



The
University
Of
Sheffield.

Ontological Categories, Existence Statements, and Metaphysical Modality

By:

Siobhan Moriarty, BA, MPhil

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

The University of Sheffield
Faculty of Arts and Humanities
School (or Department) of Philosophy

29 September 2017

ABSTRACT

What is the content of the claim that tropes a and b are co-instantiated if there is no such thing as tropes? I begin this thesis by arguing that a sentence expressing such a claim would be deficient in content and would, therefore, not be truth-apt. I use this claim to set up a general presupposition problem for the truth-apt sentences of our language. I argue that all truth-apt sentences presuppose the existence of the kinds of things which are to serve as the semantic values of their terms. Understanding the content of such a presupposition requires understanding the content of a categorial existence claim. However, I argue, it is incredibly difficult to provide a construal of categorial existence claims which does not presuppose the existence of the very things that they would be used to assert the existence of. I argue that to provide a satisfactory construal, we need to appeal to the notion of an ontological category. I contend that the notion of an ontological category with which we can provide a satisfactory construal of existence claims is a broadly Lowean one. I show that, as it stands, Lowe's construal is not adequate to the task but that it can be modified so that it is. Making use of such a modified construal, I defend a metalinguistic construal of categorial existence claims. In chapters five and six, I argue that if we fully appreciate the notion of an ontological category which has been introduced, the notion of that which I claimed we have to make use in answering the question of ontology and referring to things in the world, we will recognise that such ontological categories ground, or partially ground, de re modal truths, and through them, the truths of metaphysical modality.

Word Count: 92, 274

TABLE OF CONTENTS

CHAPTER ONE	4
CHAPTER TWO	94
CHAPTER THREE:	138
CHAPTER FOUR	164
CHAPTER FIVE	185
CHAPTER SIX	211

Chapter 1

§1

The treaty they signed sat down and began to play poker with Simon.

It is not possible for the above sentence to be true. Intuitively, the reason, or at least *a* reason, why it is not possible for this sentence to be true is that treaties are not the kind of thing which can sit down and/or play poker. It is remarkably easy to generate sentences which are similar to the above sentence in being such that the entities involved seem to be of the wrong kinds to be related as the sentence presents them to be. For example:

Her anger was taller than he had been when he was that age.

The trees surrounding the house were true.

Following Ryle (1949), we can call sentences such as these category mistakes. Ofra Magidor, in her (2013), contends that sentences such as these are distinctive in being grammatically correct but having a characteristic infelicity. She uses their putatively characteristic infelicity to identify her target notion, that of category mistake. At a later point in this thesis I shall take a different position to this on the question of what makes a sentence a category mistake¹, but to begin with I shall adopt Magidor's approach to identifying category mistakes by means of their apparently characteristic infelicity. If we do this, and if we also go on to say (as Magidor definitely would not) that the (or a) reason why such sentences can't be true is that the things involved are of the wrong kinds, or

¹ Magidor is concerned to explain what she takes to be an infelicity characteristic of category mistakes. Since something is only infelicitous for someone in some context, Magidor's category mistakes end up being category mistakes only relative to a context and a hearer (Magidor, 2013, 133). My notion of category mistake will not be relative in this way. I am using what Magidor calls the characteristic infelicity, along with examples, to roughly identify the target notion but, on the account I will ultimately defend, one can be mistaken about whether something is a category mistake. This will usually happen when one fails to some degree to understand the nature of the entities involved.

categories, to be related as the sentence presents them to be, then it would also be plausible to say that when a sentence is not a category mistake, the (or a) reason why it *is* possible for it to be true is that the things involved are of the right kinds or categories to be as they are presented to be by the sentence.

It may or may not be true that David sat down and began to play poker with Simon. Nevertheless, intuitively, the (or at least a) reason why it is possible that David sat down and began to play poker with Simon is that David is the right kind of thing to do this (alternatively, that sitting down and playing poker is a thing of the right kind for something like David to be able to do).

I shall argue that something like the intuition mentioned above is correct; that a thing's category or kind really does ground, and/or partially ground, de re modal truths concerning it.

As evident from the last example, the truths which I hold to be grounded, or partially grounded, by categories are not limited to category mistakes. Ultimately, I will expand my claim and argue that all modal truths, and certainly all de re modal truths, are either fully or partially grounded by categories. Category mistakes are not to be considered distinctive in this regard. They simply provide a compelling entry point to the claim I am defending. I consider category mistakes to be cases where the work of ontological categories in grounding modal truths is more exposed than it is elsewhere and for this reason I shall try to make use of them in my effort to defend my claims concerning the grounding work of categories.

I said above that I would argue that something *like* the intuition that a thing's category or kind really does ground, and/or partially ground, de re modal truths concerning it, is correct because the intuitive claim, as presented above, is imprecise and in need of clarification. One point which needs to be clarified is what I mean by 'category/kind' in making this claim. Certain ways of clarifying these terms render my target claim either false or trivial. My aim is obviously not to defend the target claim for just any interpretation of these key terms. Instead, my aim is to argue that there is an interpretation of these terms under which the claim is both true and substantive.

So, the first issue to which I shall turn is the issue of the interpretation of the term(s) 'category/kind' relevant for my target claim.

§2

The terms ‘category’ and ‘kind’ as used in metaphysics are, to some degree, though not completely, terms of art. They are also terms which are used, both in metaphysics and outside it, in a number of different, though arguably related, ways. The understanding of these terms which is relevant to my claims corresponds to a use which I think is well-established, but which is neither the only common, nor the most common use which is made of these terms.

A common way of using a version of the term ‘category’ is found in talk of categorising things, that is, sorting them into groups on the basis of some criterion relevant to whatever motivates the sorting. One use of the term ‘category’ takes categories to be the groups which are the products of such categorising. For this understanding of the term ‘category’, the intuitive claim introduced in §1 seems clearly false. It is not particularly plausible that belonging to a group which results from sorting would ground *de re* modal truths concerning the sorted entity. If there were any interesting correlation between the groups and the *de re* modal truths holding of the members, it would seem to be more plausible to suggest that the ground of these truths would be that on the basis of which the entities were sorted, rather than the group which was the result of this sorting.

One of the most widely defended positions in the literature concerning the question of how we should understand the notion of an ontological category is the position that ontological categories are sets or classes (not just any sets or classes, usually sets satisfying some further criterion). Such a position is defended in, for example, (Westerhoff, 2005) and (van Inwagen, 2014). This position could be taken to correspond to something like the use of the term mentioned above. Sets are ontologically dependent entities since they depend for their existence and identity on their members. Ontological categories, conceived of as very general sets of some sort, would also be ontologically dependent entities, dependent for both their existence and identity on the entities belonging to them. As such, they would be implausible candidates for the role of that which grounds, or partially grounds, modal truths concerning the entities on which they themselves depend. This is not the notion of category in which I am interested.

The term ‘category’ could be used in connected but distinct ways with respect to this approach to the notion. One might hold that the entities were sorted into their groups on the basis of their category, so that the sorting merely exhibited category membership rather than determining it. In such a case, one might find ‘category’ being used for both the basis

of the sorting and its products (the groups or sets). With respect to such an approach, I would simply note (a) that it would be important to note and maintain the distinction between the two uses and (b) that it is only the second which plausibly corresponds to the *identification* of categories as sets and so only the second which I have, at this point, set aside as being a different notion of category than that in which I am interested.

The other position commonly taken in the literature on the question of how we should understand the notion of an ontological category is the position that ontological categories are properties (again, not just any properties, but rather properties which satisfy some further criterion). Versions of this position are defended in (Cumpa, 2011) and (Tegtmeier, 2011). A position along these lines seems to be suggested by talk of ontological categories as ‘highest kinds’ when that is accompanied by the treatment of kinds as properties. On this interpretation of the term(s) ‘category’/ ‘kind’, the target claim, that an entity’s category grounds at least some of the de re modal truths concerning it, no longer seems obviously false, but it also doesn’t seem particularly interesting or distinctive. On this understanding, the claim about categories would seem to collapse into a wider claim about certain of an entity’s properties, perhaps the entity’s essential properties and their role in grounding de re modal truths concerning that entity. While this broader position is interesting, and may yet be true, it is not the claim that I am making, and this interpretation of the notion of ontological category is not the interpretation I am targeting either.

To be clear, I do not take the fact that these construals of the notion of an ontological category wouldn’t support the position that my target claim is both true and substantive to constitute an argument against them as construals. I am not, at this point, arguing against them as construals. Instead, I want to argue that there is an interpretation of the key term(s) ‘category/kind’ on which my target claim is both true and substantive. If that were the case, it would have implications for positions using versions of the other two construals. In the next three chapters, my aim will be to draw out the interpretation of the term(s) ‘category/kind’ relevant to the claim I wish to defend. To do that perspicuously, the above two construals of the term(s) must be set aside.

In chapter four I will return to argue against some of these interpretations as construals of a notion of ontological category. I will do this only in a limited way because some of the accounts of ontological categories in the literature may be best understood as simply having a different target notion than I do, albeit also using the term ‘category’/‘kind’ for that notion. However, I shall argue that some other accounts in the literature may plausibly be understood as either considering the same notion that I aim to consider but

misconstruing it, or as neglecting or missing the notion in which I am interested and, because of this, mistakenly taking its work to be done in other ways.

§3

The interpretation of ‘category/kind’ in which I am interested is one which draws to a large degree on E.J. Lowe’s construal of the notion of an ontological category in his (2006). Ultimately, I will deviate from, and develop, Lowe’s construal in several ways. Nevertheless, the basics of the notion in which I am interested are both captured, and insisted upon, by Lowe in a number of different works, most prominently in his (2006), but also notably in his (2009), and (2013)

Three key positions which are taken by Lowe which I shall adopt and defend, though also develop and modify in important ways are:

1. Ontological Categories are not entities.
2. Ontological Categories are involved in the individuation of entities (that is in the ‘singling out of entities in thought’) (Lowe, 2013, 11)
3. Ontological Categories are associated with the existence and identity conditions of the entities that belong to them.

The versions of these positions which I shall defend are not exactly the same as those which Lowe defends. In chapter two, I shall argue that Lowe’s account of ontological categories faces a number of problems which require that the account be modified. Nevertheless, a central claim of my thesis is that broadly Loweian ontological categories play an important role in successful ontological theories. The argument motivating my adoption of Lowe’s general approach to ontological categories (as outlined in 1-3 above) is a metaontological argument not specifically concerning Lowe. This argument will be presented in chapter one and will motivate my adoption and modification of Lowe’s account of ontological categories in chapter two. In chapter three, I shall present my own account, drawing on those of both E.J. Lowe and Bob Hale. Finally, in chapter four, I shall compare my account of ontological categories with alternative accounts. In some cases, I shall claim that the alternative account simply concerns a different notion of category. Where this is not the case I shall contend that my account is to be preferred. In chapters five and six, I shall argue that ontological categories as I have construed them ground, or partially ground, de re truths of metaphysical modality, and, possibly the truths of metaphysical modality generally.

§4

In his 2005 book on ontological categories, Jan Westerhoff argues that traditional views concerning the importance of such categories to ontology should be rejected. According to these traditional views, Westerhoff writes, “Every ontological theory will incorporate a system of ontological categories at its core” (Westerhoff, 2005, 12). It is exactly such a view which I wish to defend. I shall claim that ontological theories in a certain sense presuppose an ontology given by some ontological category, or ontological categories. I shall contend that this presupposition comes out in the attempted *use* of terms which are to be understood in a specified way. One way of presenting the claim that I am making is that ontological theories presuppose that there are things of some ontological category(ies) in question, i.e. that an ontological theory presupposes an ontology in terms of which it is given. In this chapter, I shall argue that this presupposition of an ontology by an ontological theory presents a serious challenge. A crucial part of my claim is the contention that, on some understandings of the content of claims that there are things of some ontological category, these claims presuppose exactly what they are used to assert. I shall argue that this should not be accepted and defend a way of understanding these existence statements which allows us to avoid the problem. The proposed way of understanding existence statements will motivate and support my construal of the notion of an ontological category.

§5

The alleged feature/problem is one of presupposition. Before addressing the question of why we should think that there is such a problem, I shall clarify the notion of presupposition which I have in mind. The relevant notion is that of semantic presupposition. The cases of semantic presupposition upon which I shall focus concern the way that the content which the expressions of a language (esp. referential expressions in a language) have depends on how the world is and what it contains.

The notion of presupposition which is currently most discussed in the literature is not this notion of semantic presupposition but a notion of pragmatic presupposition which is commonly contrasted with it. (Beaver & Geurts, 2011). Both notions of presupposition are closely linked to that of entailment. When a sentence A is a presupposition of a sentence

B, B entails A. What makes presupposition distinctive is that, in general², where A is a presupposition of B, not-B will also entail A. However, while semantic presupposition holds primarily between sentences or propositions, pragmatic presupposition holds only derivatively between sentences or propositions.

Stalnaker (1973) explains the notion of pragmatic presupposition explicitly by contrast with that of semantic presupposition and defines it as follows:

My notion will thus contrast with the standard account of presupposition which has been given by philosophers and linguists. According to this standard account, one sentence presupposes another just in case the latter must be true in order that the former have a truth value at all³...According to the contrasting idea that I will focus on, the basic presupposition relation is not between propositions or sentences, but between a person and a proposition. A person's presuppositions are the propositions whose truth he takes for granted, often unconsciously, in a conversation, an inquiry or a deliberation. (Stalnaker, 1973, 447)

Stalnaker avers that conversations take place in a context in which certain propositions are assumed to be true and contends that:

This background of knowledge or beliefs purportedly shared by the speaker and his audience constitute the presuppositions which define the context. (Stalnaker, 1973, 448)

Sentences such as 'Norah stopped smoking last year.' and 'John knows that Michael D. Higgins is the president of Ireland.' are typical examples of sentences which have features that pragmatic presupposition is used to explain. 'Stop' and 'know' as they occur in these sentences would be treated as presupposition triggers which require that the sentences' contexts of utterance include certain propositions ('Norah smoked prior to last year.', and 'Michael D. Higgins is the president of Ireland' respectively) in order for utterances of the sentences in question to avoid being infelicitous. It is characteristic of pragmatic

² It will invariably be the case with semantic presupposition that if A is a presupposition of B, both B and not-B will entail A. The qualifying phrase, 'in general' is included above because there is some debate in the literature on pragmatic presupposition about whether there are contexts where a presupposition of sentence does not project to its negation.

