinean account the metaphysician has to be concerned, for the most part, with theories and their logical form. That is to say, linguistic, and logical items are the main objects of investigation for ontology. This, however, is false. The topic of ontology, the very object it studies is not of a linguistic, logical or conceptual nature. Ontology is about reality itself of which it intends to discover language and min-independent truths.

Lowe identifies the false belief that ontology has to be about theories and logic as a remnant of logical positivism and the corresponding "linguistic turn" in philosophy (Lowe 2008b, 277). The leitmotif of these, now obsolete, trends was to posit that metaphysical problems, as philosophical problems in general, were at the end of the day linguistic and logical. As Michael Dummett, one of the main protagonists of the linguistic turn according to Lowe, put it, once we have a proper meaning-theory at hand, "there will be no further, properly metaphysical, question to be determined." (Dummett 1991, 14)

Lowe sees in Quine's doctrine of ontological commitment a residue of the old logical positivist conviction that the linguistic analysis of language can resolve all the major problems of philosophy or prove them to be pseudo-problems. This view, however, as well as the corresponding idea, made famous by Frank Jackson (1998) and others, that metaphysics is conceptual analysis are false – he argues. Ontology properly understood is not about words or meaning or logic or concepts. Ontology is about reality itself.

The last objection I discuss here is the so-called *autonomy problem*. It is based on the idea that on the Quinean construal the relationship between ontology and science is that of subordination. Metaphysics is subservient to science in the sense that the only task of the metaphysician is to clarify what scientists have to say about the world. There is no genuine

quest for ontology in addition to producing philosophical commentaries on scientific discoveries which are the true loci of revealing ultimate truths about the world.

Here again, the neo-Aristotelian argues, Quineanism is mistaken. Ontology is not *ancilla scientiae*. It is, as Aristotle rightly remarked, first-philosophy (see Tahko 2013). This means not that ontology is able to resolve scientific questions, but that ontology provides the foundations for science, and as such, it is a more fundamental kind of endeavour. Furthermore, the famous continuity between natural science and ontology often defended by Quine and the Quineans does not exist. Ontological problems "arise from within philosophy, rather than from within science or everyday life, and they are to be answered on the basis of philosophical enquiry." (Fine 2009, 158)

This concludes the discussion of vulgar Quineanism and its critiques. We have seen that there really are genuine differences between neo-Aristotelianism and what they perceive to be Quineanism. But as I will argue in the next chapter vulgar Quineanism is not Quineanism proper. It is not the metaontological theory held by a number of significant authors who describe themselves as Quineans. Whether or not their views are still in opposition to the neo-Aristotelian tenets is a question that I address in Chapter 5. Now I turn to the proper characterization of Quinean metaontology.

Chapter 3 – Quinean metaontology

The question I examine here is whether neo-Aristotelianism is genuinely different from Quineanism. One can hardly make a decision about that unless one knows what these compared items exactly are. But so far we have only seen an account of vulgar Quineanism which, being only a parody of Quineanism proper, cannot instruct us. In this chapter I provide a proper account of Quinean metaontology. I begin by identifying the sources of Quineanism. On the basis of these sources I propose a preliminary characterization of what the proper understanding of Quineanism is and how it differs from vulgar Quineanism. I close this chapter with the adequate account of Quineanism proper.

3.1. The sources of Quineanism proper

Recall that the term "Quineanism" as I use it refers to a tradition in metaontology instead of the views of Quine himself. The tradition of course originates from the works of Quine, but it has deviated from them significantly during the course of the last more than a half century. Moreover, not all of Quine's works influenced this tradition equally. The first step toward the proper characterization of Quineanism, then, is identifying the main sources and figures of this tradition.

After a few precursory articles (Quine 1934; 1939), Quine's attention turned to ontology in the 1940s.¹ He published his seminal "On What There Is" (1948) as well as his contribution to the so-called Quine-Carnap debate, "On Carnap's Views on Ontology" (1951) alongside with some minor works on specific ontological issues, such as "On Mental Entities" (1953) and "On Universals" (1947). Later on, however, his views transformed. His insights concerning reference discussed first in "Speaking of Objects" (1958), and then in *Word and Object*

¹ For more on his turn see Murphey (2012, 52–53)

(1960) led him a to a relativistic view resulting in "Ontological Relativity" (1969a) and "Things and Their Place in Theories" (1981a).²

These later relativistic ideas have not exerted a great influence on the Quinean tradition of metaontology. Later Quineans mostly refer to his views put forward in "On What There Is", especially his criterion of ontological commitment. For this reason, I will take into account only those works of Quine which remain faithful to these early conceptions. These are, for example, his "Existence and Quantification" (1969b) written in the same year as "Ontological Relativity" but bearing striking similarities to "On What There Is".

Apart from Quine several figures stand out as self-confessed representatives of Quineanism. Since not all of them can be taken into account, I limit my discussion to two main authors who had great influence on contemporary metaontology: David Lewis and Peter van Inwagen. They are unquestionably among the most influential metaphysicians of the twentieth century whose metaontological views have had great impact.

Lewisian metaontology is unmistakably Quinean. There is both a historical and a theoretical connection between the two thinkers; Lewis wrote his dissertation under the supervision of Quine and his later writings show great loyalty on his part to some central Quinean tenets. His views on the nature and method of ontology presented, for example, in *On the Plurality of Worlds* (1986) and elsewhere (e.g.: Lewis 1983; 1990) resemble to Quine's account of ontological commitment to a very large extent as many authors have remarked.³

Inwagen, a philosopher of no less importance, is also a card-carrying Quinean who formulated one of the most elaborated accounts of Quinean metaontology in his "Meta-ontology" (2001) and elsewhere (e.g.: Inwagen 2009), and whose work, just as Lewis's, shows how these metaontological principles apply in the case of first-order problems of

² For more on Quinean relativism see Bergström (2006).

³ For more on the methodological similarities between Lewis and Quine see Nolan (2005, 204), Soames (2015, 83) and Weatherson (2014, sec. 6.1.).

ontology. The writings of these two authors, together with those of Quine which I mentioned above are, in my view, the most important sources of Quineanism proper. I will reconstruct Quinean metaontology on the basis of these works. Of course, since they do not agree on all issues the view I abstract from their statements will not fit their convictions perfectly. Nevertheless, I believe that this abstracted conception can be justifiably called Quineanism proper, for it reflects the main commitments of these authors as well as the principles governing their philosophical practice.

3.2. A preliminary characterization of Quineanism

What picture do these sources draw of Quineanism? The main thesis of Quinean metaontology is most certainly the following: ontology tells us what there is; it does so by revealing the ontological commitments of our best theories of the world. This amounts to translating the best theories from their vernacular formulation to a clearer language that shows in a transparent and unambiguous manner which entities are needed to be thought of as existing in order for the best theory to be true. These entities can then be thought of as existing.

Three elements stand out as the pivotal for Quineanism proper. The first is the *best theory* or theories that serve as the starting point of the ontological investigation. The second is the clearer idiom into which the best theory is translated which is usually called the *canonical notation*. The third is the *process of translation* itself that is ultimately responsible for identifying the ontological commitments of the best theory. Understanding these notions properly is the key to having an adequate account of what Quinean metaontology really is.

These three notions are usually thought of as constitutive of the *method* of Quineanism, while its *content* in a narrower sense is often taken to be Quine's criterion of ontological commitment. However, what this criterion means depends, as we will see, on how the method is understood. The Quinean doctrine of ontological commitment is roughly as follows: a

theory is committed to those entities the existence of which is stated by translation of the theory (not by the theory itself) into the canonical notation (see Quine 1948, 33). Unless one understands these three notions clearly, the criterion of ontological commitment in itself is vacuous.

This preliminary characterization of Quineanism can be summarized in the following way: ontology is a discipline that identifies which entities need to exist in order for our best theories of the world to be true by translating them into the canonical notation. So far it does not seem strikingly different from vulgar Quineanism. In order to see why they are not the same, let us turn to the three central notions of Quineanism proper, the best theory, the canonical notation, and the process of translation.

3.3. The best theory

It is a widespread misconception that Quineans believe that the best theory that serves as the basis of the ontological investigation needs to be natural science, or to be more precise, our most advanced physics. After all, Quine was a committed naturalist rejecting the idea of a first-philosophy (Quine 1981b, 72), claiming that "it is the business of physics and other sciences to find out how the world is." (Quine 2008, 167) But does this mean that Quineans have to be naturalists, or that the best theory has to be physics or another part of natural science?

The actual philosophical practice of Quinean ontology supports a negative answer to this question. Inwagen, for example, is a self-confessed anti-naturalist (Inwagen 2006, 74) who often plays little attention to science when it comes to ontology. Take for example his argument for the existence of universals presented in his "A Theory of Properties" (2004) which is a classical Quinean argument.⁴ He attempts to show that our best theory of the world

⁴ For more on the connections between this argument and Quinean methods, see Roy and Davidson (2012, 273).

translated into the canonical notation commits us to the existence of universals. But what is this best theory? Surprisingly enough it is not contemporary physics but some everyday conceptions expressed in natural language.

Similarly, David Lewis holds that the existence of possible worlds is to be accepted because they improve our theories. That is, the best theories, the most improved ones, are those which assert that possible worlds exist. But what exactly is so improved? Is it natural science? Lewis's answer is somewhat different; if we accept his modal realism, we can "improve the unity and economy of the theory that is our professional concern – *total theory, the whole of what we take to be true*." (Lewis 1986, 4 emphasis added) But we most certainly take more things to be true than what natural science tells us. We take it to be true that Quine was the Edgar Pierce Professor of Philosophy at Harvard, and that the Second World War started in 1939. Physics does not know of such matters.

Actual Quinean metaphysicians do not at all have to be hard-headed naturalists (Eklund 2006, 318). Quine himself was often quite liberal concerning the status of scientific theories especially in his early writings. In "The Two Dogmas of Empiricism" the "whole of science" or "total science" is identified with "the totality of our so-called knowledge or beliefs, from the most casual matters of geography and history to the profoundest laws of atomic physics or even of pure mathematics and logic." (Quine 1963, 42) Science and scientific theory, then, for him could be any part, or even the whole, of human knowledge including history or even philosophy which, as the science of science, is itself a science (Quine 1953, 202).

The fact that the best theory does not have to be natural science explains how Quineans can engage in parsimony arguments concerning solely the elegance or explanatory power of philosophical theories disregarding natural science altogether, as they indeed do. Were they obliged to rely on the analysis of scientific theories all the time they could hardly do so. These considerations suggest that the vulgar Quinean view that best theories need to be those of natural science, has to be given up.

The proper principle concerning the best theory, then, is not "choose natural science", but rather "choose that chunk of the totality of human knowledge that provides you with the best explanations about the part of reality you investigate." It can be physics, for example, when we talk about material beings and elementary particles. But in other cases history, geography, natural language or even philosophy can explain outstandingly. What counts as a good explanation, of course, is a complicated matter and different authors might disagree on it. Naturalist Quineans might reject some theories as proper starting points, while more liberal ones will be less strict. These issues, however, do not concern the core Quinean principle about the best theory.

3.4. The canonical notation

A much less easily refutable conviction of vulgar Quineanism is that the canonical notation is standard first-order logic. Quine himself advocated this view in "On What There Is" and Inwagen even declared it to be an axiom of Quinean metaontology by formulating his *Thesis 4* of metaontology as follows: "the single sense of being or existence is adequately captured by the existential quantifier of formal logic" (Inwagen 2001, 18) where "formal logic" seems to mean standard first-order logic. I will argue nonetheless that this thesis is not a fundamental principle of Quineanism. The canonical notation is not necessarily standard first-order logic, and thus a Quinean can reject the claim that existential quantification captures the sense of existence properly.

Consider first the status of Inwagen's Thesis 4. It is clear that the thesis is not a logical principle, but rather an *empirical claim* insofar as its validity partially depends on contingent linguistic facts (what "to exist" means as it is used by contemporary speakers of English). Such claims about the proper logical analysis of a portion of natural language are usually

justified and falsified by appealing to contingent facts concerning how language is used and how sentences behave in certain circumstances. Our knowledge of these facts is a posteriori and fallible.⁵ Logical analyses of natural language sentences have indeed been disputed and revised many times during the course of the history of the philosophy of language. Think of the grand debates of the last century surrounding the proper logical representation of definite descriptions, proper names, indexicals, intensionality, or the questions about the very concept of a definite logical form or structure underlying the grammatical form of our everyday sentences (see Borg and LePore 2002; McLeod 2009).

In these debates linguistic, logical, and philosophical arguments have been put forward. If for any such reason Thesis 4 had to be rejected, as the Frege-Russell account of proper names has been refuted by Kripke according to most scholars, would Quineanism be thereby refuted? In my view, there are good reasons for resisting this idea. The Quinean's aim, first and foremost, is to make clear what there is. The canonical notation is a means to this end. If notations other than first-order logic proved to be able to capture the meaning of existence better, Quineanism would acquire better means to achieve its end. Thus it would be *improved*, not refuted.

The canonical notation is simply the best available idiom of existence that is able to make the commitments of the best theory clear. Just as Quineanism is not committed to any particular theory, it is not committed to any particular notation. It does not matter what the best notation is as long as it provides us with the best ways to make clear the existential commitments of the best theory. As a new theory can assume the role of the best theory thus replacing an old one while leaving the fundamentals of Quineanism intact, a new logic, shown to grasp the meaning of existence better than first-order logic, can take the role of the canonical notation.

⁵ This feature of the logical analysis of natural language is exemplified by Kent Bach's (2002) account of logical form according to which it is a level of grammatical form which is a subject to empirical linguistic study. See also Jackson (2006).

Quine himself is quite open to this possibility. In his "Existence and Quantification" (1969b), a late but precise recapitulation of his account in "On What There Is", writes the following: "Classical quantification theory enjoys an extraordinary combination of depth and simplicity, beauty and utility [...] Deviations from it are likely, in contrast, to look rather arbitrary. But insofar as they exist it seems clearest and simplest to say that deviant concepts of existence exist along with them." (Quine 1969b, 113)

This remark highlights two rather important points. First, Quine here admits that coherent logical alternatives to standard first-order logic are possible. Second, he bases the primacy of first-order logic on its depth and simplicity. That is to say, if a "deviant" logical theory of existence exceeded it in depth and simplicity we would have every reason to endorse it. In such a case Quine's and Inwagen's logical and linguistic convictions would be refuted, not their metaontology.

Quineans have in fact used logical solutions that Quine himself would have found preposterous. Think of Lewis's work on quantified modal logic – a field of philosophical logic Quine overtly opposed from the very beginning. It is true that the analysis of existence claims in terms of standard first-order logic has rarely been challenged by Quineans (which does not mean of course that it has not been challenged at all). That is because it is a powerful or even straightforwardly correct analysis. But this does not in itself imply that there is an inherent commitment in Quineanism to this analysis.

Lewis's work indicates an even more surprising feature of the canonical notation, namely, that it need not be a formal language at all. Take, for example, his theory of possible worlds. We attain it by translating our ordinary and scientific talk (the best theory) into what? First-order formal languages that simply quantify over possible worlds, e.g. Kripke-style formal semantics, will hardly enable him to reach any substantive metaphysical conclusions.

Fictionalists and Ersatz realists accept the translation of ordinary modal language into such idioms as correct.

The accurate metaphysical conclusions are yielded by the *philosophical* idiom that has terms such as "concrete" and "property" in its vocabulary. This language, and not for example a Kripke-style formal semantics, can bring forth the difference between the modal realist and the Ersatzist point of view and only this can show that ordinary modal talk is best interpreted in terms of the former instead of the latter. It stands to reason, then, that this language is the canonical notation in this case. This language may be formalized but need not be. What is required is that this language shows existential commitments most clearly, i.e. more clearly than ordinary talk or possible worlds talk per se.

The canonical notation is simply the idiom that makes existence claims most clear. It most certainly can be standard first order logic, but it need not be. However famous the slogans of Quineanism, e.g. "to be is to be the value of a variable", or "that exists which our best theories quantify over", are, they are contingent upon a particular logical analysis of ordinary language. As far as the core of Quineanism is concerned, this can turn out to be fallacious. If, on the other hand, the best logic, i.e. the kind of logic that captures what existence means, is standard first-order logic, then Inwagen's Quineanism and the version of Quineanism that is discussed here are more or less equivalent. But that is because first-order logic *happens to be* the best logic, not because Quineanism requires it to be. Quinean metaontology does not require any logical system to capture any linguistic fact just as it does not require any particular scientific theory to be true.

3.5. Translation as a dialectical strategy

The last widespread misconception about Quineanism is that the translation of the best theory into the canonical notation is a mechanical, even automatic task. To see why this view is untenable, let us first consider that even on the vulgar Quinean view the translation of scientific theories into first-order logic is "no fool-proof, algorithmic task." (Berto and Plebani 2015, 34) Anyone who ever attempted to construe such a translation can testify how much creativity and original thinking is needed to complete such a task.⁶

Second, it is important not to conflate Quineanism with the linguistic philosophy of Ayer and Dummett discussed in the last chapter. Quineans do not think that ontological problems can be resolved through the logical analysis of language, i.e. through unearthing some underlying logical form of everyday sentences. Inwagen goes as far as denying that any such logical form exists which for him does not mean that "any translation of a piece of English [...] is as good as any other." (Inwagen 2001, 27) but rather that "there will be many interesting cases in which the question whether one proposed translation is as good as another is a philosophical question, with all that *that* implies." (Inwagen 2001, 27)

Whether or not there is a single determinate logical form to everyday sentences Inwagen's more general metaontological principle stands. Semantics and the logical analysis of language do not answer ontological questions. These are resolved through *philosophical reasoning* involved in the translation of the best theory into the canonical notation. This translation is "not intended to preserve meaning intact" (Manley 2009a, 393); it is intended to make the best sense of the theory in ontological terms, i.e. in terms of the canonical notation. The method presented here is a "dialectical strategy" (Manley 2009b, 6) aimed at the ontological clarification of the best theories.