³ This characterisation of semantic presupposition is contentious. As will be noted in §6, it has been contended by, among others, Searle (1969) and Cooper (1974), that semantic presupposition cannot be defined in terms of truth-value gaps if it is to explain these truth-value gaps.

presupposition that complex sentences such as negated sentences, conditional sentences, and conjunctions inherit the presuppositions of their component clauses but not invariably, and not always straightforwardly. The phenomenon whereby the presuppositions are inherited is known as projection. The difficulties involved in predicting and explaining when the presuppositions of clauses are inherited by the complex sentences of which they are components gives rise to the projection problem which is the problem of predicting and explaining exactly that. (Beaver & Geurts, 2011). Pragmatic presupposition failure occurs when a proposition is taken to be part of the conversational context, but it is not. Pragmatic presupposition failure is not a serious problem; it generally results merely in infelicity. Speakers can even choose to utter a sentence which presupposes that the context contains propositions which it does not as a way of introducing those propositions into the context. Where this is successful, accommodation is said to have occurred but not all presuppositions are as easily accommodated as others. (Beaver & Geurts, 2011).

I will return to the topic of pragmatic presupposition briefly later in this thesis in discussing Ofra Magidor's use of the phenomenon of pragmatic presupposition to explain what she takes to be the characteristic infelicity of category mistakes. I will also touch briefly on the topic in discussing some of the consequences of my own view. However, at this point I have raised it only to set it aside and ensure that the notion of presupposition in which I am interested is distinguished from it.

The notion of presupposition which is relevant for my arguments in this thesis is a version of the notion of semantic presupposition which is preserved under negation and leads to truth value gaps of some sort.⁴ As noted earlier, with semantic presupposition, if a sentence

⁴ In his '*Presupposition*', D.E. Cooper includes these in his list of four salient characteristics of paradigmatic presuppositions (Cooper, 1974, 15), noting that for the semantic account of presupposition the truth value gap claim is the most important (Cooper, 1974, 32). He argues against accepting the semantic account of presupposition on the basis of what he contends are ordinary people's intuitions that the presupposing sentences are not truth valueless when the account says they should be. He notes that if there were theoretic pressure, ordinary people's intuitions would not be relevant (Cooper, 1974, 40) but argues that there is no such theoretic pressure. There are two problems with his argument for the conclusion that there is no theoretic pressure to regard sentences whose presuppositions are false as presenting truth value gaps. The first is that he considers a limited range of ways in which a sentence could presuppose. In the argument in question he mainly considers cases where the presupposition in question is that a definite description occurring in a sentence has to be satisfied e.g. 'The King of France' in 'The King of France is not bald'. But, as he elsewhere acknowledges, this is not the only way a presupposition can occur, and it is not, I shall argue, the form of presupposition which is most forceful in compelling us to accept truth value gaps. The second problem is that on the basis of the dismissal of one argument that might be used to provide the required theoretic pressure, Cooper concludes "that no argument can demonstrate that sentences do or do not lack truth values where their presuppositions fail" (Cooper, 1974, 40-41). In this chapter, I hope to provide some theoretic pressure to support the claim that the failure of some presuppositions does threaten to create truth value gaps.

B presupposes a sentence A, then not-B will also presuppose it, and if A is false, neither B, nor not-B will be truth apt. On one understanding, the truth value gaps to which semantic presupposition failure leads are propositions which lack truth values. Defending the claim that there are such gaps would require defending modifications to classical bivalent logic. I shall not defend the claim that there are propositions which lack truth values. What I shall defend is the claim that there are, or could be, sentences we might be inclined to call truth-apt which nevertheless actually fail to express propositions, and so fail to be truth-apt, due to a deficiency of content which results from semantic presupposition failure. Truth-value gaps of this kind do not require any revision of classical bivalent logic.

In much of the literature on presupposition, the notion of semantic presupposition is connected with the figures of Frege and Strawson. Given their specific views, this emphasis on Frege and Strawson has the result that discussion of the phenomenon of semantic presupposition often concentrates on the question of what is presupposed by sentences incorporating definite descriptions. For my purposes, the question of whether sentences incorporating definite descriptions presuppose the truth of sentences asserting the existence of entities which satisfy those definite descriptions will not be particularly important. Ultimately, for my own argument I shall be concerned only to claim that sentences presuppose the existence of those things which serve as the semantic values of their expressions. What those things are is a separate, and separately important, question. Different answers to the question of what semantic values are required by sentences can be defended. Indeed, the fact that different answers to this question can be defended, and that they lead to different understandings of the meanings of sentences is crucial to my arguments late in this chapter. Nevertheless, some example of expressions which trigger semantic presupposition is needed both to clarify the target notion of semantic presupposition and to defend the claim that there are expressions which are such that sentences incorporating them have these presuppositions. Names will serve this purpose in §7.

I shall discuss names as an example of an expression which triggers semantic presupposition both because names (of some construal or other) are the focus of much of the literature on semantic presupposition, and also because I take names to present us with an especially convincing example of semantic presupposition. I shall begin by providing a brief overview of the seminal debate on the notion of semantic presupposition from the literature. The semantic notion of presupposition is, as I noted previously, most closely

associated with positions of Frege and Strawson. These positions are best understood in the context of a debate between Frege, Russell, and Strawson.

§6

The notion of semantic presupposition has been widely understood in the literature to be relevant to the question of how we should understand singular propositions generally, singular existential propositions specifically, and even propositions of other forms (e.g. ‘All my children were asleep’ (Strawson, 1950, 344)).

The basic point is that the content of a name, or definite description occurring in subject position, seems to require the existence of that which the term denotes. The fact that this is the case and that its being the case can be a problem can be brought out by focusing on existential statements. In these cases, the sentence seems to require, in order that the name or definite description which it incorporates have content, that the referent of that name exist, even if that existence is exactly what is being asserted by the proposition in which the term occurs. The existential proposition would thus seem to presuppose exactly what it is being used to assert. That this is a problem is especially clear when we consider cases in which we would want to say that reference fails. Some take fiction to present us with examples of such sentences. Other typical examples are scientific posits which are ultimately rejected e.g. ‘Vulcan’, which was a planet posited to explain perturbations in the orbit of Mercury, e.g. ‘phlogiston’, which was the chemical element posited as that which was released in combustion. By considering these cases where the presupposition of a referent for a name is a problem, it can be made obvious both that the presupposition at least seems to occur and that its occurrence can be a problem. One of the main points of discussion in the debate between Frege, Russell, and Strawson is whether, and how, significance can be secured for sentences incorporating empty names since such sentences abound in natural language and are generally taken to be significant.

Frege introduced his position on semantic presupposition in ‘On Sense and Meaning’:

If anything is asserted there is always an obvious presupposition that the simple or compound proper names used have meaning. If therefore one asserts ‘Kepler died in misery’, there is a presupposition that the name ‘Kepler’ designates something; (Frege, 1892/1980(b), 69).

Frege aimed to accommodate the apparent significance of sentences containing names which failed to refer with his distinction between a name, its sense and its meaning. The name is the linguistic item, the meaning of the name is its referent and the sense of the name contains a “mode of presentation” of the referent. (Frege, 1892/1980(b), 57). Frege claimed that names without meaning (reference) could nevertheless have sense, and that sentences containing such names could be significant by expressing a thought, the sense of the sentence, even though these sentences would not designate a truth-value, the meaning of a sentence. The idea is that the sentence can have a sense because the name occurring in it does have a sense to contribute towards that sense, but the sentence can’t have a meaning, i.e. can’t have a truth value, because a name occurring in it lacks the meaning it would be required to contribute towards a meaning for the sentence.

Russell also recognised a presupposition problem and responded by distinguishing between logically proper names which presuppose the existence of their referents⁵ (basically just demonstratives) and natural language names which Russell claimed are usually⁶ disguised definite descriptions. Russell’s logically proper names were supposed to be such that their referents couldn’t fail to exist; one would have to be acquainted with an entity in order to use a demonstrative to refer to it. Given this, the fact that these logically proper names presupposed the existence of their referents was not supposed to be a problem because that presupposition could not fail.

Russell accepted that, unlike his logically proper names, his definite descriptions, and disguised definite descriptions, could fail to have bearers but he denied that these definite descriptions presupposed the existence of their referents. He attempted to resolve the presupposition problem for sentences involving definite descriptions by providing an analysis of such sentences which incorporated the existential claim which was putatively presupposed into the sentence which putatively presupposed it. On this analysis, the definite descriptions which would be thought to give rise to the presupposition problem

⁵ Here, and elsewhere, I speak of expressions presupposing the existence of their referents. I do this for the sake of convenience and perspicuity. As introduced, semantic presupposition is a relation between interpreted sentences or between propositions. All sentences where I speak of expressions presupposing the existence of their referents should in principle be able to be reformulated in terms of interpreted sentences or propositions presupposing the truth of interpreted sentences or propositions which assert the existence of relevant referents.

⁶ Russell (1912/1998) claimed that whether a natural language name actually functioned as a disguised definite description could vary between language users. The basis for this variation would be the kind of knowledge the language user had of the referent of the name. If it was the knowledge by acquaintance that one might have of oneself, the name could function as a logically proper name, but if it was the knowledge by description that people generally have of other people, then the name would function as a disguised definite description. (Russell, 1912/1998, 30-1)

were said to “have no meaning in isolation” (Russell, 1905, 492). For Russell, the significance which Frege seems to secure for sentences containing terms which lack denotation is insufficient. He contends that it is clear that these sentences do have a truth value, usually the truth value false (Russell, 1905, 484) Thus, he concludes that the denotations required for such a truth value must either be secured or rendered unnecessary for truth-aptness. (Russell, 1905, 484) His position aims to render the denotations in question irrelevant to truth-aptness. The analysis he provides for a sample sentence which might be thought to run afoul of the presupposition problem, ‘The round square is round.’, is: “There is one and only one entity x which is round and square, and that entity is round” (Russell, 1905, 491)

Responding to Russell, Strawson (1950) contended that the proposed resolution of the presupposition problem was misguided. Strawson argues that Russell went wrong in thinking that since a sentence is significant it must be truth-apt. Strawson contends instead that expressions are significant insofar as they *can be* used to refer to something (Strawson, 1950, 327) and sentences are significant insofar as they *can be* used to make true or false assertions. However, Strawson insists, it is *uses* of expressions that refer, and it is *uses* of sentences to make assertions that are truth-apt. If one fails in an attempted use of a sentence to refer to something even though such reference is called for, what one says will fail to be truth-apt. Strawson says in this circumstance there will fail even to be a use:

I will add that it will be used to make a true or false assertion only if the person who is using it is talking about something. If, when he utters it, he is not talking about anything, then his use is not a genuine one, but a spurious or pseudo-use: he is not making either a true or false assertion though he may think he is. (Strawson, 1950, 329).

For Strawson, when such presupposition failure occurs, the question of a sentence’s truth or falsity *will not arise*. Following Strawson, many, such as Stalnaker (1973) took truth-value gaps to be definitive of semantic presupposition:

According to this standard account, one sentence presupposes another just in case the latter must be true in order that the former have a truth value at all (Stalnaker, 1973, 447)

However, following Searle (1969), Cooper points out that if presupposition is defined in terms of truth-valuelessness, it cannot explain that truth-valuelessness (Cooper, 1974, 41). Defining presupposition in such a way would also capture something too broad. Given

these points, it can be seen that the conditions mentioned at the beginning of this section (according to which presupposition is preserved under negation, and leads to truth-value gaps in cases of presupposition failure) are necessary conditions for semantic presupposition but are not definitive of it. Hopefully, the overview provided above of the seminal debate between Frege, Russell, and Strawson on apparent cases of semantic presupposition build upon the necessary conditions and make the notion of semantic presupposition which was taken to be at issue clearer.

The notion of semantic presupposition which I shall appeal to is not tied to a specific verdict on the debate outlined above concerning definite descriptions. My own view simply relies on the claims; that many expressions in our language rely for their content on entities in the world which serve as their semantic values, that the way in which expressions in our language do this is systematic, and that where expressions rely for their content on the truth of an existence statement which is in fact false those expressions lack the content they need in order to play their role in sentences in which they occur.

There can be arguments over cases, and, as I have noted, I am certainly not committed to taking the cases discussed above to present the presupposition problem in the ways they are sometimes there held to. ‘The present King of France’ in ‘The present King of France is bald’ for example, may, I think, plausibly be taken to attempt to refer to a person in an indirect way which avoids presupposing the existence of a person who is the present king of France.

Nevertheless, it seems clear that the meaning of linguistic items in general depends in part on the world. In ‘General Semantics’ Lewis articulates the crucial point clearly.

The Markerese method is attractive in part just because it deals with nothing but symbols...But it is just this pleasing finitude that prevents Markerese semantics from dealing with relations between symbols and the world of non-symbols – that is with genuinely semantic relations.

(Lewis, 1970, 19)

We confer meaning on linguistic items by connecting them to the world in specified ways. In particular, insofar as one accepts a referential semantics, one may say that in many cases, we use things in the world to confer meaning on linguistic items. We need not, and should not, say that this is always the case. Lewis, in his argument against Armstrong’s use of a relation regress argument against various forms of nominalism emphasises the

impossibility of providing a fully general analysis of predication without using primitive predication, noting that an attempt to achieve this would simply open up an objectionable regress but could never succeed (Lewis, 1983, 352-3). Accepting this need not discourage those who think there are facts of the matter concerning ontology; as Sider points out (Sider, 2011, 13) we can take primitive predicates, like ‘instantiates’ as it occurs in Armstrong’s theory of universals, and ‘participates’ as it is used by Platonic realists, to make demands of the world, and to be such that it can succeed or fail to represent the world without demanding that it do so through denotation.

Insofar as one accepts a referential semantics, one often takes terms to connect to the world by having, or putatively having, a denotation. If this is the case, and it is the case that we can be mistaken in our understanding of how the world is made up, then it is plausible to think that such a mistake concerning what there is could lead to our mistakenly thinking that we have conferred meaning on some symbols when we have not. And where we are successful in using the world or something(s) in the world to confer meaning on some symbol, it is likewise plausible to think that we are successful in part because we are not mistaken in this way. The meaning conferred depends on the world being a certain way or containing a certain thing or certain things. Insofar as this is the case it seems to me that the meaning conferred will presuppose the existence of that in/of the world which was used to confer that meaning. It is this claim which I shall pursue.

I should note also that the primary notion of presupposition in which I am interested is not one connected to the conscious content of beliefs or to questions of rationality or irrationality. There will be a contradiction involved in using a term whose content depends on the existence of something to reject that thing’s existence. However, it is evident that it is not completely transparent what the things are in the world upon which our words depend. Given this, it need not be any more irrational to deny the existence of something with a sentence which presupposes the existence of that thing than it is to hold any other position which though it does not seem paradoxical, can, ultimately, be revealed to be paradoxical. In keeping with this, I should note that when I say that someone presupposes something in this primary sense, I am not saying that that person holds the position that it exists.

In my attempt to clarify the notion of presupposition which I shall make use of in this thesis, I have distinguished it from the more frequently discussed notion of pragmatic presupposition, and in so doing, set aside as irrelevant the examples of sentences which are used to make the notion of pragmatic presupposition clearer. I identified the notion

with which I am concerned as a version⁷ of the notion of semantic presupposition and provided an overview of a seminal debate from the literature concerning that notion, but I went on to set aside the example of semantic presupposition upon which that debate focuses, definite descriptions, as an example which is not necessarily apt. I suggested that definite descriptions are very plausibly not a case of semantic presupposition in the way that they are taken to be by Frege and Strawson. Certainly, it is plausible that they have semantic values, and if they do they presuppose the existence of the entities serving as their semantic values. I just do not find it particularly plausible that they presuppose the existence of bearers which satisfy the relevant descriptions. Other people might find this plausible. Alternatively, one might give an account of the semantic value of a definite description which took it to be something, such as the intersection of various sets, which itself required the existence of the relevant entity. My position does not require me to take a firm view on this question. However, one consequence of my lack of commitment on this question is that I am not taking definite descriptions to be useful, or even somewhat clear, examples of the target notion of semantic presupposition.

I have located the notion of presupposition in which I am interested within a theoretical debate but since I have, to some degree, set aside the examples which are used to clarify the other notions of presupposition addressed in that debate, what remains to be done in clarifying the notion of presupposition I have in mind is to provide an example. Names seem to me to provide such an example⁸.

For this reason, in the next section I shall conclude my attempt to clarify the notion of semantic presupposition that is relevant to my argument by providing a little more discussion of the case of presupposition as it occurs with names. I shall focus on attempts to allow singular existential claims to have a truth value within a Fregean account of names. Singular existential sentences present us with a particularly pressing case of the presupposition problem because we face strong pressure to allow them to come out true or false, not merely truth-valueless. Nevertheless, standing in the way of our doing so is the fact that the names figuring in these sentences seem to presuppose the existence of their bearers.

⁷ Perhaps narrower in some ways, more general in others.

⁸ They provide an example but not an uncomplicated one. Later, in the thesis I will have more to say on the question of what is plausibly presupposed by what. Ultimately, I shall not take the undifferentiated class of names to be particularly useful for saying what semantic values are required for our language to have its content.

I shall focus on the Fregean attempt to resolve this problem in part because versions of it are widely adopted for singular existential statements and in part because a parallel course is very widely embraced for the case of general existential claims/ categorial existence claims. It is the general existence claims/categorial existence claims with which I shall mainly be concerned in the body of this thesis, but I think both versions fail for similar reasons. If that is correct, then drawing out what goes wrong in the case of singular existential claims will be useful both in itself and by way of preparation for the later discussion of general existential claims.

I shall not claim that my conclusion, that names presuppose their bearers, is ineluctable. I shall only claim that it is difficult to avoid, that many attempts to avoid it are unsuccessful, and thus that names present at least a prima facie plausible case of semantic presupposition of the kind I am interested in. I shall also claim that a successful attempt to avoid the conclusion that names presuppose the existence of their bearers would simply shift what it was whose existence is presupposed. Such a result is completely acceptable for my overall argument. For my purposes, all I need to argue is that names are at least a prima facie plausible case of the notion of presupposition at issue and that as such they facilitate an understanding of the notion of presupposition which is at issue.

§7

In this section, I shall discuss in greater detail the problem of presupposition as it occurs for names in order: (a) to make the alleged problem clearer, and (b) to present arguments against some apparent solutions. The problem is clearest in cases where we would want to deny the presupposed existential claim. For this reason, discussions of the problem often focus on sentences involving fictional names, e.g. ‘Sherlock Holmes lives at 221b Baker street’, or mythical names e.g. ‘Odysseus was king of Ithaca’, or on negative existential claims that we would want to count as true. I am going to focus on true negative and false positive existential claims in part to avoid debates around the status of fictional or mythical entities but mainly because of the importance of existential claims in ontology and because it seems especially counter-intuitive that a negative existential claim should presuppose exactly what it is being used to deny.

The basic function of a name is to designate an object. Intuitively, understanding a particular name involves knowing what object that name designates. If a name occurs in subject position in a subject predicate sentence, e.g. ‘Agustin Creevy is an Argentinian

rugby player.’, it seems that the name serves to refer to something in the world, Agustin Creevy, and the sentence says something about that thing, that it is an Argentinian rugby player. A negative existential sentence which we want to regard as true cannot be treated in this way despite the fact that it appears to be a subject predicate sentence. It cannot be treated this way because if we took the name to denote something in the world which the sentence went on to say something about there would be no way for the sentence to be true. We seem to face a presupposition problem in understanding what is said by these sentences. The case is complicated by the fact that although the problem seems most acute when we want to count a negative existential sentence to be true or a positive existential sentence to be false, as Kripke notes (Kripke, 2013, 147) we cannot plausibly give different analyses of existential sentences depending on whether they are true or false. Further, the way the problem occurs indicates that, at least *prima facie*, names are taken to presuppose the existence of their referent; we face a problem with negative existentials, a need to provide alternative analyses to either resolve the problem or show that there was never a problem to begin with, exactly because names are generally taken to presuppose the existence of their referents but in these cases, it is implausible for them to do so.

§7.1

How might we either resolve or avoid the problem?

Frege’s solution (1892/1980(b)), which was outlined above, does not involve denying that the content of a name, in one sense of content, depends on its having a referent. Frege does deny that a name without a referent will fail to be significant. It will be significant because it will have a sense and so sentences in which it occurs will be able to express a thought. However, since the name does not have a referent to contribute to the sentence, the sentences in which it occurs will not be truth-apt. So, on Frege’s position, it is accepted that names presuppose their referent:

I reply that when we say ‘the Moon’, we do not intend to speak of our idea of the Moon, nor are we satisfied with the sense alone but we presuppose a meaning.

(Frege, 1892/1980(b), 61)

Indeed, Frege contends that in a logically perfect language all names will be guaranteed a referent (Frege, 1892/1980(b), 70). Since he accepts that the content (in one sense) of names presupposes a referent and that sentences containing names without such a referent

fail to be truth-apt, Frege needs to provide an alternative analysis of existence sentences in which such names seem to occur in order to be able to take such sentences to be truth-apt. He does this by arguing that existence is a second order concept (Frege, 1892/1980(a), 49). It will therefore be first order concepts, not objects, which fall under the second order concept of existence.

§7.2

What first-order concept does Frege take existence to be said of? There is one passage in ‘On Concept and Object’ which suggests it is the concept denoted by ‘being named ‘...’’. This is not the only or the most plausible interpretation of Frege’s view, but it is one worth pausing on just to point out why it wouldn’t work.

I do not want to say it is false to say concerning an object what is here said concerning a concept; I want to say it is impossible, senseless to do so. The sentence ‘there is Julius Caesar’ is neither true nor false but senseless. The sentence ‘there is a man whose name is Julius Caesar’ has a sense, but here again we have a concept as the indefinite article shows.

(Frege, 1892/1980(a), 50)

Dummett treats this as an available, though not a particularly plausible, interpretation of Frege’s view (Dummett, 1993, 283) and both he and Kripke make the same obvious objection (Dummett, 1993, 283) (Kripke, 2013, 153); understood in this way, the claim would fail to express the intended content. We want to say that some person doesn’t exist but the non-existence of whoever we are interested in is compatible with many others who exist being called by the same typographically individuated name. Thus, the simplest version of a meta-linguistic approach to existence sentences, the simplest version of what Quine would call semantic ascent (“the shift from talking in words to talking about them” (Quine, 1960/2013, 250)) is clearly not sufficient to resolve the problem because it fails to capture the intended content; it could be true that a word, typographically individuated, has reference even though the use, in some sense, that we are interested in does not succeed in referring.

§7.3

A more plausible understanding of Frege's solution draws on his notion of sense. As noted above, Frege allows that names (a term he construes broadly to include definite descriptions) which lack referents can nevertheless have a sense. For Frege, senses are modes of presentation of their referents. What are modes of presentation? It might be thought that there cannot be a mode of presenting that which doesn't exist. Although this might be thought to be supported, for instance, by an analogy Frege uses in explaining sense (the moon (the referent), the telescope image (the sense), and the retinal image (the subjective idea)), ultimately, it is clear from Frege's writings that senses are to be capable of existing even though the denotation of the name of which the sense is a sense does not exist. Further, if senses are to be useful in the task at hand, providing a first order concept which can be said to fall or not fall under the second order concept of existence, then senses will have to be first order concepts.

What first order concepts will they be? One option is that they should be concepts by which we recognise, or attempt to recognise, the object in question. Kripke (1981) has provided well-known and compelling objections against the satisfactoriness of this option. Kripke argues that uniquely identifying features are usually just contingently held by an object and thus the general absence of anything satisfying a condition specifying those features does not necessitate the truth of the conclusion that an object in question does not exist. There could be a world in which an object in question both existed and failed to satisfy the relevant concept. Identifying the sense with a concept which specifies the features we use to identify an object and then saying that nothing satisfies that concept seems to get the content of an existence claim wrong.

Another option, pursued by Dummett (1993) and others is to take the relevant concept to be a concept such as e.g. that denoted by 'identical to Venus'. One problem with this is that intuitively the content of a condition 'being identical to Venus' depends on there being such a thing as Venus to be identical to. In Fregean terms, one might think that the name needs to have a denotation to contribute to the denotation of the predicate if the predicate in which it occurs is to have a denotation and we need it to have a denotation because we need it to denote the first order concept we want to predicate existence of.

So Dummett faces the problem of the source of the content of the 'Arthur' in the concept 'identical with King Arthur' which is to exist regardless of whether Arthur himself does. He contends that the source is to be the sense of the name:

That a name lacking reference may still have a sense resolves our uncertainty whether, if King Arthur did not exist, there is any such concept as *being identical with King Arthur* (Dummett, 1993, 289).

But the sense of a name seems to be taken in two different ways by Dummett as both the manner in which something is given to us “the sense is no more and no less than a particular way of singling out that object” (Dummett, 1993, 227); which seems to be what Frege held it to be, and “an agreed means of determining, for any object, whether or not it is the bearer of the name” (Dummett, 1993, 289). These two understandings would only coincide if an object’s manner of presentation were essential to it and therefore being presented in a certain way could determine that something was the referent of a name.

As noted above, Kripke has presented cogent arguments against such a position and Dummett himself seems to reject it in his argument against Miller’s position that a name should be taken as a predicate. If an object’s satisfaction of a concept is contingent, then it doesn’t need to satisfy the concept in order to exist and satisfaction of the concept cannot be among the conditions for ‘being that object’. Without these contingent features, the sense doesn’t seem to yield a uniquely determining condition. But if one accepts that the sense of ‘King Arthur’ taken as a manner of presentation cannot yield such a condition, we cannot use it to provide the content of Arthur in the concept ‘being identical to King Arthur’, if that is to be the condition for something being King Arthur, and thus as the first level predicate of which existence is denied in the negative existential claim.

Taking just the second option, whereby the sense of a name is “an agreed means of determining, for any object, whether or not it is the bearer of the name” (Dummett, 1993, 289), as the sense of the name ‘King Arthur’ is also problematic. Dummett writes that a “complete sense borne by a proper name” is “one which uniquely determines the bearer of the name” (Dummett, 1993, 289) and he also writes of “the condition which someone must have fulfilled for him to have been King Arthur” that “to fulfil that condition is precisely to fall under the concept *identical with King Arthur*” (Dummett, 1993, 290). Having ruled out manner of presentation as the relevant condition, this makes it appear that the sense of the name ‘King Arthur’ is the condition of falling under the concept *identical with King Arthur*. But if the sense of the name *is this condition*, then the sense of the name can’t also

be the source of content for 'King Arthur' as it occurs in this condition. That would yield a circularity which, when looking for a source of content, can't be accepted.

So even though the sense of the name 'King Arthur' is taken to allow for the existence of the concept *identical to Arthur*, independent of the existence of Arthur, the sense of the name appears to consist in the condition of falling under that concept and therefore there does not appear to be a source for the content of 'King Arthur' in the concept *identical with King Arthur*. This is a problem.

The circularity can be seen in Dummett's summation of the proposal:

there must be a condition which must hold if the singular term is to have a referent and which is not necessarily known to hold by anyone who grasps the relevant use of the term: the content of the affirmative existential statement will then be that this condition obtains

(on Dummett's account this condition is that something falls under the concept e.g. *identical to King Arthur*)

There will be such a condition only if the term, as so used, has a sense. The sense of the term will consist in the condition that any given object has to satisfy to be the referent of the term.

(on Dummett's account the condition an object has to satisfy is to fall under the concept e.g. *identical to King Arthur*)

the condition for it to have a reference is then that there is some such object

(Dummett, 1993, 297)

(on Dummett's account the condition for 'King Arthur' to have a reference is for something to fall under the concept *identical to King Arthur*).

But if, as outlined above, the sense of the name 'King Arthur' is the condition of falling under the concept *identical to King Arthur*, this sense presupposes, and therefore cannot provide, the content for 'King Arthur' as it occurs in the predicate apparently denoting the concept. The name seems to occur in its own sense. This being the case, and having already ruled out manner of presentation as the source of content for the name as it occurs

in the concept, it does not appear that there is a source for the content of ‘King Arthur’ as it occurs, apparently independently of the existence of King Arthur himself, in the concept *identical to King Arthur*. This is a serious problem for the account as an explanation of true negative existentials involving empty names.

§7.4

So, the presupposition problem for names remains unresolved. The basic problem, as Kripke (2013) diagnoses it, is that we seem to need to *use* a term, not merely mention it, in order to make an existential claim but using it seems to require that its referent exists. So, it at least seems to be the case that the use of names, paradigm tools of reference, presupposes the existence of the referents of those names. The content of the names, in one sense of content at least, seems to require that the entities exist.