Lewis can again provide us with examples. For him translating our best theories (e.g. ordinary language) into the canonical notation (e.g. the philosophical idiom of modal realism and Ersatzism) is almost never a matter of simple re-description or formalization. It involves not only much creative thinking but also argumentation of a distinctively philosophical kind. Lewisian metaphysics – that is, Quinean metaphysics – very rarely amounts to the unearthing

⁶ See for example Andréka et al. (2012) and Andréka, Madarász and Németi (2006). I am indebted to Attila Molnár for drawing my attention to the truth of this matter.

of hidden logical forms in the manner of the practicing student of logic; instead in most cases he employs what Inwagen calls "Quine's strategy of ontological clarification." (Inwagen 2001, 31)

The phrases "translation" and "clarification" are somewhat misleading. They suggest that Quinean ontology is about uncovering something already there – but maybe concealed or obscured – in the theory, e.g. meaning or content. However unfortunate this word choice may be, it ought not to be taken to be indicating that Quineanism is about the semantics of scientific theories. As I have noted, Quineanism is about *what there is*, not about what science says. Vulgar Quineanism and Quineanism proper come apart at this very point. It is true that the Quinean road to what there is leads through, or better departs from, the best theory. But as we have seen, this only means that the starting point of the philosophical arguments constituting the dialectical strategy that leads to ontological conclusions has to be the best piece of knowledge of the portion of the world we investigate.

Ontological clarification, then, is not unearthing meaning, but making the best sense of the theory in terms of the canonical notation. This roughly means determining what the world has to be like in order for us to have this piece of knowledge of it. As Quine puts it a theory is committed "to which the bound variables of the theory must be capable of referring in order that the affirmations made in the theory be true." (Quine 1948, 33) The canonical notation does not report on the meaning of the theory, but on its *truth-makers*, if you will. This is a genuinely philosophical task that requires much more than the comprehension of first-order logic.

3.6. The final characterization of Quineanism

Vulgar Quineanism has shown to be mistaken. It is true that Quineans find out what there is by translating the best theories of the world into the canonical notation. But this does not mean that they search for existential quantifiers in scientific theories translated into first-order logic. Instead they ontologically clarify our best account of (a portion of) the world, be it natural science, ordinary language or something else, by means of a suitable idiom, be it first order logic or something else, through a complex and delicate dialectical process of *translation* that requires distinctively philosophical reasoning. This clarification shows what needs to be there in order for the best theory to be true which hopefully guides us as to what there really is.

One might object that my conclusions are based on the works of authors who do not exemplify but rather *betray* Quineanism and whose thoughts, for this reason, are not authoritative. Such an argument might be compelling but only under certain circumstances. Beginning with an uncharitable conception of Quineanism and then rejecting serious philosophers as Quineans – who at the same time self-identify as such – is clearly not an option. We can decide who is a good Quinean only if we know what Quineanism is, but we learn what Quineanism is by looking at what Quineans actually do.

Consequently an argument of this kind needs to be supported by an investigation such as the one in this chapter which shows that there are confirmed Quineans just as influential as Lewis and Inwagen whose metaontological remarks and philosophical practice indicate their commitment to vulgar Quineanism. I acknowledge the possibility that such an alternative analysis exists just as I recognize that my account, which is dependent for a large part on interpretive and historical considerations, can be questioned. Such is the nature of investigations of this sort.

If my characterisation of Quineanism proper is tenable, however, we are in the position to determine what it takes for a theory of metaontology to transcend it and offer a genuine alternative to it. I will discuss these criteria in Chapter 5 where I set out to argue that neo-Aristotelianism does not succeed in its endeavour to transcend Quineanism. But before I do so I have to make clear what neo-Aristotelianism is. This is the topic of the following chapter.

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Chapter 4 – Neo-Aristotelian metaontology

In this chapter I turn to the main characteristics of neo-Aristotelian metaontology. After situating this fairly recent phenomenon on the metaontological scene, I show that unlike Quineanism it cannot be thought of as a unified theory; it is a family of such theories connected by the shared adherence to "a broadly Aristotelian framework" and the hostility to the Quinean paradigm. I examine this framework in detail and present the two main variants of neo-Aristotelian metaontology.

What I call neo-Aristotelian metaphysics is a fairly recent phenomenon; it emerged only in the last two decades. Being too young to be a tradition, I will refer to it as a school of thought. Its members are philosophers with "a greater or lesser affinity to the methods and doctrines of Aristotle and/or the Aristotelian-Scholastic tradition." (Novotný and Novák 2014, 6) who "deploy what they regard as distinctly philosophical, often a priori, methods to discuss metaphysical concepts like essence, substance, dependence, potential, ground, and other categories of being and relations among beings described by language that is not purely extensional." (Tahko 2012a, 1)

These notions, of course, were present in much of twentieth century metaphysics, and Aristotle was a rather common point of reference. Neo-Aristotelians acknowledge this and often think of themselves as the continuation of a tradition that has always been there in analytic metaphysics. They recognize such authors as important precursors as Joseph Almog, David Armstrong, David Wiggins, G. E. M. Anscombe, and many others. What makes neo-Aristotelianism distinctive is its adherence to a specific conception of these notions presented in the works of a few key authors around whom this school is largely organized.

Paramount among these authors is Kit Fine whose two ground breaking articles – "Essence and Modality" (1994) and "The Question of Realism" (2001) – introduced the two key notions of neo-Aristotelianism, essence and grounding. These works quickly became seminal

and many authors already working on similar topics started to contribute to the growing system of neo-Aristotelian metaphysics. Notable figures are the late E. J. Lowe (1998), Fabrice Correia (2000), David Oderberg (2001), Jonathan Schaffer (2009), Gideon Rosen (2010) and many others. Their work inspired an astonishing number of young scholars and helped neo-Aristotelianism becoming a true movement that has produced a vast, innovative, and very high quality literature during the last two decades.

Since the beginning it has been a goal for neo-Aristotelians to put forward a novel theory of metaontology. The authors who have presented the most advanced and authoritative versions of neo-Aristotelian metaontology are, in my view, Fine, Lowe, Schaffer, and Tahko. Their views, however, do not constitute a single unified theory. They fall under at least two large categories which I call *essentialist* and *ground-theoretic* neo-Aristotelianism. What binds them together is, on the one hand, their opposition to the Quinean paradigm, and, on the other, their adherence to a *broadly Aristotelian framework*. Let us first explore this framework.

4.1. A broadly Aristotelian framework

What makes neo-Aristotelianism Aristotelian? For one thing, there is a widespread and explicit admiration of Aristotle's works as well as a thorough scholarly interest in them (see Fine 1992; Tahko 2008; Koslicki 2012). But is there a more general Aristotelian conception that connects neo-Aristotelians in addition to their disposition to pick up themes from Aristotle rather than Carnap? There is indeed, I believe, a broad framework to which they adhere and which has some distinctively Aristotelian elements at its core.

This framework is first and foremost *anti-empiricist*. Empiricism, as I use it here, is not an epistemological theory, but rather a more general philosophical outlook associated with card-carrying empiricists such as Hume, Carnap, Quine, or some common interpretation of their views. For this kind of *metaphysical empiricism*, as Fine remarks, "the world is an on-or-off matter" (Fine 2005, 1). The only metaphysical question of any importance is *if* something is

the case or not. Typical questions of empiricist ontology are the following: are there any properties or not? Are there numbers or not? Does a relation R (supervenience, constitution, instantiation, etc.) hold between A and B hold or not?

Aristotle himself is strikingly disinterested in questions of this sort – he rarely asks if this or that kind of being exists. Take for example his very first ontological argument in the *Categories* concerning substances concluding not that they exist – this is treated as more or less self-evident – but rather that they are *primary*. Aristotle is here interested in showing that substances do not depend for their existence on anything else, while other things do depend on them, and thus substances have ontological priority. From Michael Loux (1991) to Michail Peramatzis (2011) a range of authors argue that the core questions of Aristotelian metaphysics are mainly not *if*-questions, but rather questions concerning priority, the order of dependence that obtains in the world.

Similarly neo-Aristotelians believe that while if-questions are legitimate, there is another kind of questions the significance of which may have been downplayed by metaphysical empiricists, but clearly recognized by Aristotle. These questions can be called *why*-questions. When we know *if* a fact obtains, *if* an entity exists, *if* a proposition is true, we may still further enquire *why* it obtains, exists, is true, rather than something else, what *explains* it. Explanation as I use it here is not to be understood in epistemic terms, but rather as a full-fledged ontological notion which refers to mind-independent relations in the world (cf.: Gorman 2005, 283).

While different neo-Aristotelians might hold different views on what metaphysical explanation is, they all agree that these explanations, and consequently why-questions instead of if-questions, should be in the focus of metaphysical inquiry. Insofar as neo-Aristotelianism opposes metaphysical empiricism in that it accommodates the notion of metaphysical explanation I believe it is right to call it a form of *metaphysical rationalism*. Samik Dasgupta

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defines metaphysical rationalism as the endorsement of the Principle of Sufficient Reason, "the principle that everything has an explanation" (Dasgupta 2014, 1) where "explanation" is a metaphysical instead of an epistemic term. For our purposes a weaker principle is sufficient according to which *some things have explanations*.

Metaphysical empiricism, then, can be defined as the negation of metaphysical rationalism, that is, the view that *nothing has an explanation*. Metaphysical empiricism is interested exclusively in *mere existence*, i.e. whether or not certain things exist regardless of their explanatory traits. The category of metaphysical explanation the investigation of which is fundamentally different from the investigation of mere existence is not intelligible for metaphysical empiricists. If why-questions can be asked at all, they are to be conceived of as subcases of if-questions, i.e. questions about the mere existence of explanatory relations. After all, asking *why X* is the case is just asking *if* the relation of explanation holds between *X* and a certain *Y*. It seems, then, that the opposition between Quineanism and neo-Aristotelianism can be described as a form of the opposition between metaphysical empiricism and rationalism. Whether this description is correct will only be discussed in the next chapter. For the time being, let us turn to neo-Aristotelianism itself.

As I mentioned, different neo-Aristotelians account for metaphysical explanation differently. There are two main approaches in today's literature that I call *essentialist* and *ground-theoretic* neo-Aristotelianism. The latter holds that the relation of metaphysical explanation, which they identify with the concept of *grounding*, is itself a primary or fundamental notion of metaphysics and all, or at least most, metaphysical investigations have to be made sense of in terms of grounding. Essentialists, on the other hand, believe that the explanation relations are given rise to by the most ultimate nature or essence of beings, thus these essences are the proper objects of metaphysical investigation. The two approaches are

compatible, but not equivalent. A more detailed discussion of their tenets can provide us with deeper insight into the nature of neo-Aristotelianism.

4.2. Ground-theoretic neo-Aristotelianism

Grounding is the notion most widely employed to account for the notion of metaphysical explanation. This approach is advocated most prominently by Fine $(2001)^7$ and Jonathan Schaffer (2009). Grounding is a rather peculiar concept that resists easy definition. The statement that '*X* grounds *Y*' is usually taken to mean that *Y* holds (is true, exists, has certain features, etc.) *in virtue of X*. For example, the fact that there is a city is grounded in the fact that many buildings are arranged in a certain way, many people act and talk in certain ways, etc. In this respect grounding is more or less equivalent with metaphysical explanation discussed above (cf.: Dasgupta 2014, 2).

Many authors have found grounding an especially useful notion and a large literature exists clarifying various problems concerning it (see Trogdon 2013; Clark and Liggins 2012; Correia and Schnieder 2012). Debated questions about grounding are, for example, the following: what are the relata of the grounding relation exactly; what are the logical properties of grounding; what is the relation between grounding, reduction, truth making, etc.? These problems do not need to concern us in the following.

As one might expect, several authors have expressed doubts about the very notion of grounding. Some point out, for example, that the main examples of grounding can be accounted for in terms of different notions already known to metaphysics, e.g. constitution, truth making, sometimes even logical implication. There is no need for introducing the mysterious notion of "Grounding" with the capital G, when ordinary "groundings", i.e. various kinds of dependency relations can cover these cases quite successfully (Wilson 2014).

⁷ However, he seems to have a cordial relationship to the essentialist approach as well (see Fine 1994, 8; Fine 2012a, 8).

Here, again, I cannot discuss these objections in detail, yet it is important to keep in mind that grounding is not universally welcomed as the grand invention of twenty-first century metaphysics.⁸

Ground-theoretic neo-Aristotelianism, as a metaontological theory, holds that the main concern of ontology is not "what there is", but rather what grounds what (Schaffer 2009). Ifquestions or existence questions, in which Quineans and metaphysical empiricists in general are supposedly most interested, are not especially mysterious. As Schaffer puts it "while the Quinean will show great concern with questions such as whether numbers exist, the neo-Aristotelian will answer such questions with a dismissive *yes, of course.*" (Schaffer 2009, 352) The genuine ontological mystery is what grounds the existence of numbers. Once we have revealed the order of grounding we become able to access the only ontologically significant truths about reality, i.e. the ones about the hierarchy of beings determined by the metaphysical explanation relations that hold between them.⁹

This view seems to be a compelling account of what metaphysics is which is in accord with the Aristotelian picture in general.¹⁰ It claims that the main aim of ontology and metaphysics is to reveal the *structure* of reality which is constituted by the metaphysical explanation, i.e. grounding, relations among the entities. One, however, might contend that a purely structural account of reality might not be satisfactory in that it might not amount to a complete account of metaphysical explanation. Some neo-Aristotelians believe that there is an even more fundamental kind of question to be asked about metaphysical explanations which concerns not so much the structure, but rather the *nature* of reality. I call their view *essentialist* neo-Aristotelianism.

⁸ For a more general discussion about scepticism concerning grounding, see Daly (2012).

⁹ This is, of course, an extreme view. Neo-Aristotelians can agree with Fine that there are existence-questions "that are both non-trivial and philosophical. The question of whether there are 'concrete' possible worlds, for example, might well deserve this double honor." (Fine 2009, 158)

¹⁰ For criticism of Schaffer's and Fine's versions of ground-theoretic metaontology see Sider (2011, chap. 8.1, 8.6).

4.3. Essentialist neo-Aristotelianism

E. J. Lowe, one of the most remarkable proponents of neo-Aristotelianism who passed away in 2014, defined metaphysics as "the Science of Essence." (Lowe 2008a, 34) He, as well as the whole neo-Aristotelian paradigm, conceives of "essence" in a specifically Aristotelian manner. Since Quine's "Three Grades of Modal Involvement" (1966) most metaphysicians defined essence as the set of properties an individual possesses in all possible worlds in which it exists (see Plantinga 2009). Fine's 1994 "Essence and Modality" casted serious doubts on the tenability of this definition, and even though various problems have been raised concerning Fine's arguments (see Zalta 2006; Correia 2007; Wildman 2013) neo-Aristotelians by and large came to the conclusion that this definition is to be rejected.

Instead they usually turn to Aristotle's original understanding of essence according to which it is "to ti en einai", that is, "what being is" for something (see Buchanan 1964, chap. 4), or as Locke famously put it in his *Essay* "the very being of any thing whereby it is what it is" (Locke 1975, III, iii, 15). Essence on this construal is that in virtue of which something is what it is. This "whatness", *quidditas*, as the scholastics said, or essence constitutes the deepest metaphysical nature of an entity that determines all of its metaphysically relevant features.

Essence is usually taken to be an ontological primitive.¹¹ They argue that it is not amenable to further analysis in more fundamental terms, but rather it is to be regarded as a fundamental notion in terms of which other concepts are clarified. Such clarifications have indeed been put forward. Fine and Fabrice Correia presented essence-based accounts of metaphysical necessity (Fine 1994; Correia 2012). Ontological dependence is widely defined in terms of essence (Fine 1995a; Lowe 1998, chap. 6; see also Correia 2005, 25 ff.), and there have been many attempts to explain grounding itself by means of essence (see Fine 2012b, 74 ff.).

¹¹ For a criticism of that approach see Paul (2006).

It is not a surprise, then, that many neo-Aristotelians came to the conclusion that the main concern of ontology is essence itself (Lowe 2009c; Tahko 2012a, 26). In Lowe's words ontology or metaphysics is "a primarily a priori discipline concerned with revealing, through rational reflection and argument, the essences of entities, both actual and possible, with a view to articulating the fundamental structure of reality as a whole." (Lowe 2009c, 100) Revealing the essences of entities not only allows us to know what things are, in what their ultimate metaphysical nature consists, but also to identify the different categories of being and the hierarchy that orders them. For the essence of an entity determines the ontological category to which it belongs, its identity conditions, as well as the various dependency relations (grounding included) that hold between it and other entities.

Essentialist and ground-theoretic neo-Aristotelianism are not equivalent, although they are compatible. An essentialist neo-Aristotelian might not subscribe to the notion of grounding at all. For example, although Lowe is often not hostile to the idea of grounding, he prefers to talk about ontological dependence instead.¹² Similarly, a grounding theorist does not necessarily rely on the notion of essence. In any event, the two are compatible. As we have seen, grounding can be accommodated within the essentialist framework, and one might even propose a definition of essence in terms of grounding saying that all there is to the nature of an entity is its place in the overall structure of reality.

4.4. Summary

What is, then, neo-Aristotelian metaontology? On the basis of the foregoing discussion the following answer seems to be adequate: neo-Aristotelian metaontology is metaphysical rationalism understood as the stance according to which not only if-questions, but also whyquestions make sense in ontology. Knowing if something is the case is not yet having a proper ontological account of the thing in question. One also needs to know why it is the case, i.e.