There are other ways one might develop Frege’s view, and there are other similar views. However, since my primary interest is not in the case of names themselves but in the way in which the content of linguistic terms depends on, and thus presupposes, the entities in the world used to confer that content upon those terms, I don’t need to argue that it is impossible that any such attempt should be successful. Instead, having used the case of names to present what is at least a *prima facie* forceful case of presupposition, I can note that if any attempt along the lines of that described above were successful, it would simply change what was presupposed.

Instead of presupposing the existence of a person, Arthur, it would presuppose the existence of a concept/property, *...is identical to Arthur*. In such a case, we would have interpreted the existential sentence in such a way that it no longer referred to Arthur and said something about him but instead referred to a concept/property, *...is identical to Arthur*, and said something about it, i.e. that it falls under the higher-level property *...is instantiated*. The content of the language would still be provided, at least in part, by some entities. In order to be *used* the words would need to have the content thus provided, and thus the use of the words (semantically individuated) would presuppose the existence of the relevant entities, here first-order concepts and possibly also second-order concepts. In this way, the problem of presupposition generalises. It is not just a problem that comes up for names. It is the generalised version of the problem in which I am really interested and which I shall pursue in the next section.

The last three sections focused on introducing and clarifying a notion of semantic presupposition and motivating the appeal to it. The motivating idea is that language, as used in truth-apt sentences⁹, depends on the world for its content in systematic ways. A sentence incorporating expressions of various kinds presupposes the truth of claims that the semantic values of its expressions exist. At the end of the last section, I emphasised one way that the presupposition problem generalises; it is not only names whose content depends on the existence of their semantic values but also expressions of other kinds. For instance, a specific predicate might depend for its content on the existence on a specific property. In both of these cases, however, what is at issue is the way that the content of individual expressions depends¹⁰ on the existence of their individual semantic values, e.g. specific names on their bearers. The discussion of the literature on semantic presupposition in the previous sections also concentrated mainly on the way that individual expressions require the existence of their individual semantic values. In this section, and those following it, I shall focus more on the claim that the way in which our language depends on the world for its content is systematic¹¹.

Expressions of varying kinds have varying kinds of semantic values. We can distinguish between expressions on the basis of the different kinds of entities they need as semantic values; the differing kinds of entities which sentences incorporating these terms will presuppose the existence of. In this section, I am going to connect this systematic version of the phenomenon of semantic presupposition to the question of ontology, the question of what there is. Ultimately, I shall claim that it is ontological category notions with which we can answer this question, and articulate the kinds of entities the existence of which is required if our language is to have its content.

There is an obvious way in which this approach draws on, and seems to fit neatly with, the well-known Quinean dictum that we should affirm the existence of whatever entities

⁹ What I am interested in is how language depends on the world when we succeed in making the connection with the world which is required for the expression of truth-apt sentences. In other words, I am interested in how language depends on the world in those cases where things go right in the way required for us to be able to express truth-apt sentences. Later in the thesis, I shall discuss briefly a case where things go wrong in the sense that although we are trying to express truth-apt sentences, we fail to. I shall not be engaging with the question of how we should understand the meaning of expressions which do not express, or try to express, a proposition.

¹⁰ As I discuss in greater detail elsewhere in the thesis, I take the phenomenon of semantic presupposition which holds between interpreted sentences or propositions to be a consequence of the status of words as artefacts dependent for their identity on what they denote.

¹¹ Later in the thesis, the systematic dependence and the individual dependence will be linked.

are required for the bound variables of first-order quantification to range over in order to make the sentences of our best theory true. Over the course of this section, part of what I shall do is draw out and defend this connection between the Quinean approach to ontology and the basic approach to ontology which I am in the course of developing and defending. However, I shall also complicate the connection.

Realism about metaphysics will be an assumption of this thesis. What I mean by this is that it will be a default assumption of this thesis that there is a correct answer to the question of what there is, and that the correctness of this answer is not a mind-dependent matter. This assumption will not go completely unquestioned. I shall defend realism about ontology against some specific challenges. However, I shall not attempt to give an independent defence of it. My assumption of realism about ontology will be the point which complicates the relation of my approach to Quine's. My approach takes there to be a fact of the matter about the entities in the world which our expressions take as their semantic values, and on which they depend for their content. In a later chapter, I shall defend a version of the view that articulating what those entities are on which our language depends on for its content is how we can make claims about what there is. One of the central claims of the thesis will be the claim that it is with category notions, understood in a specific way, that we can do this.

By contrast, I shall argue, Quine's approach to ontology is more pragmatist than is usually¹² realised. I shall identify and set aside some of the aspects of his approach which are tied up with his pragmatism on the basis that they are incompatible with a realist approach to ontology. Another claim I shall go on to make later in the thesis, and for which I shall lay the groundwork in this section, is the claim that there are aspects of the position that Carnap uses to dismiss ontology that can be usefully appropriated by a realist about ontology¹³ and that will fit in well with the realist approach for which I argue.

¹² The pragmatism of Quine's approach to ontology is not widely acknowledged in metaphysics but there is a growing recognition of it in recent literature on metaontology (see for example (Metametaphysics, 2009)). I draw on and discuss some of this literature in making the argument of this section.

¹³ In making this claim I am following Amie Thomasson (2015) to some degree but the way in which I propose to make use of Carnap's approach differs significantly from the way in which she does. I shall discuss this in greater detail later in the chapter.

§8.1

Much of the recent discussion in metaontology has focused on the debate between Carnap and Quine, (Carnap, 1931) (Quine, 1948/1980) (Carnap, 1950/1956) (Quine, 1951/1980) (Quine, 1951 (b)) on the status of, and appropriate methodology for, ontology, and on the widely held view that Quine won this debate and in so doing defended heavyweight or realist ontology. Putnam's claim that Quine saved ontology is frequently quoted.

If we ask when ontology became a respectable subject for an analytic philosopher to pursue, the mystery disappears. It became respectable in 1948, when Quine published a famous paper titled "On what there is". It was Quine who single-handedly made Ontology a respectable subject. (Putnam, 2004, 78-9)

Much recent discussion has focused on the questions of what was really defended by Quine, what the disagreement between Carnap and Quine actually was, and whether a version of Carnap's position can be defended against Quine's criticisms.

Quine presents what he calls the ontological problem as the question 'What is there?' (Quine, 1953/1980, 1) and with his first comment on this problem he might be thought to raise the question of what kind of term would occur in an appropriate answer. He claims that 'everything', though accurate, is not enough to provide a satisfactory answer to the question: "There remains room for disagreement over cases" (Quine, 1953/1980, 1).

Quine's reputation as the saviour of ontology rests to some extent on his introduction of a method of determining ontological commitment which has subsequently been widely adopted. Having argued that Russell's theory of descriptions can be used to resolve the presupposition problem for names, he concludes that "the burden of objective reference" (Quine, 1953/1980, 6) is not borne by names but only by the bound variables of first-order quantification. Accordingly, the test for ontological commitment concerns those variables. Quine claims that we should affirm the existence of those entities which these bound variables of first-order quantification have to range over in order to make the sentences of a favoured theory true.

There are two points which I want to emphasise about this. The first is that this is a test of presupposition, but the relevant notion of presupposition differs subtly from that which upon which I have been focusing. The notion of presupposition in play here is what I shall call the derivative notion. I shall expand on what is meant by this later, but the basic idea

is that instead of presupposing the truth of some existence statement itself, with Quine's notion what is presupposed is the truth that someone has made an existence claim.

The variables of quantification, 'something', 'nothing', 'everything', range over *our whole ontology*, whatever it may be; and we are convicted of a particular ontological presupposition if, and only if, the alleged presuppositum has to be reckoned among the entities over which our variables range in order to render one of our affirmations true.

(Quine, 1953/1980, 13) (italics added)

The second point I want to emphasise is that for Quine, the answer you give to the ontological question by saying what your variables range over will be a consequence of a more general ontological position you have taken. Quine is explicit about this. We don't determine what there is by considering what our variables range over. We determine what we have already taken there to be by considering what our bound variables of quantification range over.

We look to bound variables not in order to know what there is, but in order to know what a given remark or doctrine, ours or someone else's, says there is; and this much is quite properly a problem involving language. But what there is is another question.

(Quine, 1953/1980, 15-16)

How do we determine the answer to this other question? In keeping with Quine's confirmation holism (Quine, 1951), he contends that we are to use theoretical virtues such as simplicity, adequacy, economy and efficaciousness to evaluate a potential position. If we can provide acceptable paraphrases of sentences of a given kind (e.g. of sentences concerning species), then we need not accept entities of that kind (e.g. species) among the values of our bound variables, and if we need not, we should not.

We adopt insofar as we are reasonable the simplest conceptual scheme into which the disordered fragments of raw experience can be fitted and arranged. Our ontology is determined once we have fixed upon the overall conceptual scheme which is to accommodate science in the broadest sense.

(Quine, 1953/1980, 17)

§8.2

As noted at the beginning of this section a question raised frequently in recent metaontological literature is the question of what sort of realist ontology Quine can be said to save or defend with the above view.

Huw Price (2009) emphasises that Quine takes the relevant considerations to be broadly pragmatic ones (Price, 2009, 327). And having noted above that Quine takes the question of what is there to be answered once one has fixed upon a conceptual scheme which accommodates science, we can look to ‘Two Dogmas of Empiricism’ and find Quine elaborating what is meant by ‘conceptual scheme’ in a way which supports Price’s contention.

As an empiricist I continue to think of the conceptual scheme of science as a tool, ultimately, for predicting future experience in light of past experience...Physical objects are conceptually imported into the situation as intermediaries...as irreducible posits comparable epistemologically to the gods of Homer...The myth of physical objects is epistemologically superior to most in that it has proved more efficacious than other myths as a device for working a manageable structure into the flux of experience

(Quine, 1951/1980, 44)

Price’s claim is that insofar as Quine is adopting conceptual schemes which yield an answer to the question of what there is on the basis of pragmatic considerations, he cannot plausibly be taken to be defending a realist approach to ontology, and he is not really at odds with Carnap’s anti-metaphysical claims (Price, 2009, 325-7)

§8.3

As noted previously, Carnap has often been taken to have been the defeated participant in a debate with Quine on the status of ontology but recently that status has been called into question. Many metaontologists who are in one way or another sceptical of realist or heavyweight ontology now defend what they identify as neo-Carnapian views, for example Amie Thomasson and Eli Hirsch. These views tend to draw upon the notion of linguistic frameworks which Carnap proposes in his paper, ‘Empiricism, Semantics, and Ontology’ (1950/1956) and which he uses to argue that the existence questions metaphysicians focus on are meaningless because insofar as they are significant they can

generally be given trivial positive answers. In this subsection, I am going to present two of Carnap's arguments against the significance of ontology in order to draw out the comparison with Quine, consider whether we should think Carnap's arguments against the significance of metaphysics are successful, and provide the set up for later considerations of the neo-Carnapian position of Amie Thomasson.

In a paper titled 'The elimination of metaphysics through the logical analysis of language', Carnap argues that logical analysis can reveal that metaphysical statements are meaningless either because they contain words which have been deprived of their customary meaning but not supplied with a new one (Carnap, 1931, 66) or because they fail to be well-formed in a way that is not immediately apparent due to a gap between logical syntax and grammatical syntax (Carnap, 1931, 67). Carnap's argument for the meaningfulness of terms occurring in metaphysics is based on an empiricist criterion of meaning.

Every word of the language is reduced to other words and finally to the words which occur in the so-called "observation sentences" or "protocol sentences". It is through this reduction that the word acquires its meaning. (Carnap, 1931, 62)

Carnap uses examples of sentences from metaphysicians (esp. Heidegger) to defend the claim that sentences occurring in metaphysics are guilty of what he identifies as errors. However, even if successful, this would only be sufficient to justify a dismissal of these sentences, from these metaphysicians. It would not be sufficient to justify a dismissal of all of metaphysics. To justify such a dismissal Carnap claims that the sentences of metaphysics fail to be meaningful because they aim to state that which in principle cannot be stated "knowledge which is not accessible to empirical science" (Carnap, 1931, 76). The claim that such an attempt could never succeed is based on the specific empiricist criterion of meaning which Carnap supports. According to Carnap, the sentences in question will always be meaningless because "the meaning of a sentence is given by its method of verification" and so, "such sentences cannot possibly be expressed" (Carnap, 1931, 76).

Carnap's argument for the meaningfulness of metaphysical claims in his (1931) is based on an empiricist criterion of meaning which is assumed but not defended in the piece. This criterion of meaning is used to make the argument that specific terms as used by metaphysicians are meaningless because they cannot be appropriately connected to observation sentences. But the position that such reduction is required for meaning is not

particularly plausible (indeed it no longer defended in his (1950/1956)) and it seems itself be based on, if not a specific ontological position, then at least a position which rules out a broad range of ontological positions. Carnap says he won't commit to a position on the content of observation sentences but it is clear that there are many putative entities which are not even thought to be such as to serve as or to be part of that content. Carnap's subsequent move from arguing that sample sentences from metaphysics are meaningless to the more general conclusion that all sentences of metaphysics are meaningless is also justified by his empiricist criterion of meaning. Resisting Carnap's conclusion just requires rejecting his empiricist criterion of meaning or even just refusing to accept its inclusion as an undefended premise in an argument of this kind.

The anti-metaphysical position of Carnap's which is most frequently defended by contemporary metaontologists is not that outlined above. It is the position he articulates in 'Empiricism, Semantics, and Ontology' (1950/1956). In that paper, Carnap aims to allow for reference to and quantification over entities of various kinds (e.g. things, abstract objects, numbers) in a way that is free of any ontological commitment that would be objectionable to empiricists. In order to do this, he introduces the notion of a linguistic framework.

How the notion of a linguistic framework should be understood is a question whose answer is much disputed in the literature. As Carnap introduces it, it seems to be a set of conventions the adoption of which allows for expansion in some sense of a previously used language.

If someone wishes to speak in his language about a new kind of entities, he has to introduce a system of new ways of speaking subject to new rules; we shall call this procedure the construction of a linguistic framework for the new entities in question

(Carnap, 1950/1956, 205)

Although the way Carnap writes here of wanting to speak of a new kind of entities might lead one to think that this new kind of entities had been antecedently recognised, that is exactly the sort of claim that Carnap is most concerned to deny. He notes that although he speaks of "the acceptance of a new kind of entity...this phrase does not mean for us anything more than acceptance of the new linguistic forms" (Carnap, 1950/1956, 214). Carnap uses the notion of linguistic framework to make a distinction between internal and

external questions. The idea is that internal questions are asked within the framework in some way whereas external questions are asked outside of it.

Price contends that the best way to understand this distinction is to understand it as a distinction between the use and mention of terms (2009, 324). The way that Carnap talks about his frameworks supports this interpretation: “Internal questions and possible answers to them are formulated with the help of the new forms of expressions” (Carnap, 1950/1956, 205). External questions, by contrast, are introduced as questions about “the existence or reality of the system of entities as a whole” (Carnap, 1950/1956, 205). Carnap’s claim is that existence questions of the kind philosophers ask (e.g. Are there properties?) have trivially positive analytic answers if they are understood as internal questions, as questions asked using the framework. However, if they are understood as questions asked outside the framework they lack cognitive content. Carnap claims that the only way an external question is other than meaningless is if it is the pragmatic question of whether it would serve one’s purposes to adopt some particular framework. Carnap claims that this is “a matter of practical decision” rather than “a theoretical question” (Carnap, 1950/1956, 205).

The use vs. mention interpretation of Carnap’s internal/external distinction seems to bring us back to the problem of presupposition. It seems to present us with exactly that problem. If our terms rely on certain entities for the content which allows for their use then, if they can be used, it follows that whatever supplies the content allowing for this use exists. By contrast, if we try to avoid presupposing the content by merely mentioning a term, we have great difficulty in saying what we want to say or even saying anything at all. Amie Thomasson (2015) defends what she calls an easy ontology of simple realism on the basis of an interpretation of Carnap’s distinction which takes something like this line. I will consider Thomasson’s position later in this chapter. Thomasson does not offer her interpretation as an exegesis of Carnap’s position but instead as a promising way to interpret it. She deliberately sets aside other aspects of his position in order to develop what she takes to be the most promising parts of his view into her own Neo-Carnapian position. I shall discuss Thomasson’s Neo-Carnapian position later in this chapter but the point I want to make here is simply that insofar as we are interested in exegesis of Carnap, this doesn’t seem to be the right way to interpret him.

The interpretation outlined above builds on recognition of the fact that language depends on the world for its significance and that at least some expressions depend for their content on an entity in the world which is their referent. In his (1950/1956), Carnap doesn’t seem

to accept this. He goes back and forth between talk of accepting new entities and talk of accepting new forms of expression and repeatedly insists that the former amounts to no more than the latter (Carnap, 1950/1956, 207) (Carnap, 1950/1956, 214). His frameworks seem to amount to no more than systems of rules for manipulating symbols; to construct a framework you simply need to provide expressions with specified rules governing their behaviour. The introduction of numerals and sentences containing them is not explicitly tied to the world in any way. There could be a version of such a view in which we would find the worldly component of the semantics for these terms in the introduction rules of the terms for them but Carnap could not allow this. He would reject any appropriately overarching notion of a world or reality. He specifically denies what he takes to be the metaphysicians' demand for "some ontological insight" to justify the introduction of the terms (Carnap, 1950/1956, 214), and although he claims that the rules for 'designates' and 'exists' allow for trivial analytic inferences of the claims that e.g. " "five" designates a number" and "Abstract objects exist" (Carnap, 1950/1956, 217) (Carnap, 1950/1956, 209) the main claim of his article is that one can accept claims like this without accepting a Platonist ontology or indeed any ontology. In light of this, it doesn't seem that the internal/external use-mention distinction, as Carnap employs it, can give rise to the presupposition problem in the way it might seem to. Since the framework specific terms in internal statements haven't been provided with worldly referents, the problem for external statements can't be a lack of such referents.

Indeed, when we look to Carnap to see the basis he provides for the dismissal of external questions, we do not find claims about lack of content for framework specific terms in external questions. Carnap's justification for dismissing external questions has to do with notions of reality. He interprets the question of whether numbers exist, understood as an external question, as a question about whether *a system* exists (Carnap, 1950/1956, 205) (*italics added*). Carnap objects to this question by claiming that for something to exist is for it to exist within some system. It seems that there cannot be systems of systems because Carnap claims that being an element of a system is not something which can be meaningfully said of systems themselves¹⁴. (Carnap, 1950/1956, 207).

In light of the above, it can be seen that Carnap's dismissal of metaphysics in his (1950/1956) depends on two claims: (1) Metaphysicians are trying to make external

¹⁴ It is worth noting that it is not clear why there shouldn't be systems of systems. Insofar as, for Carnap, accepting systems seems often to be no more than accepting new forms of expressions, systems of systems would be new forms of expressions for new forms of expressions which seems to be exactly what Carnap is proposing in introducing talk *about* frameworks.

existence statements (in his sense of external statement). (2) There is no overarching notion of reality and no notion of reality which is common to different systems of entities so there is nothing coherent we could mean by asking whether some thing or things are real/exist simpliciter.

Both of these claims can be resisted. In asking about whether abstract objects exist metaphysicians are asking about whether those entities exist. It is difficult to give the content of that question but claiming that it is a question about whether some other entity, the system containing those entities, exists just seems to get the content wrong and Carnap provides no real justification for the interpretation. But it is an important claim for his argument because Carnap's claim seems to be that to exist is to exist within a system but, he claims, that is not something that a system can be said to do. Thus, the external existence statements which have been thus interpreted lack cognitive content because they are not well-formed.

That brings us to claim (2). It too may be resisted because it seems that there really is a commonality to be captured. Even if, for the sake of argument, we accept Carnap's claim that different notions of reality correspond to different systems, still insofar as they are all *notions of reality*, there seems to be a commonality. Indeed, it is this commonality that allows Carnap to make a general claim like the claim that "To be real in the scientific sense means to be an element of the system" (Carnap, 1950/1956, 205). If there is a coherent general notion of being real, then one can claim that we are pursuing the answer to this question by asking a system relative one. If that is the case, we can claim coherence for what looks like a non-internal question of existence. If we reject both (1) and (2) above, we can also reject Carnap's conclusion that the statements of metaphysics are external statements (in his sense) which lack cognitive content.

§8.4

As noted, a number of philosophers in recent metaontological literature (e.g. (Eklund, 2013) (Price, 2009)) argue that those who take Quine to have saved ontology from Carnap's anti-metaphysical arguments fail to appreciate how much Quine and Carnap have in common. Eklund notes that both Quine and Carnap took the analytic/synthetic distinction to be relevant to their debate over ontology. In an attempt to see how it could be relevant, Eklund (2013) draws out a number of potential interpretations of Carnap's frameworks. He notes that Carnap creates a three-way distinction: (1) internal questions,

(2) external questions understood as pragmatic questions, and (3) external questions understood as factual questions. He argues that in attacking the analytic/synthetic distinction, Quine doesn't argue against Carnap's dismissal of group (3) but instead argues against Carnap's distinction between groups (1) and (2) (Eklund, 2013, 237). Somewhat similarly, Price (2009) argues that those who take Quine to have saved ontology fail to appreciate that Quine was really pushing Carnap's claim that the question of framework adoption should be decided on the basis of pragmatic considerations further. Price quotes Quine to this effect:

Carnap maintains that ontological questions ... are questions not of fact but of choosing a convenient scheme or framework for science; and with this I agree only if the same be conceded for every scientific hypothesis

((Quine, 1966, 134), quoted in Price, 2009, 327)

If we accept this, and we are not pragmatists regarding ontology but are instead ontological realists, do we go wrong in adopting Quine's ontological method? The answer seems to depend on whether we adopt the method in its entirety, and, if not, on which parts of the method we adopt. The most widely adopted aspect of Quine's approach is his test of ontological commitment, summarised in the slogan 'To be is to be a value of a variable'. We are to recognise commitment to the entities over which our bound variables have to range in order that certain affirmations turn out true. This test is sometimes taken to provide a way of answering the ontological question but as noted earlier, for Quine this is not what it does. Instead, for Quine, the test is used to determine the ontological presuppositions of someone's position (Quine, 1953/1980, 15-16). Quine's pragmatism is relevant to what he does take to be the right method to determine the answer to the ontological question. He has a pragmatic approach to, at least the method for answering, but possibly also the content of, the question posed by the ontological problem. Then he has a test for ontological commitment which doesn't involve obvious pragmatic considerations and whose role seems to be to clarify the answer to the ontological question which was previously given. I am going to argue that these two aspects of Quine's method can be separated.

We can acknowledge that theoretical virtues such as simplicity have some role without taking that role to be determinative and without adopting Quine's seemingly pragmatic understanding of the problem posed by the ontological question. We can also, I shall

argue, understand and apply Quine's test for ontological commitment, or presupposition, in a different way to the way he himself did. The way in which I hope to do this draws on the notion of semantic presupposition and is key to the metaontological approach which I shall ultimately defend. Finally, the metaontological approach I shall defend is that which will allow me to explicate the notion of ontological category which I shall claim has consequences for how we should understand the truth conditions of de re modal claims.

§8.5

Quine's pragmatism is relevant to:

- (a) His understanding of the question posed by the ontological problem 'what is there?'. The task is that of fixing upon a conceptual structure (Quine, 1953/1980, 17) and conceptual structures themselves are thought of as tools: "As an empiricist I continue to think of the conceptual scheme of science as a tool, ultimately, for predicting future experience in light of past experience" (Quine, 1951/1980, 44)

and it is also relevant to

- (b) The basis on which he thinks an answer should be determined; we are to choose the best conceptual scheme which accommodates science but 'best' here is to be understood pragmatically.

We can depart from Quine on both of these points. I shall not at this point defend the substance of alternative answers. I just want to point out that there are prima facie plausible alternatives.

There is a more robustly realist understanding of the ontological question which I gestured towards earlier and which I shall later develop which understands the question to ask what *the world* contains or consists of and which takes this question to be something we can get right or wrong (though not every answer need be comprehensive). There is plenty of room for debate about how we should understand such a claim, but it is prima facie plausible as an interpretation of the question. We can see this by considering the frequency with which ontologists make claims about *the world* and what the world is like in providing answers to the ontological question.

The world is the totality of facts, not of things (Wittgenstein, 1961/2001, 5)

I propose now that entities like our fine parts or abstract components are the primary constituents of this or any possible world, the very alphabet of being. (D.C. Williams, 1953/1997, 115)

We can also plausibly depart from Quine on the second point. Again, I shall not defend an alternative epistemology of metaphysics at this point, but I shall claim that it is *prima facie* plausible to claim that not all knowledge of things there are is based on pragmatic considerations of overall theory.

Quine's test of ontological commitment was to be applied to pragmatically determined answers given to the pragmatically conceived ontological question. Its role was to clarify these answers. If we reject the pragmatic interpretation of the question and the pragmatic method of answering it, what role is left for the test of ontological commitment/presupposition? In a way that I shall now explain, my claim is that its role is to facilitate the articulation of an alternatively determined answer to the realist version of the ontological question.

At this point, I want to return to the notion of semantic presupposition which I spent the first part of this chapter trying to clarify and review the way in which I suggested that semantic presupposition is connected to the question of ontology. The notion of semantic presupposition which I have delineated assumes an approach to semantics according to which expressions of various types have entities which serve as their semantic values. The intuitive ideas here are that language depends on the world for its content, and that the way we confer meaning upon words is by systematically connecting them with the world. We do this often, but not always, by connecting them with entities in the world. My claim is that if this is the case, the content of language, and especially of denotational terms, is dependent on the existence of that in the world which was used to give it meaning. If this is correct, and use requires content, then the use of language generally, and denotational terms in particular, presupposes the existence of that in the world on which its content depends and it does so in a way which has nothing to do with the ontological positions taken by those who use the language.

It is clear however that the way in which language depends for its content on the world is not transparent. As is clear from the fact that different analyses are provided by different ontologists for the same sentence, many different positions can be taken on the question of what the world is required to contain in order to provide the content of sentences we wish

to take to be true. Working with the notion of semantic presupposition however one can claim that there will be a right answer to this question. My proposal is that making a claim as to what this right answer is is a way of articulating a position on the question of what there is. The new role for Quine's test of ontological commitment/presuppositions is to reveal the ontological commitments/presuppositions of both ontological and ordinary language (at least insofar as that language is meaningful. Sometimes we shall have to say that, as it stands, it is not.)

The original purpose of the test was to reveal ontological commitments of positions taken. We are revealed to be committed to, or to presuppose, those entities we have to take our bound variables of quantification to range over in order for a certain class of sentences to be true. An important difference between this original purpose and my own is that what Quine takes to be revealed are the presuppositions of someone's position whereas I am claiming that we should use the test of commitment to make claims about the presuppositions of terms in a language we use, not of our positions. The test is, nevertheless still supposed to work in basically the same way but, as mentioned above, instead of being a test, it is to be a tool.

A further important difference between Quine's position and my own is that I do not follow Quine in taking the bound variables of first order quantification to be the only terms which "bear the burden of objective reference" (Quine, 1953/1980, 6). This difference can be supported in two different ways.

1. Quine's claim that only variables bear the burden of reference is due to his acceptance in his (1953/1980) of Russell's theory of descriptions. On the basis of this theory Quine claims that names themselves do not refer when they occur in sentences; they should be given a quantificational analysis and only the bound variable occurring therein is properly taken to play a referential role in the sentence in which the name seemed to feature. However, since Quine wrote 'On what there is', Russell's theory of descriptions has become harder to defend. In his (1972/1981) Kripke presented well known and persuasive arguments against it. According to these arguments, taking a name as a definite description will yield incorrect claims concerning the content of sentences in which that name features. Kripke claims that to capture the content correctly you need to take names to be rigid designators, terms which refer to the same thing across all possible worlds. If you allow the meaning of the name (e.g. 'Aristotle') to be specified by a description or descriptions typically only contingently true of the bearer (e.g.

‘...taught Alexander the Great’) you get such implausible results as the result that the proposition that Aristotle taught Alexander the Great is a necessary truth because its negation would be a contradiction (effectively, it is not the case that the teacher of Alexander the Great taught Alexander the Great). Indeed, not only will this proposition turn out, implausibly, to be necessary, it will also turn out, implausibly, to be known, when it is known, a priori, because it will suffice to know the meaning of the terms to know that the proposition is true. Kripke argues that results like these show that a description theory of names leads to a misconstrual of the content of the sentences considered.