¹² See, however, Lowe (2011)

what explains that it is the case. Why-questions or questions of metaphysical explanation can be accounted for in terms of grounding and essence, or in other words, of *structure* and *nature*. On the first view, knowing why something is the case is to know how it fits into the overall structure of reality determined by the relation of grounding. The essentialist, by contrast, holds that this structure, even if it exists, is not in itself explanatory. What ultimately does answer the why-question is the essence of the entities in question from which all of their ontologically relevant aspects flow.

Metaphysical rationalism so understood is opposed to metaphysical empiricism according to which why-questions, conceived of as ultimately different in nature from if-questions, do not make sense in ontology. The only intelligible question to ask is whether something is the case or not. Insofar as why-questions are intelligible at all, they are to be thought of as subcases of if-questions. Asking why something is the case is asking *if* a certain relation of ontological explanation holds between it and something else.

These characterizations open up a range of questions. First, is Quineanism really a form of metaphysical empiricism as neo-Aristotelians claim? If so, does neo-Aristotelianism manage to offer a tenable form of metaphysical rationalism that at the end of the day does not collapse into empiricism? Alternatively, if Quineanism is not really metaphysical empiricism, then is it still true that neo-Aristotelianism genuinely differs from it? Answering these questions is the task that I undertake in the next chapter.

Chapter 5 – Aristotle versus Quine

In this chapter I present my argument for the claim that neo-Aristotelianism is not a genuine alternative to Quineanism. I take two theories to be genuine alternatives if and only if they *contradict* each other. For only then is it the case that one has choose one *over* the other, i.e. that one cannot advocate both views at the same time. If one of the theories states something about which the other is silent, then they may be different, but they are not *alternatives*, let alone genuine alternatives.

I believe that using this criterion is justified in the present case because neo-Aristotelianism aspires to *transcend* Quineanism. It attempts to put forward solutions that are *unavailable* for Quineans. Otherwise the neo-Aristotelian's proposals could be taken up by the Quinean who could thereby improve her theory without abandoning it. It is, however, clearly not the intention of the neo-Aristotelian critics to improve or complement Quineanism, but rather to propose non-Quinean solutions to its problems thus providing an alternative approach to metaontology.

I argue, then, that there is no contradiction between Quineanism and neo-Aristotelianism. I demonstrate this by showing that the Quinean can incorporate the main neo-Aristotelian tenets into her own framework. Naturally I cannot go through all the propositions held by Quineans and neo-Aristotelians and show that they are compatible. I consider instead the neo-Aristotelian answers to the challenges posed to Quineanism discussed in Chapter 2 one by one, and argue that there is no reason why they cannot be accommodated within the Quinean framework. This discussion, I believe, covers the core of neo-Aristotelian metaontology.

This analysis, then, succeeds in showing that neo-Aristotelianism does not contradict Quineanism; therefore they are not genuine alternatives. It is true that neo-Aristotelian discussions are *different* from traditional Quinean discussions. The latter clearly do not have much to do with grounding and essence. But Quineans also did not talk about possible worlds or non-reductive physicalism much before the 1960s. This does not mean that the theory of possible worlds is a genuine alternative to Quineanism, i.e. that one is either a Quinean or a possible world theorist. Similarly, it is not true that one is either a Quinean or a neo-Aristotelian.

My argument, of course, does not exclude the possibility of the existence of a neo-Aristotelian dictum of which I am not aware, but which does contradict Quineanism. It also does not show that neo-Aristotelianism cannot be *transformed* so that it contradicts Quineanism, nor that such a transformation is not underway at this very moment. I do not, however, wish to counter these problems, because they follow inevitably from the nature of the present investigation which, however conceptual it is, is about contingent facts, i.e. two philosophical traditions existing in our time. The possibility of contrary evidence in such cases can never be excluded.

5.1. The triviality problem

The first problem of Quineanism discussed in Chapter 2 is the *triviality problem*. It is the concern that Quineanism renders ontological problems trivial, i.e. solvable in a rather simplistic, although sometimes time-consuming, way or through empirical research. The discussion in Chapter 3 shows that this accusation is unjustified, but this is not relevant for the present discussion. My question here is whether the neo-Aristotelian answer can be incorporated into the Quinean framework.

A paradigmatic answer to the triviality problem has been proposed by Kit Fine in his "The Question of Ontology" (2009). In it he argues that if-questions are usually, although not necessarily, trivial, while why-questions are not. To show this he employs a rather specific account of why-questions first developed in "The Question of Realism" (2001) which relies on the notion of *reality*, but his argument may be extrapolated to other types of neo-Aristotelianism as well.

Fine argues that while if-questions are about *mere existence*, one can recognize "a 'thick' ontologically loaded sense" (Fine 2009, 168) of existence; in stating that something exists in this latter sense "we are not saying that there is something identical to it but saying something about its status as a genuine constituent of the world." (Fine 2009, 168) For this reason we might even refrain from using "existence" and replace it with another notion that reflects its specific role more adequately. Fine's suggestion is the concept of reality. The question of ontology is not "what is there?" but "what is real?"

Fine's concept of reality is closely connected to metaphysical explanations in general, and to grounding in particular. He entertains the idea that reality might be defined in terms of grounding; for example, one could argue that that is real which is not grounded in anything else, i.e. what is *fundamental*. He rejects this idea and insists that reality is an undefinable, primitive term (Fine 2009, 174); nevertheless, he acknowledges that problems concerning reality "are largely to be settled through considerations of ground." (Fine 2001, 28)

Fine's main reason for thinking that the investigation of reality is not a trivial matter is that reality cannot be properly grasped by the existential quantifier of standard first-order logic. From the sentence "there is an F," it does not follow that Fs are real. Fine proposes the introduction of an *existential predicate* that applies only to what is real. Asking to what, if anything, this predicate applies is a specifically philosophical question concerning a specifically philosophical concept. As such, it is not trivial. By contrast, asking what theories quantify over is a not specifically philosophical question – scientists (*qua* scientists) can talk about mere existence, but they cannot talk about reality.

Is this solution unavailable for the Quinean? As we have seen in Chapter 3, introducing novel logical means that complement or even replace standard first-order logic is not beyond the capacities of Quineanism, for it is not inherently committed to any particular logical analysis of language. If for any reason, be it logic, linguistics, or philosophy, the quantifierbased analysis proves to be unsatisfactory, the Quinean can give up her previous commitment to it and adopt a new formal idiom as the canonical notation. The Quinean, then, can be convinced by Fine's arguments and embrace the new formal idiom of the existential predicate without abandoning Quineanism.

A Finean might argue that while the Quinean is able to improve her vocabulary, she is unable to embrace the concept of reality itself. This concept is simply too alien to the general Quinean outlook, for example, because it is a metaphysical rationalist concept instead of an empiricist one. Let me postpone the discussion of the connection between Quineanism and metaphysical empiricism to the next section, and consider two preliminary answers to this Finean objection briefly.

First, consider that Quineanism, during the course of the twentieth century, has been able to accommodate a number of rather "strange" metaphysical notions that were alien to Quine's own outlook. Think of the concept of possible worlds, a paradigmatic rationalist invention, or substance, trope, sparse property, supervenience, truth making etc. It is not hard to imagine what Quine, let alone more committed positivists, such as Carnap would have made of many such notions (cf.: Price 2009). Why would, then, Finean reality be any more problematic than these?

Second, regardless of how strange this notion is there is no principal reason why it could not be embraced by the Quinean, i.e. introduced to the canonical notation. We have seen that there are no inherent restrictions as to what can or cannot be in it. Quineanism only requires the metaphysician to translate her best theory into the best notation whatever their content may be. And it is hard to see that when the Quinean uses the term in genuine philosophical reasoning, i.e. when she translates the best theory into the canonical notation, in what sense she is not really using the concept only the term. One can take, then, Fine's arguments to be Quinean arguments to the effect that the ontologically clarified best theory has to contain sentences such as "Fs are real" – as Inwagen's argument in "A Theory of Properties" shows that the clarified theory says "properties are universals." Some Quineans depending on their philosophical taste may be reluctant to introduce the notion of reality as some were reluctant to introduce essence, substance, possible worlds, naturalness, etc. Their disagreement, however, does not have to be more significant than the one between the naturalist and anti-naturalist Quinean. A Quinean, then, who is tempted by Fine's arguments, can easily incorporate Fine's views into her own framework. The Finean solution, which is a paradigmatic neo-Aristotelian solution to the problem of triviality, can very well be accommodated within Quineanism.

5.2. The subject matter problem

The *subject matter problem* is the worry that Quineanism misconstrues the subject matter of ontology as a discipline concerned primarily with theories and their translations. Ontology, however, is the study of reality, not that of linguistic items. This objection seems to be more pressing; after all, Quineanism really is committed to the study of theories and notations. But here, again, the question is not whether the worry is legitimate, but rather if the neo-Aristotelian solution can be accommodated within Quineanism.