If we accept Kripke’s objections to the Russellian theory of descriptions, which I shall, then we should also reject Quine’s dismissal of names as referring terms. As noted above, first-order variables, for Quine, play a distinctive role in sentences. They are the only bearers of objective reference. If we do not take them to be such, should we follow Quine in according variables such a central role in the test for ontological commitment? The answer I shall give is that we should, but that the reason why variables will be useful on the current approach will differ, given the point above, from the reason why they are important within Quine’s approach. The reason to continue to accord variables a central position is that we can shift from talking about variables already occurring in sentences (such as the variable that will occur in a sentence incorporating a disguised definite description) to talking about the legitimacy of *quantifying into* various positions in varying ranges of sentences. Talking about when and into what position it is legitimate to quantify into various sentences facilitates the task which the current construal of the ontological question aims to carry out: the task of making explicit what entities our language depends on the existence of in order to have the content that it does, in other words, what existence claims are presupposed if our language is to have its actual content.

The intuitive idea which supports this shift is cogently presented by Bob Hale in a discussion of the legitimacy of quantifying into predicate position.

it would be obviously and grossly implausible to claim that ‘Something is wise’, for example introduces a commitment to the existence of objects of which ‘Socrates is wise’ is wholly innocent. On the contrary, it seems plain that quantification into a position in a sentence, assuming it carries an

existential commitment, merely generalises a commitment already borne by the constant expressions – whether names or predicates – which can occupy those positions and which its bound variables replace. (Hale, 2013, 12)

2. A second reason not to follow Quine in taking only the bound variables of first order quantification to bear objective reference is that to do so is to build an ontological assumption into the methodology with which one approaches ontology. As Hale (2013) notes, to take this position is to rule out by assumption the possibility that any entities exist which are not apt to be referred to by first order variables.

It is – to put the same point in a way that brings out its massive ontological significance – simply an *assumption* of Quine’s whole approach that expressions of other types, such as predicates like ‘is wise’ or ‘weighs more than’, etc., do not refer or stand for entities of any kind, so that our use of them carries no existential commitment” (Hale, 2013, 12).

Accepting this point, we can reject Quine’s assumption and treat the question of whether to accept variables in predicate position as an open one while still holding on to the claim that ‘to be is to be the value of a variable’.

I claimed above that on the approach to ontology which I am currently defending we should use the test of ontological commitment more as a tool than a test. It is to be a tool we can use to articulate an answer to the question of what there is by making a claim about what the answer is to the question of what our bound variables of quantification have to range over. The reason it is such an important tool for my purposes lies in the answer to my next question which is: *how* are we to say what our variables of quantification have to range over in order that our language has the content that it does? With what sort of term can we specify what our variables have to range over?

This is not a question in which Quine was particularly interested. Although, famously, he notes that the answer ‘everything’ is not satisfactory, he is not particularly concerned to provide an answer to the question of what makes for a satisfactory answer. He sometimes

seems to take open sentences to be satisfactory. The difficulty is that in saying what there is we are not interested in a list of open sentences. On account of this feature of Quine's approach to ontology Schaffer labels the answers his approach to ontology yields 'flat'.

For the Quinean, the target is *flat*. The task is to solve for E = the set (or class, or plurality) of entities. There is no structure to E . (Schaffer, 2009, 354) ¹⁵.

The claim I aim to defend is that the right sort of term to use to give an answer to the ontological question is an ontological category term. Ontological categories are commonly parsed as the highest or most fundamental kinds. The fundamentality of ontological categories makes them indefinable. They can't be defined in other terms. They provide the notions in terms of which other things are defined. For this reason, clarifying them by showing how their content is built into the content of terms for those things that would be defined in terms of them is important in enabling one to use such category terms to give an answer to the question of what there is.

This work of clarification is especially important in light of the apparent possibility of reduction of one category to another. To explain why this is so, in the next section I shall return to the issue of the derivative notion of presupposition which was noted earlier in this chapter.

§9

The question to be addressed in the next few sections is: *how* are we to say what our variables of quantification have to range over in order that our language has the content that it does? Or to put the question another way: with what sort of term can we specify what our variables have to range over? In the next few sections I shall consider a number of ways that this question has been answered. I shall argue that none of them are satisfactory because they all fall afoul of what I shall call the presupposition problem.

The basic presupposition problem is that you need to find a way of saying *what* there is without presupposing the existence of the very things whose existence you are asserting but it is very difficult to avoid presupposing the existence of those things while still providing the intended content for the term with which you say *what* it is that there is. I

¹⁵ Schaffer provides a three-way distinction between this understanding of the target as flat, an understanding of it as flat but sorted, and (his own approach) an understanding of it as ordered.

discussed and motivated the presupposition problem for singular terms earlier in this chapter.

The presupposition problem with which I shall be concerned going forward is similar to that one, but it is generalised in two different ways, both of which have been anticipated over the course of this chapter. First, I shall be concerned not only with the presuppositions of individual entities by individual names but also with the presuppositions of individual entities by individual instances of other types of expression. For example, I shall say that it may be the case that a predicate ‘...is F’ presupposes the existence of a property, F. Second, I shall be concerned with the presuppositions of expression types. For instance, given certain background assumptions, one would say that using second-order variables presupposes the existence of properties of some kind. The justifying idea here is that the legitimacy of quantifying into predicate position depends on the existence of properties serving as the semantic values of those predicates.

The first account of how we should answer the ontological question which I shall consider is that which Quine offers in his (1960/2013). Quine frames the problem that the use of certain terms presupposes the existence of their referents, not as I have, as a threat to genuine content, but instead as a threat to the possibility of debate. His proposed resolution combines a move to talking about words instead of things (a move he calls semantic ascent) and a pragmatist framework for what the ensuing discussion about words should be.

it does happen that semantic ascent is more useful in philosophical connections than in most and I think I can explain why. Consider what it would be like to debate over the existence of miles without ascending to talk of ‘mile’. “Of course, there are miles. Wherever you have 1760 yards you have a mile.” “But there are no yards either, only bodies of various lengths.” “Are the earth and moon separated by bodies of various lengths?” The continuation is lost in a jumble of invective and question-begging. When on the other hand we ascend to ‘mile’ and ask which of its contexts are useful and for what purposes, we can get on; we are no longer caught in the toils of our opposed uses. The strategy of semantic ascent is that it carries the discussion into a domain where both parties are better agreed on the objects (*viz.* words) and on the main terms concerning them. (Quine, 1960/2013, 250-1)

There are two main problems with Quine's proposed method of semantic ascent. The first is that unless the words to which we ascend are typographically individuated the participants will not agree on them as required, so it seems that the words will have to be merely typographically individuated words to allow for the participants to agree on them, but such words will be close to useless in making the relevant claims. Quine suggests, as another example of semantic ascent that "There are wombats in Tasmania' might be paraphrased "'Wombat' is true of some creatures in Tasmania'" (Quine, 1960/2013, 250). However, if 'wombat' here is to be understood merely as a typographically individuated word, then the truth of the paraphrase is compatible with there being no mammals at all in Tasmania and if this is the case it is clear that the intended content has not been preserved across the paraphrase. The objection here addresses existential sentences which incorporate general terms, but it parallels one which, as I noted earlier, Kripke (2013) makes concerning singular existential sentences. Kripke argues that a metalinguistic construal of existential claims which took them to be claims about whether some name has a referent would fail to capture the intended content because we would not want to say that if Moses had not been given the name 'Moses', and no one else had been given the name 'Moses', that that would make it true that Moses did not exist. And on the other hand, we would want to deny that Vulcan would have existed, simply if something or other had been named Vulcan (Kripke, 2013, 152-3).

The problem, in both the general and the singular case, is that the typographically individuated words, although they might provide common ground, do not allow us to make the existence claims we are interested in, the existence claims which are the topic of our disagreement. To express these claims, we need to give content to the words we would use to make them but once we do this the words will no longer function as common ground. I have argued that this is exactly what we should expect because the existence of the entities needed to give content to the terms is the topic of the disagreement.

The second problem with Quine's proposed method of resolution is that the pragmatist criterion, whose application he suggests the ensuing discussion about words should consider, would result in a discussion that was largely beside the point from a realist point of view. Once the words had some content, one might suggest that the discussion's verdict could be a contributing consideration in a realist discussion, but the usefulness of typographically individuated words does not seem like it could contribute even this.

Typographically individuated words are not enough to allow us to say what it is that exists, what it is that our variables range over. We seem to need words with content to do this but

if we are to use words with content to that end, we need to provide that content without relying on the entities whose existence is asserted to provide it.

One of the most common ways in which philosophers try to provide the appropriate content to their existence claims without presupposing the existence of the entities whose existence they are asserting is through the strategy of locating the content with which they say *what* it is that there is in the predicate. This strategy parallels Quine's suggestion in his (1953/1980) that we can move from saying that 'Pegasus exists' to saying that 'Something Pegasizes' (Quine, 1953/1980). In a similar way, instead of saying 'Tropes exist', we might say that 'There exists an x such that x is a trope'. The motivating idea in both cases is the idea that the content of the predicate ('Pegasizes'/'is a trope') does not depend on the existence of that of which the predicates are true and so avoids presupposing the existence of the very things whose existence is being asserted. My response, anticipated earlier in my discussion of the problem as it arises for individual existence claims, is that the content of relevant predicates will presuppose the existence of the entities in question. Versions of this approach are so prevalent that I am going to consider the general approach first and then briefly consider specific versions of it.

§9.1

In this section, I shall argue that the presupposition problem arises for the specific kind predicates which one might be inclined to use to answer the ontological question and that for this reason existence claims which make use of them presuppose the existence of the entities whose existence is in question. If this is the case, then we need to seek an alternative construal of the sentences with which we say what there is.

The basic reason to take this position, that individual kind predicates presuppose the existence of the entities of which they are true, echoes the reason given earlier to take the content of the predicate 'is identical to Aristotle' to presuppose the existence of Aristotle. The kind term 'trope' features in the kind predicate 'is a trope'. My argument will be: if trope is, at least taken to be, a kind which is basic in the sense of not being reductively defined in terms of any other kind, then the term 'trope', will depend for its content on the existence of tropes. The kind predicate 'is a trope', since it incorporates the term 'trope' will depend for its content on the existence of tropes if the kind term 'trope' does.

The kind term ‘trope’ does depend for its content on the existence of tropes and so the kind predicate ‘is a trope’ also depends for its content on the existence of tropes.

To anyone who is inclined to resist this argument by claiming that the kind term ‘trope’ should be understood as the predicate ‘is a trope’ rather than as a term which features in that predicate, I give the following response. For the approach such a person would be defending, the challenge is to give content to, or make explicit the content of, the kind predicate ‘is a trope’ (a) without using tropes to do so (otherwise the content would presuppose their existence), (b) without reductively defining this kind predicate in terms of some other kind predicate, and (c) without interpreting the kind predicate as mere qualitative predicate¹⁶. I deny that this is possible. Once the challenge is understood along the lines described above, basically the same reasons which lead us to say that the kind term ‘trope’ cannot be given the desired content without presupposing the existence of tropes should lead us to say the same about the predicate ‘is a trope’. For this reason, I think the argument below should in principle be able to answer the objections of such a response

§9.2

Over the course of the next six subsections I shall address the question: why should we think that providing the appropriate content to a kind predicate such as ‘is a trope’, and the kind term ‘trope’ which occurs in it, requires presupposing the existence of the entities whose existence is being asserted?

In answering the ontological question, the question of what there is, ontologists use terms for kinds. With terms for kinds one is supposed to be able to say what it is our bound variables range over. Obviously, there is disagreement about the answer. There is disagreement about which terms are referring terms and also about what those terms which are referring terms should be understood to refer to.

For example, someone who believed in tropes or moments might claim that ‘Peter’s smile’ is a referring term, whereas someone with a certain kind of object-property ontology might think that ‘Peter’s smile’ is not a referring term, that there is no such entity as Peter’s smile, there is only Peter, the property of smiling and the fact that Peter satisfies

¹⁶ It is prima facie implausible that ‘is a trope’ is a mere qualitative predicate since it incorporates the substantival general term ‘a trope’ but I shall in any case explain later in this section why merely qualitative predicates will not suffice to provide answer to the ontological question.

or instantiates that property. Even among those who agree that ‘Peter’s smile’ is a referring term, there will be disagreement about what the term should be understood to refer to. The moment theorist might say that it should be understood to refer to an essentially dependent entity which is partially constituted by the object, Peter. The trope theorist might reject this and claim that a term like ‘Peter’s smile’ should be understood to refer to an independent entity, and that the object, Peter, if any such entity exists, should be understood in terms of the independent tropes which make it up.

Ontologists use kind terms to make claims about how referring terms should be understood. The kinds supposedly corresponding to the kind terms are used to specify the correct interpretation of terms for individuals¹⁷ (e.g. this is a term for a set, or this is a term for a number, or this is a term for a function). They are used to make claims about what notion of entity we should use to interpret some range of terms which are to be taken to refer to individuals (e.g. Lowe (2006) thinks substantival general terms (such as ‘elephant’) are such as to have substantial kinds (kinds which are also objects) as their semantic values. Hale (2013) thinks that predicates should be understood to have unsaturated properties as their semantic values.)

How are we to understand the kind terms with which we can say what entities various expressions have as their semantic values?

§9.3

For any given putative kind term, the question of how we should understand it is itself generally a point of dispute in ontology. What is important for my purposes is recognition of the fact that once two different positions are taken on a question such as this, there is not a single kind notion at issue, there is a single kind term, typographically individuated, but two kind terms, semantically individuated.

For instance, consider a moment ontologist who claims that Peter is an object and that Peter’s smile exists but depends on Peter, and the trope theorist who allows for the existence of objects such as Peter by reducing them to bundles of tropes such as Peter’s smile. These two people might both use the putative kind term ‘object’ for Peter but the moment ontologist, faced with the trope theorist’s ontology, would be justified in claiming that the object Peter, as he understood him, was simply not to be found there. The trope theorist aims to allow the term ‘Peter’ to be used as a referring term, and he

¹⁷ In this piece ‘individual’ is intended to be understood as a categorically neutral term for any entity.

may use the term 'object' for whatever it is that that term refers to but his notion of object and the moment ontologist's notion of object are two entirely different notions. Although they both use the term 'object', they are using it in such different ways that we should say they are not both using the same semantically individuated term.

The question of this sub-section was: how are we to understand the kind terms used to specify the correct interpretation of terms for individuals? Two points from the above provide the first steps towards answering this question.

1. What are taken to be ontologically more basic kind terms are used to explain what are taken to be ontologically less basic kind terms.
2. In taking a kind term to be ontologically less basic than some other, one uses the more basic term to specify an interpretation for the less basic term and this may differ from how others use that term.

§9.4

If the ontologically more basic terms are used to explain the ontologically less basic terms, then the question of how we understand kind terms shifts to the question of how we understand what are held to be the ontologically basic kind terms.

A subsidiary question is: what is meant by 'ontologically basic' here? How, for instance, is an ontologically basic term different from a semantically basic one? I take semantically basic terms to be those which are learnt first, and which are not learnt on the basis of others. I make no claim that any kind term which is a candidate for being ontologically basic is such a term. It seems unlikely that they would be. The basicness in which I am interested concerns what something is. It relates back to the idea that kind terms are used to say what referring terms refer to. They express notions which say what something is. They will be used in real definitions of things. Any kind which is such that the real definition of things of that kind is given with some other kind is less ontologically basic than that other kind. The relation of *being ontologically more basic than* will be transitive and asymmetric.

Relating it back to the ontological question, the idea is that if we use a kind to say what terms for individuals should be understood to refer to that kind should be an ontologically

basic one. If it is not ontologically basic, then the real answer is given by the more basic kind in terms of which it should be understood. If one is neutral on the question of whether a kind is ontologically basic, then one leaves the ontological question open and to that extent unanswered because, as noted, there can be disagreements about whether and how an apparent kind should be understood or reduced. Different positions in such a disagreement result in very different answers. If one tries to remain neutral on the question of how a kind term should be understood one simply doesn't give it the content required to be able to use it to give an answer to the question.

For brevity, I shall from this point simply use 'basic' instead of 'ontologically basic'. I'll specify 'semantically basic' if I intend to talk about semantic basicness instead.

§9.5

The question was: how do we understand the kind terms we use to give answers to the ontological question. A partial answer is that we understand some by taking the kinds to which they correspond to be less basic than other kinds. The question then becomes: how do we understand the terms for the most basic kinds in terms of which we are understanding the others? Indeed, not alone are we understanding the less basic kinds in terms of the most basic kinds, since we are using the most basic kinds to say what terms for individuals should be understood to refer to, we are also using these kinds to understand the individuals in our ontology. Allowing for this understanding is a primary role for these notions in an ontological theory. We need to be able to explain how terms for the most basic kinds should be understood because we are using the most basic kind notions to which they correspond to provide an answer to the contested question of how we should understand many other things.

We use kind notions to explain what our referring terms stand for, and we explain less basic kinds in terms of more basic kinds. At some point some kind notions must be taken as primitive, that is, as non-reducible, otherwise none of the kind notions will be such as to provide an answer to the ontological question. We cannot reduce or define the terms for the most basic kinds, yet we still need to make the kinds they are supposed to correspond to intelligible because it is in terms of these kinds that our other answers are given.

The solution seems to be that we cannot define them from below, in terms of the more basic, so instead we have to make them intelligible from above, in terms of the less basic¹⁸. If we were aiming at definition such a move would fail because the less basic which would be serving as the definiens would themselves be properly understood only in terms of the definiendum. But a definition is not what is aimed at because it has already been accepted that definition is not possible for terms for the most basic kind notions. Instead, the goal is to make the primitive kind notions corresponding to the most basic kind terms intelligible and in so doing to fix what is meant by those terms. The idea is that this will be done from above by appeal to less basic but more accessible notions. Once these less basic notions are used to make the primitive intelligible our understanding of the less basic notions themselves will be slightly modified because we will apprehend them more clearly and precisely in the light of the primitive they helped us to understand and which we take to underlie them.

An example of using the less basic to understand the more basic would be the use of our inchoate notion of a feature to introduce the notion of a trope which is then used to define a more precise notion of feature. Existence and identity conditions are another way in which ontologists frequently make primitives intelligible through the use of something less basic which will ultimately be understood in terms of those primitives. By appeal to an inchoate understanding, e.g. of the mental, or of the moral, or of artefacts, a rough range of sentences is demarcated. The primitive kind notion is introduced as that which allows, or partially allows, these sentences to be understood because, it is said, something of that kind should be understood to feature in the worldly correlate of these sentences in a systematic way whenever these sentences are true. The sentences, having been used to introduce the primitive, are then to be understood in terms of it.

¹⁸ The move here draws on Bob Hale's defence of his neo-Fregean approach to ontological categories. This approach shall be discussed at greater length later in this chapter and again in Chapter Four. I shall not adopt his construal of ontological category notions, but I shall adopt aspects of it. One part of the approach which I shall adopt is the distinction between the task of definition and the task of making a basic notion intelligible in terms of less basic notions and his insistence on the point that the circularity involved in doing the latter is of an unproblematic sort. However, I shall not exactly follow Hale on the question of what is required for the circularity involved in the task of making a notion intelligible to be unproblematic.

It is important to grasp that the threatened circularity is epistemological, not definitional, and that what is required to avoid it is a way of recognizing expressions as functioning as singular terms which does not involve discerning that there are objects for which they stand. It is not necessary that the notion of a singular term be explicable or definable without invoking that of an object. On the contrary, the semantic function of a singular term is precisely that of identifying an object as what we are talking about – that is just what it is to be a singular term. (Hale, 2013, footnote 19, p. 15)

§9.6

If the above is correct, then the answer to the question of how primitive kind terms are explained is that less basic but more accessible notions, which will ultimately be understood in terms of the primitive kind notion said to correspond to the basic term, are used to explain how that term should be understood. The epistemically prior notion is used to explain the ontologically prior notion which ultimately defines it.

This is where the problem of presupposition comes back in. The basic argument for thinking that the presupposition problem generalises to kind terms goes as follows: The primitive is explained as that which underlies, in some specified way, the less basic notions used to introduce it. If there is in fact nothing which underlies the less basic things in question in the way specified, then appropriate content is not provided for the term supposedly corresponding to the primitive.

One claim in the background here is that the less basic things couldn't be as they are but be constituted differently. This seems right. If the less basic things are to be properly understood in terms of the more basic, then they couldn't be what they are but have a different real definition. If a primitive is introduced by being used to provide an analysis of a roughly demarcated range of sentences, but there is nothing which occurs in the really correct analysis of the sentences in the way the primitive is said to (perhaps the range of sentences are not correctly analysed together at all) then the term for the primitive which was being explained in this way has not been successfully explained. It has not been given the content that the introduction aimed to give it.

Another claim in the background is that in trying to allow the term for the primitive to be understood we are (to slightly modify Kripke's terms) fixing the content of the term, not specifying its meaning. This also seems right. Most importantly, if we treat the introduction or explication as specifying the meaning, we won't get the required clarification of what were supposed to be non-basic notions appealed to in the introduction or explication. These non-basic notions are supposed to be used to make the primitive intelligible and are then to be understood more clearly in light of it. If the introduction specifies the meaning, there will be nothing which would provide this result; the non-basic notions will remain only as clear as they were to begin with. Also, if we treat the attempts to specify how primitive kind terms should be understood not as fixing their content but instead as specifying their meaning, we seem to miss our target. We end

up with various instances of one kind, whatever corresponds to predicates, if any one thing does, rather than with entity notions which could be used to say what corresponds to predicates *or* to sentences *or* to terms like ‘Peter’s smile’ etc. i.e. rather than with terms which we could use to say what it is that our variables range over.

§9.7

If the argument outlined above works, then the presupposition problem arises for primitive kind terms because we only succeed in giving them the content we want them to have, or explicating the content they do have, when things of the relevant primitive kind exist. This is because we only succeed in giving them the content we want them to have if there are less basic things available which are correctly understood in the way that we specify in terms of our target primitive. If there are no such non-basic things available, or the non-basic things we choose are in fact properly understood in some way other than that which we propose, then our attempt to fix the content of our primitive does not succeed. Without the content it would need to serve as a primitive, our term cannot be used as one, it can only *seem* to be so used.

We need it to have the requisite content in order to provide with it an answer to the ontological question. Further, if a primitive lacks requisite content, then all the words defined in terms of it within a theory will also lack requisite content, so the problem of a lack of appropriate content for the primitive kind terms of a theory becomes a problem of lack of appropriate content for all the kind terms of that theory.

So, the presupposition problem arises for primitive kind terms¹⁹, and predicates which incorporate such terms, because if we get the answer to the question of how the world is made up wrong, then the putative primitive kind terms, or primitive kind predicates, that we try to use in giving this answer will fail to have the content they need to have in order to be *used*. The kind terms and the predicates incorporating them will also fail to have the content they need to have in order for someone to claim using them that our position is wrong. It is only if we get the answer to the question of how the world is made up right that we will succeed in providing our primitives with the content they need to be used.

¹⁹ The presupposition problem will also arise for non-basic kind terms understood in terms of a basic kind term but in a slightly different way. What is presupposed will still just be that there are things of the basic kind.

But if our primitive kind terms and the predicates which incorporate them depend for their content on the existence of entities of the kinds apparently in question, then these terms cannot plausibly feature in the sentences with which we claim that entities of these kinds exist.

Two final points should be made.

First, in claiming that we when we go wrong we don't succeed in fixing the requisite content for our putative primitives, I do not claim that we do not endow them with any significance at all. We can clearly make some sense out of incompatible answers to the ontological question and the fact that we can do so must be accommodated. However, this is a common problem for semantic presupposition. We can clearly make some sense out of claims about Vulcan. The claim that words have some significance can plausibly be taken to be compatible with the claim that they nevertheless fail in one way or another to have the meaning they would require to occur *as intended* in truth apt sentences. How they do so is a problem I shall address briefly in chapter three.

Second, I have raised the problem for those kind terms which should be understood to correspond to primitive kind notions made intelligible through the less basic notions which are understood or defined in terms of them, and which are such as to provide an answer to the ontological question. Which notions these are remains an open question and my argument is not intended to be specific to any answer to it. Whatever the answer is, having the putative primitive kind term occur in a predicate would not allow one to evade the task of specifying its content. One would need to specify its content in order to say what was required to satisfy this predicate and, once one faced that explanatory task, all the problems discussed above would arise again. So, locating the intended content of the category or kind terms that we want to use to answer the ontological question in the predicate will not allow us to avoid the presupposition problem. Taking categorial existence claims to have the form 'There exists an x such that x is an F' is not tenable. We need to find an alternative construal for the existence claims with which we say what it is that our variables range over.

§9.8

The discussion over the course of the last few sections focused on the construal of existence claims as being of the form 'There exists an x such that x is an F' i.e. ' $\exists xFx$ '. I

argued that this approach is taken by many to allow one to say what there is without presupposing the existence of the entities that one is claiming exist. I argued that, in fact, locating the content of the category/kind term in the predicate does not allow one to do this and so the approach should be rejected. At the beginning of the discussion I said that, although the argument against the approach would not be specific to any philosopher's version of it, I would give examples of philosophers who take the approach at the end of the section. That is what I shall do in this section. I shall focus on two different philosophers, Peter van Inwagen, and Gottlob Frege, both of whom, in very different ways, provide construals of existence statements which locate the content of the category term being used to say what there is in the predicate. They also both take these existence statements to be of the form 'There exists an x such that x is an F' but they construe this form in different ways. My objection to both will be that their approaches run afoul of the argument made in this section. I shall argue that they are not able to provide the intended content to the predicates included in their existence statements unless entities of the kind in question exist.

I shall consider van Inwagen first because his construal of existence statements is more straightforward in some respects than Frege's and is closer to what I take to be the default approach taken to existence claims by philosophers.

§10

At first glance, van Inwagen's (2014) account of existence statements seems to threaten to run afoul of the presupposition problem for existence statements in the most obvious way possible. To defend the univocity of the notion of existence/being, van Inwagen connects the notion of existence with that of cardinal number and argues that since the latter is clearly univocal the former must be so also (van Inwagen, 2014, 61-3). He credits Frege with the recognition of the connection between statements of cardinal number and statements of existence, quoting, and endorsing, Frege's claim that "Existence is analogous to number. Affirmation of existence is nothing but denial of the number zero" (Frege, 1884/2007, 65). However, van Inwagen does not propose to understand either of these types of statement in the same way that Frege does.

As I shall discuss in more detail below, Frege construes both statements of number and statements of existence as claims that certain first-order concepts fall under certain second-order concepts. van Inwagen contends that such a construal fails to capture the content of existence claims. He insists an existence claim such as 'Horses exist' is about

the objects in question, the horses, and not about the first-order concept, ‘...is a horse’. To maintain the connection with number which he is using to defend the univocity of the notion of existence while accommodating his claim that existence claims are about objects, not concepts or properties²⁰, van Inwagen provides his own construal of the statements of number with which he is connecting existence claims. On his account, statements of existence such as ‘Fs exist’ are equivalent to statements of the form ‘The number of Fs is not zero’ and the latter statements should be understood to feature variably polyadic predicates of the form ‘The number of ...is not zero’. This variably polyadic predicate is predicated of the objects in question, the horses.

But it does not follow from these things that I have conceded that the predicate ‘the number of...is not zero’ is a predicate of concepts. I would say that on a given occasion of use, it predicates of certain things that they number more than zero’ (van Inwagen, 2014, 62)

The reason why this approach seems to fall afoul of the most obvious version of the presupposition problem for existence statements is that it seems that on this construal to say that horses exist is say something about the very things in question, i.e. that they satisfy a certain variably polyadic predicate, ‘the number of...is not zero.’. If this is the right way to understand van Inwagen’s proposal, then that construal is untenable because such existence claims would presuppose exactly what they were being used to assert and the proposed analysis would be unable to handle true negative or false positive existence claims. However, there is reason to think that this is not the right way to understand van Inwagen’s proposal because he also gives another formulation of existence claims which he takes to be equivalent to the first. In presenting the alternative formulation he is more careful to at least attempt to avoid obvious presupposition of the truth of the existence claim in question. Since the alternative formulation is supposed to be equivalent to the first, we should favour an interpretation of the first which avoids taking it to have such obviously problematic presuppositions. The second formulation van Inwagen defends is a version of the traditional existentially quantified construal of the claim that there are horses. The claimed equivalence between the first formulation and this one suggests that the way of avoiding taking the first formulation to fall afoul of the presupposition problem

²⁰ If the existence claim in question was that properties existed, van Inwagen would, presumably allow that such a claim would be about properties. The claim is just that statements that certain objects exist should not be understood to be statements about some corresponding property.

in the most obvious way is to focus on the fact that ‘Horses’ seems to be taken by van Inwagen to be a predicate. For example, he writes that:

When I say affirmation of existence is denial of the number zero, I mean only that to say that Fs exist is to say that the number of Fs is not zero. For example, in my view, ‘Horses exist’ is equivalent to ‘The number of horses is not zero.’ (van Inwagen, 2014, 61)

In the above quotation, ‘Horses’ is symbolized by van Inwagen with a capital F suggesting that it is intended to be understood as a predicate. But, if ‘horses’ is a predicate of objects and ‘the number of...is not zero’ is a predicate of objects, we need to take as implicit in the sentence some introduction of the objects being talked about. In light of this, one way to proceed is to understand the first formulation of existence statements, as well as the second, to involve existential quantification. Adapting the construal of the existential quantifier which van Inwagen goes on to provide in connection with his second formulation, this approach would interpret ‘Horses exist’ as ‘It is true of some things that they are horses and the number of those things is not zero’. On this formulation, van Inwagen’s first construal of existence statements is not guilty of the most obvious version of presupposition of the existence of the things in question. This version is now recognisable as a version of the approach discussed above whereby the content being used to say what exists is located in the predicate and so problematic presupposition is thought to be avoided. van Inwagen’s second version is exactly such an approach.²¹ It is to this second approach I shall now turn.