How can, then, the neo-Aristotelian circumvent theories and reach out to the things themselves? Merely abandoning scientific theories and standard first-order logic, as we have seen, is far from enough to render neo-Aristotelianism anti-Quinean. If using everyday intuitions as the best theory and various logics of grounding and essence as the canonical notation is enough to solve the subject matter problem, then the Quinean is saved. Strange notions, such as grounding and essence, need not, again, scare the Quinean off; she can introduce these into her language, for she is insensitive to the content and constitution of both the best theory and the canonical notation. As long as neo-Aristotelians engage in philosophical reasoning in order to clarify which ontology accounts best for our best conceptions about the world their solutions remain reconcilable with Quineanism.

And this is indeed what they seem to be doing. Fine in "Essence and Modality" and in "Senses of Essence" (1995b) sets out from everyday and philosophical intuitions concerning the concept of essence and attempts to find a partially formal idiom to clarify what these express. These attempts eventually resulted in the massive logical system of the Logic of Essence (1995c) which, I believe, a Quinean could not fail to recognize as a canonical notation into which our theories of essence are to be translated.

Similarly, Lowe in his "A neo-Aristotelian Substance Ontology" (2012a) argues that the various pieces of philosophical, intuitive, and even scientific knowledge we have about the notion of substance indicates that it is best interpreted not in terms of what he calls relational and constituent ontologies, but rather by means of his four-category ontology. His argument does not seem to be different in kind from Lewis's argument to the effect that we know about possible worlds – from logic, philosophy, etc. – is best interpreted in terms of modal realism instead of Ersatzism.

Finally, think of the truly massive efforts neo-Aristotelians employ to develop an adequate logic of grounding (cf.: Fine 2012c). Their aim is not to convey some direct insight they have into the nature of reality, but rather to clarify what properties grounding has on the basis of the intuitions, and already acquired philosophical knowledge about grounding. What they do does not seem to be ultimately different from what Inwagen and Lewis have been doing in attempting to clarify what properties possible worlds or causal relations have. They just talk about different concepts – they talk of things about which Quineans have been so far silent. This, however, is insufficient for making neo-Aristotelianism a genuine alternative to Quineanism.

I believe, however, that there remains a forceful argument that the neo-Aristotelian can employ at this point. She can appeal to the distinction between metaphysical empiricism and rationalism. She can claim that what sets her apart from the Quinean is that she clarifies theories by means of formal and non-formal notation in order to answer *why-questions* instead of if-questions. Fine, Lowe, and grounding theorists do not develop these formal systems so that they can see what they quantify over or claim to exist in general. Neo-Aristotelianism is not concerned with mere existence, for it, unlike Quineanism, is interested in the structure and nature of reality.

In my view, this argument is not compelling, for it is not true that Quineanism is disinterested in matters of structure and nature. Quineanism is not metaphysical empiricism in the sense discussed here, that is, it has never been concerned only with mere existence. It might use the wrong notions to capture structure and nature (supervenience instead of grounding, modal essence instead of Aristotelian essence, etc.), but it cannot be denied that why-questions do play a significant role in Quinean ontology as well as in neo-Aristotelianism.

The misconception that Quineanism is only concerned with if-questions may originate from the false belief that the most well-known Quinean arguments, the so-called indispensability arguments, are about mere existence. For example, the famous Quine-Putnam argument for the existence or mathematical object shows, it seems, only that numbers and sets exist while saying nothing about what or how they are. And if the paradigmatic Quinean argument has nothing to say about structure and nature, then it is hard to see how Quineanism in general does.

To see why this is a misconception, let us consider the aforementioned argument itself. The Quine-Putnam indispensability argument is usually reconstructed in the following way: (1) If X is indispensable to our best scientific theories, then X exists; (2) abstract entities are

indispensable to our best scientific theories; (3) therefore abstract entities exist. Is this really a Quinean argument? It seems that Quinean principles can justify all the premises: (1) simply recapitulates the principle that if our best theories translated into the canonical notation claim X to exist, i.e. if it proved to be impossible to dispense with it while ontologically clarifying the theory, then we ought to hold that it really does, and (2) only reports that it really is impossible to dispense with abstract entities; finally (3) follows from (1) and (2).

Let us, however, take a closer look at how (2) is justified. Simply saying that scientists utter "there are prime numbers between 2 and 13" which implies "there are numbers", does not suffice. The argument "scientists say 1+1=2, therefore there are abstract objects" is not an example but a caricature of Quineanism. The core Quinean intuition is precisely that we cannot take the best theories assertions at face value. On the face of it, sentences such as "Pegasus does not exist," and "the average person is 1.65 meters tall" commit us to Pegasus and the average person. But once we translate these into the canonical notation it becomes clear that these things do not at all need to exist in order for these sentences to be true.

In order to justify (2), then, an argument is needed showing that our best account of abstract objects translated into an idiom that makes existential commitments most clear really does state that there are numbers. How would such an argument look like? Consider again the case of the average person. The Quinean argues that the claim "the average person is 1.65 meters tall" does not commit us to the existence of an average person because once it is clarified it becomes clear that all that is needed for it to be true is a number of people and maybe an abstract object, but no flesh and blood average person.

This argument is sound only if one assumes that the average person, if it exists, has to be a flesh and blood person. If one believes that the average person is an abstract object, one might very well believe that the sentence above does commit us to its existence. That is to say, the Quinean argument has to invoke at least some assumption concerning the *nature* of the

average person. Without such assumptions it would not be possible to tell whether any of the entities claimed to exist by ontologically clarified best theory is the average person or not.

Similarly if one wants to find out whether there are numbers, one has to make assumptions concerning the *nature* of numbers, otherwise one cannot decide whether there are numbers among the various entities that exist according to the ontologically clarified best theory. Those who believe that numbers are by nature abstract entities may come up with different conclusions than those who hold that numbers are, for example, mental beings. But someone who does not think anything at all about the nature of numbers cannot put forward any such argument whatsoever.

The Quinean has to be interested in nature for the simple reason that one cannot know *if* something exists unless one knows *what* it is. As the proverbial woman in St. Augustine's *Confessiones* looking for her drachma in order to know if she found it, the metaphysician cannot know if she found a commitment to numbers if she does not have some ideas as to what numbers are, as opposed chairs or ghosts. Accounting for nature, then, is indispensable for the Quinean, as well as for anyone interested in if-questions.

A problem might be raised at this point. The neo-Aristotelian can argue Quineans *should* account for nature, as the foregoing argument shows, but they fall short of this requirement. Quineans characterize themselves as being concerned only with existence, with what there is, ignoring matters concerning nature, while as the previous line of reasoning shows, it is impossible to account for existence without taking nature also into consideration. Neo-Aristotelianism, then, transcends Quineanism by paying due attention to structure and nature thus overcoming an inherent tension within Quineanism itself.

This idea might sound compelling, but unfortunately it is not true that Quineans have only been concerned with existence while they should have been talking about nature. They have always paid attention to nature. Consider one of the most famous debates among Quineans, the disagreement between Lewis and Inwagen on mereology. Lewis is a mereological universalist, thinking that any two material beings constitute a third one, while Inwagen is a nihilist thinking that material beings never constitute new ones – as long as we are talking about inanimate objects. In my view, it is wrong to think of this debate as being entirely about mere existence. It is true that Lewis thinks that there are physical objects in which Inwagen does not believe. But part of his reason for denying their existence is that he has certain convictions as to what it is to be a material being and what the relationship of parthood is. He and Lewis disagree at least in part on whether those convictions are tenable or not – they disagree about the nature of material beings and parthood.

Other examples could be cited. Quine (1960) does not argue that meanings as such do not exist; he argues that meanings as *mental or platonic entities* do not exist. He does not claim that there are no mental states (1953), only that they are nothing over and above physical states. Inwagen (2004) does not argue that properties as such exist, but that properties as universals do. Lewis (1986) does not insist that there are possible worlds whatever they may be, but holds that there are possible worlds as concrete entities. Paul Benacerraf (1974) does not believe that there are no numbers whatsoever, only that there no numbers understood as individual entities, e.g. sets, and so on and so forth.

Some might be inclined to conclude from these examples not that Quineans had the right ideas concerning the relation between existence and nature or if-questions and why-questions, but rather that there is a tension between the theory and the practice of the Quineans. After all, Quineans declared that they are interested in what there is – existence – but they constantly talk about nature too. In my view this argument is not compelling. Quineans do indeed want to know about *existence*, but nothing indicates that their interest is limited to *mere existence*. We have seen that it is possible, often necessary, to ask why-questions in order to answer if-questions, and that Quineans do indeed do this. What reason do we have, then, to interpret

their commitment to existence-questions as being about mere existence instead of existence intertwined with nature? The only such reason in my view is sheer malevolence, for the former solution clearly assigns to them a highly implausible stance.

What is true of nature is true of structure. Quineans can be interested in structure just as much as they are in nature. They might not use the right term, e.g. grounding, and attempt to account for structure in various, inadequate ways, e.g. through reduction, supervenience, constitution, and so on. But this does not mean that they are unable to make sense of the notion of structure that is relevant to why-questions. After all, questions of supervenience and reduction really are about ontological dependence and metaphysical explanation, even if these notions are unable to properly grasp these concepts. Quineans and neo-Aristotelians, then, agree that why-questions are important – particular representatives of each camp might disagree on how why-questions should be grasped, but such disagreements can, and indeed do, hold within the groups in question as well.

There is a neo-Aristotelian strategy to answer this challenge. They can say that even though Quineans recognize the need for an account of structure and nature, they cannot actually provide one. They can at the very best *fake* that they account for structure and nature. The concepts Quineans employ – or can employ – do not suffice to grasp structure and nature, thus they can only pretend that they are concerned with why-questions. In reality, however, they fail to overcome their initial empiricist convictions and end up with an incoherent view.

This argument is presented most forcefully in Lowe's "An Essentialist Approach to Truth Making." (2009a) Lowe argues that Quineans can only account for nature by saying that certain predicates, e.g. "abstract", apply to certain entities, e.g. numbers. But these predicates are, for the Quinean, on a par with any other kind of predicate. The Quinean takes the assumption that numbers are abstract not to be different in kind from the assumption that cabbages are plants. The best the Quinean can do, then, is to provide an enormous

enumeration of all the entities together with the predicates that apply to them. "However, such an inventory could not intelligibly be nothing more than a gigantic 'washing list'." (Lowe 2009a, 203)

Washing list ontologies, however, cannot capture nature at all. Two ontologists can agree on the washing list while disagreeing on the nature of entities. Consider Lowe's example of the pure trope theorist and the resemblance nominalist. The first believes that the only ontological category is *trope*, i.e. particular property instance, while the second holds that there are only concrete individual substrates with resemblance relations among them. "Two such ontologists could agree perfectly about how to *describe* the world – agree, for instance, that it includes shoes and ships and sealing wax, cabbages and kings, along with anything else that one could expect to find on a gigantic 'washing list'." (Lowe 2009a, 205)

The trope theorist and the nominalist disagree on the nature of the entities on the list. One holds that cabbages, kings, chairs, and ghosts are bundles of tropes, and the predicates that apply to them refer to tropes. The other believes that these things are concrete, not trope-like particulars, and the predicates designate resemblance relations among them. Their views differ not as to whether this or that predicate applies to this or that entity, but as to *what* those entities and predicates are, to which ontological category they belong.

Such differentiations, which Lowe calls "categorial differentiations" (Lowe 2009a, 203), cannot be made sense of within the Quinean framework according to him. The Quinean at best can claim that the predicate "abstract" applies to numbers, and the predicate "trope" applies to properties in the same way "cabbage" applies to certain plants, and "king" to certain people. But this is not what the neo-Aristotelian *means* when she says that properties are by nature, for example, tropes and not resemblance relations or universals. She would like to express a truth about ontological categories, the nature of entities. But Quineans do not know of such categories; for them every entity, be it a particular, a universal, a number, a

property, a chair, a cabbage, are on a par. Quinean ontology "is most aptly characterized not as a *one*-category ontology – the one category being 'thing' in the broadest possible sense, or 'entity' – but rather as a *no*-category ontology." (Lowe 2009a, 205)

This argument has its ground-theoretic version presented by Jonathan Schaffer. He argues that while neo-Aristotelians believe in an ordered ontology structured by the grounding relation, Quineans have *flat ontologies*. In such ontologies genuine structure does not exist. Quineans use surrogates, e.g. supervenience, "to fake ordering structure within a flat ontology." (Schaffer 2009, 363) But again, asking *if* certain relations hold between certain entities is not the same as asking *in virtue of what* certain entities exist or are what they are. Quinean attempts to account for structure are just as phoney as their cheap substitutes for nature.

The main problem with this objection is that it is not quite clear what neo-Aristotelians exactly expect Quineans to do, and why they cannot do it. Here again, the neo-Aristotelians might have pointed out some shortcomings of the metaphysical vocabulary used by most twentieth century metaphysicians. This, however, does not mean that Quineans have to give up their theories; it means they have to improve them. And the neo-Aristotelian proposals, again, do not seem to demand them to leave their most fundamental convictions behind, only to modify their conception to such an extent that it permitted by these fundamental principles.

Consider Schaffer's critique of Quineans who try to fake structure. He engages in a lengthy discussion on how supervenience and modality-based analyses of grounding fail, and then concludes that Quineans cannot talk about grounding. But why would Quineans be obliged to use only modal concepts? Why could the Quinean not say to Schaffer, "I am convinced, I will use grounding from now on"? Schaffer, I believe, would insist that a Quinean theory of grounding would be a travesty of the whole idea. Quineans, he believes, would transform the

why-questions about grounding into if-questions or existence-questions which is possible but also "perverse."

It is unclear, however, where the perversity comes from. Quineans would use the notion of grounding in genuine philosophical arguments to point out genuine ontological truths. What else do neo-Aristotelians do of which Quineans are incapable? If the appreciation of whyquestions together with the capacity to use the concept of grounding (both of which Quineans have) is not enough to counter the subject matter problem, then what exactly is? In my view, it is quite intangible what this secret ingredient is that neo-Aristotelianism is supposed to have and for the lack of which Quineanism is hauled over the coals.

It is utterly curious that Schaffer believes that Quineans could not manage to modify their views appropriately, for in Section 2.3 of his paper "On What Grounds What" he himself provides a perfectly legitimate Quinean interpretation of ground-theoretic neo-Aristotelianism. He argues, in effect, that Quineans can be neo-Aristotelians if they accept that "the best theory is a theory of the fundamental" (Schaffer 2009, 367), and the canonical notation is an idiom of grounding, or "the apt translations are into talk of the fundamental" (Schaffer 2009, 370). Since the Quinean can do all of this, Schaffer's argument implies that neo-Aristotelianism and Quineanism are not opposed as genuine alternatives at all.

The same can be said of Lowe's solution to this problem. He argues that in order to be able to properly account for categorial differentiations, we have to introduce a new sort of predicates that is different in kind from ordinary predicates. To the former belong "trope" and "concrete", to the latter "cabbage" and "chair". The newly introduced predicates are called "formal ontological predicates" (Lowe 2009a, 206) which are the means of formal ontology, i.e. essentialist neo-Aristotelianism, the main concern of which is ontological form, i.e. ontological categories determined by the general essences of things (Lowe 2009c, 106).

What Lowe argues in effect is that the proper logic that clarifies ontological matters, that is, the canonical notation, should be a *sortal logic* (Lowe 2005, 64). That is, it should contain different sorts of predicates and variables to which different kinds of syntactic and semantic rules apply (cf.: Lowe 2009b, chap. 11). As Lowe himself assures us, what is needed for a sortal logic are "simple syntactical amendments to Frege–Russell [standard first-order] logic." (Lowe 2005, 63) We have already seen many times that simple syntactical amendments to standard first-order logic are allowed in Quineanism. It is not clear, then, why Quineans cannot pursue formal ontology, if all that is needed for this is an interest in matters of nature and a capability to embrace the language of formal ontological predicates and the sortal logic that corresponds to it. What could make it the case that this solution is available for the neo-Aristotelian but not for the Quinean, when both can take nature seriously, and adopt the language required to grasp it?

To sum up, it seems that whatever solution the neo-Aristotelian might come up with in order to overcome the subject matter problem it is available for the Quinean. Whether or not these solutions are successful, they are not sufficient to set the two schools in question apart, they do not constitute a genuine difference between the two. Since I do not know of any further neo-Aristotelian solutions to the subject matter problem, I conclude that all such solutions can be incorporated into Quineanism.

5.3. The autonomy problem

Let us turn to the last problem, the so-called autonomy problem. It is the concern that Quineanism renders ontology subservient to science thus misconstruing the place of ontology among scholarly disciplines. This is not a very difficult problem for Quineanism proper which, as we have seen, does not necessarily assign a central role to science and does acknowledge that finding out what exists is a genuinely philosophical task. But my question, again, is not whether the objection is forceful, but if the neo-Aristotelian solution is irreconcilable with Quineanism.

One of the most elaborate answers to the autonomy problem has been provided by Tuomas Tahko (2013). He argues, following Aristotle, that ontology or metaphysics is *first philosophy*. It is not subordinate to science, but rather has priority over it. Instead of standing in need of scientific data and concepts, it is science that needs ontology's help to be complete, for scientific discoveries are impossible without prior metaphysical knowledge.

Consider an example of Lowe (2008a): We know it for a fact that the Evening Star and the Morning Star are identical. This is a well-known example of empirical discovery. But how do we know it? We know it because we have observed that these two material objects always occupy the same space-time region. But this observation alone does not imply that they are identical. To make this inference one needs to employ an extra premise, namely that if material objects of the same sort occupy the same space-time region, then they are identical. This premise is metaphysical, not scientific. It is, then, not metaphysics that needs the help of science, but vice versa: scientific knowledge is unattainable without prior metaphysical knowledge (see also Lowe 2007; Bird 2008).

Tahko acknowledges that science has a genuine and autonomous role to play in the understanding of reality. Science complements metaphysics insofar as our knowledge of the world "would not be complete without empirical input." (Tahko 2013, 64) Tahko, being a follower of Lowe, conceives of this complementary relation in terms of the essentialist version of neo-Aristotelianism. He believes that metaphysics identifies candidate essences which actual things may or may not have, but it is science that determines which essences are actual; metaphysics only explores the realm of possibilities.

Assuming that science is the best theory according to Quineanism, which is not necessarily the case, are Tahko's views concerning the relationship between science and metaphysics necessarily anti-Quinean? On the face of it, it seems that they are. If science is the best theory, and ontology is the investigation of the best theory, then it seems that this investigation is necessarily posterior to the best theory itself, while on the neo-Aristotelian picture ontological investigations precede scientific ones.

But what does this precedence or priority means exactly? Tahko, as well as Lowe, talks about the epistemic priority of ontology: we cannot find the transuranic elements unless we know what they are (Lowe 2008a, 41); we cannot set out to find the Higgs boson unless we know what kind of thing it is (Tahko 2013, 62). That is, ontological knowledge comes first. But these examples are quite strange. Surely we do not know what *transuranic elements* and the *Higgs boson* are by pure a priori reflection on the essences of things. These are scientific facts discovered by scientific means.

Nonetheless, it is true that our knowledge of the essence of transuranic elements is ontological knowledge. A kind of ontological knowledge, however, which we attained with the help of scientific knowledge, which, in turn, presumably relies on further ontological premises as in the case of our knowledge about the identity of the Evening Star and the Morning Star. The ontological and the scientific knowledge stand, as Tahko puts it discussing a priori and a posteriori knowledge, in a "bootstrapping relationship" (Tahko 2011). They mutually feed into one another thus helping us in getting closer to the true nature of reality.

The epistemic precedence of ontology does not mean that one has to know the whole of metaphysics first, and can start investigating scientific questions only afterwards. It merely means that one cannot know if something holds, i.e. the answers to the scientific question, unless one knows what it is, i.e. the answer to the ontological question, but in attaining knowledge of the latter one may invoke any kind of knowledge of the phenomena in question we already possess. If these phenomena belong to the realm of natural science, we had better

begin with what science has to say about them, and find out what they are on the basis of this piece of knowledge.

Quineanism is not at all hostile to this idea. Its insistence on the best theories as starting points of the ontological investigation is not a sign of the blind worship of science, but rather of the adherence to the common sense view that we do not have sui generis insight into the ultimate structure and nature of being – we have to rely on knowledge we already have; which can be scientific knowledge, a collection of everyday intuitions, etc. In other words, Quineans can accept the epistemic priority of ontological knowledge, for their method does not track the order of justification, but the order of discovery. Quineans do not hold that ontological claims are justified by the best theory. Ontological claims are justified by philosophical arguments the starting point of which is the best theory, the best available kind of knowledge of the realm of being about which the ontological question is asked.

If neo-Aristotelians do not attempt to base ontological knowledge on direct access to metaphysical facts, then it seems that there is not much difference between their outlook and that of the Quinean. Both claim that ontological knowledge comes from philosophical arguments based on pieces of knowledge we already have about the portion of reality we investigate. There is some evidence that neo-Aristotelians have something of this sort of immediate access in mind. For example, Lowe, while rejecting the idea of some kind of essentialist intuition, does believe that we attain knowledge of essence through pure understanding (Lowe 2012b, 28). Others, such as Tahko, however, believe that other kinds of knowledge, even scientific knowledge can have a crucial role in ontological investigations (Tahko 2012c, 20).

Furthermore, the actual philosophical practice of neo-Aristotelianism does not support the view that their method relies on mysterious ways of accessing ultimate truths about reality. Their arguments are surprisingly familiar compared to their revolutionary tone concerning

their place in the recent history of metaphysics. They rely on everyday intuitions, sometimes scientific facts, and even build large and complicated formal systems to make sense of these. This is the kind of activity the student of twentieth century Quinean metaphysics is used to.

I conclude, therefore, that the neo-Aristotelian solutions to the autonomy problem can also be incorporated into Quineanism. Thus all the main tenets of neo-Aristotelianism can be made sense of within the Quinean framework. On the criteria discussed at the beginning of this chapter I can know infer that their conception of metaphysics does not constitute a genuine alternative to Quineanism. In other words, neo-Aristotelianism does not succeed in overcoming Quineanism.

One might object that my definition of Quineanism is so broad that virtually any kind of metaphysics is reconcilable with it; by this account nothing is a genuine alternative to Quineanism. My answer is that the history of philosophy provides us many ways to do metaphysics which are not at all reconcilable with Quineanism. I myself mentioned several of them in the foregoing discussion. There is vulgar Quineanism, markedly different from both Quineanism proper and neo-Aristotelianism. There is the pure logico-linguistic approach of Ayer and Dummett according to which metaphysical knowledge is semantic knowledge. There is pure rationalism, the view that metaphysical knowledge is attainable through sheer rational reflection -a view that neo-Aristotelianism sometimes approximate, but never quite exemplify in actual philosophical practice. There is also pure empiricism or science worship that takes metaphysical knowledge simply to be scientific knowledge, and so on, and so forth. These all differ significantly from both Quineanism proper and neo-Aristotelianism. The latter take metaphysical knowledge to be genuine philosophical knowledge which, however, is acquired with the help of pre-philosophical knowledge on the basis of which philosophical arguments can be put forward. Neither of them renders their ontology subservient to science or language, as pure empiricism and linguistic philosophy, nor takes it to be a matter of pure rational intuition and deduction as rationalism. They take metaphysical knowledge to be fallible, and their main tool is abductive reasoning. The reason why few if any metaphysicians exemplify today a recognizably anti-Quinean stance is that the legacy of Quine is much stronger and much harder to overcome than many believe – this is one of the main points shown in this chapter.

Conclusion

I argued that neo-Aristotelianism is not a genuine alternative to Quineanism. It is not the case that one needs to abandon Quineanism for the sake of neo-Aristotelianism. Quineans can accommodate the main neo-Aristotelian tenets within their theory. In the neo-Aristotelian's truly immense efforts to build various formal systems to capture the nature of grounding and essence, the Quinean can recognize her own attempts to give an account on what there is in terms of various formal and non-formal idioms relying on the best available, scientific, philosophical and other kind of knowledge of reality. Neo-Aristotelianism, despite its selfimage, fails to transcend the Quinean tradition.

It is important not to misinterpret this result. It does not mean that neo-Aristotelianism is hereby refuted or in any way invalidated. The traditions discussed here were not in any way evaluated, only described and compared. I do suggest that neo-Aristotelians should recognize their mistake in conflating vulgar Quineanism and Quineanism proper, but they can very well agree that insofar as there is a more liberal, less hard-headedly empiricist version of Quineanism, they have no qualms about it. What are, then, the actual consequences of the present investigation?

In the Introduction I stated that my aims here were twofold: first, to provide insight into the metaontological scene showing that some divisions and oppositions within it are illusory and second, to gain deeper understanding of the challenges of contemporary metaphysics. As far as the first aim is concerned, the results are the following: the Quinean legacy proved to be much harder to overcome than neo-Aristotelians hoped. Quine, the stubborn naturalist, who remained a "confirmed extensionalist" (Quine 2004) even after Kripke and Putnam may have seemed to be a foe easy to defy. But his legacy is much stronger and much more pervasive than that. Quinean ideas permeate almost every corner of contemporary analytic philosophy. Leaving them behind, if it is possible at all, requires much more innovation, and probably

abandoning some core elements of the kind of thinking and intellectual attitude that dominated the last half century of philosophy.

What this means for the contemporary challenges of ontology is unclear. I believe, although I cannot argue for it here, that the problems neo-Aristotelians formulate are genuine and difficult. A turn indeed is needed in today's metaphysics, a turn away from the still prominent verbal debates and empty parsimony arguments, from the ways we talk about things, to the things themselves, to their structure and nature. Does neo-Aristotelianism succeed in bringing about this turn by resurrecting the spirit of Aristotle? If it does, then it is the saviour of Quineanism as well as today's metaphysics. In this case neo-Aristotelianism does not lead metaphysics, led astray by a century long rule of empiricism, back to its true roots, to Aristotle. Instead, it, not being a genuine alternative to Quineanism, manages to synthetize two grand traditions thus achieving a truly remarkable result.

It is quite possible, however, that being unable to overcome Quineanism neo-Aristotelianism falls victim to the same mistakes it committed. Does not the endless efforts of neo-Aristotelians to come up with increasingly complex formal systems about essence, dependence, reality, ground, and to reconcile these systems with science, everyday intuitions, and the philosophical tradition, signify neo-Aristotelianism's inevitable descent to the level of philosophy that they themselves find problematic? Why would their never-ending debates about grounding prove to be any more fruitful than the Quinean quarrels about mereology and supervenience? What will prevent them from reaching an impasse where they can only talk about the parsimony and elegance of their theories and formal systems, but cannot reach out to the things themselves anymore? The present inquiry has to end by raising these important and difficult questions. Answering them is a quest for future studies.

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