§10.1

The second construal van Inwagen provides for existence claims is a version of the typical quantificational approach to these claims. He argues that ‘Horses exist’, ‘Numbers exist’, ‘Sentences exist’ etc. can all be construed in the form ‘ $\exists xFx$ ’. He contends that the existential quantifier occurring in such a construal fully captures the notion of existence. To explain how we should understand this construal of existence statements, he provides

²¹ Comparison of the second version with the above formulation of the first brings into question what justification van Inwagen has for including the variably polyadic predicate ‘the number of...is not zero’ in the first to begin with. The second version will be (very nearly) the first version with the clause concerning number excluded. Given that, the inclusion of the clause concerning number in statements of existence seems inessential; unnecessary for the work of asserting existence. If that is the case, the connection between the notion of number and the notion of existence is weakened and so too is van Inwagen’s argument from the univocity of the former to the univocity of the latter.

an explanation of how he thinks we should understand the variables and quantifiers occurring in them.

van Inwagen distinguishes between referential and general uses of terms like ‘a cat’. Roughly, in the referential use, the expression ‘a cat’ is used to refer to a single cat, whereas in the general use, no particular cats are referred to. Having made this distinction, van Inwagen connects the use of variables to the use of the English pronoun ‘it’. He claims that just like ‘it’ needs an antecedent, variables need an antecedent. However, van Inwagen claims, ‘it’ can take either referential or general uses of terms like ‘a cat’ as its antecedent, and will function either generally or referentially depending on whether its antecedent does. To illustrate this, he gives as examples the sentences ‘Jack saw a cat and he chased it’ (referential use of both ‘a cat’ and ‘it’) and ‘If Jack sees a cat, then he chases it’ (general use of both ‘a cat’ and ‘it’). By contrast, van Inwagen claims, variables always function generally.

the way occurrences of variables function and the way occurrences of the third person singular pronoun function- when they function ‘generally’ are essentially the same. (van Inwagen, 2014, 74)

Having explained how we are to understand the variables featuring in existence claims, van Inwagen goes on to explain how we should understand the quantificational expressions featuring in these claims. He does not construe quantifier phrases as second-order properties in the way that a Fregean would. Instead, he claims that (a) the universal and existential quantifier expressions of first-order logic should be understood as abbreviations of the English phrases ‘It is true of everything that it is such that...’ and ‘It is true of at least one thing that it is such that...’ respectively. (van Inwagen, 2014, 74). These expressions should be filled in by expressions for open sentences featuring variables which become bound when the open sentence of which it is part is prefixed by one of the expressions above. So, as an example, ‘It is true of everything that it is such that...’ could be prefixed to ‘it is a cat’. van Inwagen claims that the quantifiers provide antecedents for the pronouns or variables occurring in the open sentences to which they are prefixed. The universal quantifier provides the antecedent ‘everything’ and the existential quantifier provides the antecedent ‘at least one thing’.

These formulations of universal and existential quantifiers phrases reflect the assumption that ‘everything’ and ‘at least one thing’ are syntactically suitable antecedents for the third person singular pronoun. (van Inwagen, 2014, 74)

van Inwagen’s discussion of the notion of a domain of quantification clarifies the way he takes quantifier phrases to provide antecedents for variables. van Inwagen denies that you *need* to specify the domain over which you want your variables to range before you use them. Instead, he claims, you can just directly quantify over all the things in the world.

The notion of a ‘domain of quantification’ is not an essential part of an understanding of quantification. Quantification, unless it is explicitly restricted to suit the purposes of some particular enquiry, is quantification over everything. (van Inwagen, 2014, 77)

In light of the above, we can see how existence statements on van Inwagen’s second formulation are to be understood, and how they might seem to avoid presupposing the existence of the things whose existence they are used to assert. The statement ‘Fs exist’ is to be construed as ‘ $\exists xFx$ ’. The quantifier ‘ $\exists x$ ’ is to provide an antecedent for the variable x in the sentence ‘ Fx ’ which occurs in the scope of the quantifier phrase. The quantifier phrase provides this antecedent by ranging over all things without referring to any one thing in particular. (If it referred to one thing in particular, the statement would no longer seem to avoid presupposing the existence of that thing). The quantifier phrase, as it were, refers indifferently to all things, and is used to say of them that it is true of at least one of them that it satisfies the predicate F . In this way, it seems, we can say that there are F s by saying that something is an F without presupposing the existence of any F s.

My contention is that this construal of existence statements will not manage to avoid presupposing the existence of the very things whose existence is being asserted, at least in the cases of the existence claims of interest in ontology, i.e. those instances of the formula ‘ $\exists xFx$ ’ where what is substituted for F is a notion general enough or basic enough to make the resulting statement one which is of use in answering the ontological question. The argument for this contention is that outlined previously. My claim is that it will not be possible in these cases for the intended content to be given to the predicate ‘ F ’

occurring in the claims without presupposing the existence of Fs. If the notion of an F is basic enough, or putatively basic enough, to be of interest in answering the question of ontology, then its content will not be able to be conferred or explicated in terms of a notion yet more basic, i.e. it will not be able to be defined from below. Its content will have to be conferred on it through ostension, through abstraction from something(s) ostended, or in some other way fixed as that in terms of which some less basic but more accessible notions or things should be understood. But if the content of F is conferred or explicated in any of these ways, that content will presuppose the existence of Fs. For the content to be somehow ostended (this seems unlikely), there would have to be an F. For the content of F to be abstracted from something ostended, that thing would have to be something satisfying the predicate F, so there would have to be an F. For the content to be in some other way fixed as that in terms of which some less basic but more accessible notions or things should be understood, there would have to be non-basic things which were properly defined in terms of the notion F, and so there would have to be Fs.

§10.2

To make the point clearer, I shall finish my consideration of van Inwagen's position by illustrating my objection by applying it to some cases of existence claims apt to provide a partial answer to the ontological question which van Inwagen considers. van Inwagen's approach to ontology is a realist one. He presents it as a broadly Quinean approach and defends a number of Quinean positions. He claims that the existence statements that philosophers are interested in are ones that have to be clarified through the application of the notion of ontological commitment. The explanation he provides of what this will involve is that we should accept the existence of those things that we need our variables to range over in order for the sentences of our best science to come out true. If a paraphrase can be provided for a sentence which avoids the need for the variables to range over some kinds of things that it was thought they needed to be able to range over, then that paraphrase will show that we do not *need* to allow our variables to range over such things to have our target sentences come out true. But such paraphrases are difficult to provide. To show this he considers a fictional nominalist, Norma, and draws out the difficulties that beset her attempt to be consistent in advocating nominalism (van Inwagen, 2014, 80-4).

van Inwagen sets up the basic difficulty for Norma by noting that the very statements she would make to assert and defend her nominalism would imply the falsity of her position.

Something 'Norma the nominalist' might say is: "Although there are true sentences that appear to imply the existence of abstract objects, these sentences do not really have that implication". That sentence logically implies (or certainly seems to) that there are sentences - for the same straightforward reason that "There are biological weapons hidden somewhere in Iraq" certainly seems to have 'There are weapons' among its logical consequences

But, van Inwagen notes:

it is obvious from the context that the open sentence 'x is a sentence' is to be understood in such a way that ' $\forall x(x \text{ is sentence} \rightarrow x \text{ is an abstract object})$ ' is indisputably true. Therefore, Norma's statement at least appears to imply the falsity of ' $\neg\exists x(x \text{ is an abstract object})$ ' – that is the falsity of nominalism.

(van Inwagen, 2014, 81)

What is important about this for my purposes is that the content of the predicate '...is a sentence', how it is to be understood, is what undermines Norma's claim that there are no abstract objects. There is a way that the predicate, or the relevant open sentence, should be, or is intended to be, understood, and the content that it has when it is understood that way prevents nominalists consistently talking in terms of things which satisfy it. Could they nevertheless use the predicate without becoming inconsistent? Could they, for instance, say $\neg\exists x(x \text{ is a sentence})$? Well, what would it be that they were saying nothing was? They cannot be saying that nothing is the kind of thing that different sentence tokens are tokens of because they do not think inscribed sentences are tokens of any type and so they will not think that the above description determines any kind. There are a number of things that they might say that would seem to imply that there was no thing of a kind such as they knew believers in sentence types took sentence types to be (e.g. there is nothing that doesn't occupy space) but although saying something like this would seem to preclude the truth of realism about sentence types, it would not explicitly express the falsity of it. The content of '...is a sentence type' as realists use it just doesn't seem to be available for nominalists (at least if they are to be consistent). The conclusion I draw from this is that predicate 'is a sentence type' having the content it is intended to have by realists about sentence types is not consistent with the non-existence of sentence types; the content presupposes the existence of sentence types.

The point can be further illustrated by considering the debate van Inwagen considers between a nominalist and a realist who accepts the existence of species. Drawing on Quine's discussion of the case in his (1948/1980), van Inwagen points out some moves available to Norma, his imaginary nominalist, while emphasising how difficult it is to make these moves successful.

van Inwagen's case starts with a claim made by our best science which both the realist and the nominalist want to make come out true; that is the claim that some zoological species are cross-fertile. The question becomes: what is required for this claim to be true? And that question is approached by considering the question: how should the sentence expressing the true claim in question be interpreted? Since the realist accepts the existence of abstract objects, he has species to work with and can give a face value interpretation of the sentence expressing the target claim. van Inwagen offers the following as the face value rendering of the claim that a realist can provide:

‘ $\exists x\exists y(x \text{ is a zoological species} \ \& \ y \text{ is a zoological species} \ \& \ x \neq y \ \& \ x \text{ and } y \text{ are cross-fertile})$ ’ (van Inwagen, 2014, 82).

However, van Inwagen notes, the nominalist cannot accept this rendering of the claim because it quantifies over, and thus commits one to, species. So, the nominalist has to give a different interpretation of the target claim, they have to give a paraphrase. van Inwagen claims that appropriate paraphrases are available. He provides an example of one:

This paraphrase makes use of four open sentences (abbreviated as indicated):

Ax x is a living animal

Cxy x and y are conspecific (animals)

Dxy x and y are fertile (sexually mature and non-sterile) animals of different sexes

Ixy x can impregnate y or y can impregnate x

And here is the paraphrase:

$\exists x\exists y [Ax \ \& \ Ay \ \& \ \sim Cxy. \ \& \ \forall z\forall w (Czx \ \& \ Cwy \ \& \ Dzw. \ \rightarrow Izw)]$.

(van Inwagen, 2014, 81)

What van Inwagen wants to point out with this example is that we can limit our ontology if we are willing to increase and complicate our ideology, our stock of primitive predicates. What I want to note about the example is that the point of disagreement between the realist and the nominalist over what there is becomes a point of disagreement about the content of sentences accepted as true.

The disagreement about ontology forces a disagreement about content and can be mediated through it. Both the realist and the nominalist accept the target sentence as true and aim to capture its intended interpretation. What is being contested becomes the intended content of the target sentence. The realist's predicate '...is a zoological species' does not appear in the nominalist's paraphrase. The realist takes that predicate to have content such that it appropriately features in the target sentence in the way they claim. Since the nominalist analyses the disputed content a different way, and denies that that content really contains anything corresponding to the realist's predicate '...is a zoological species', they have to claim that the realist's proposed interpretation of '...is a zoological species' is confused, based on a mistake.

This shows that taking there to be a predicate '...is a zoological species' which can be *used* with the content the realist intends it to have is not an ontologically neutral position. Taking the predicate to have this content presupposes the truth of the realist's position and so asserting the realist's position with a sentence that *uses* the predicate is not acceptable because to do so would be to assert the existence of some things (species) with a sentence that presupposes the existence of those very things.

§10.3

The discussion above of van Inwagen's construal of existence statements was intended to provide an illustration of the way that the strategy of locating the content of the term with which we say what there is in the predicate doesn't succeed in avoiding the presupposition of the existence of the very things in question. I considered van Inwagen's view because his view is a version of the widely held view that we should consider existence statements to have the form ' $\exists xFx$ '. I have argued that van Inwagen's view is not tenable. The reasons his view was not tenable were not specific to his view but common to views

which adopt his approach. However, there is a way of taking existence statements to have the form ‘ $\exists xFx$ ’ which differs from van Inwagen’s in important respects and so should be considered separately. It is the view of Gottlob Frege, and those who have followed him. I shall now consider this view.

§11

On the Fregean approach, existence claims are taken to have the form ‘ $\exists xFx$ ’ but this form is construed in a different way than it was on van Inwagen’s approach as discussed above. For Frege, and neo-Fregeans such as Bob Hale (2013), the first-order existential quantifier stands for a second order property because second order properties are “the referents of second level predicates – including first-order quantifiers $\forall x\dots x\dots$, $\exists x\dots x\dots$, $\forall y\dots y\dots$, etc. which may be combined with first level predicates to form sentences” (Hale, 2013, 13). So, the Fregean approach to existence claims construes claims of the form ‘ $\exists xFx$ ’ as saying of some first-level property that the second level property of being instantiated is true of that first level property: “In the sentence ‘There is at least one square root of 4’, we are saying something, not about (say) the definite number 2, nor about -2, but about a concept, square root of four; viz. that it is not empty.” (Frege, 1892/1980(a), 49).

One problem with the Fregean approach’s construal of existence claims as claims to the effect that a second-level property, ... is instantiated, is true of a first level property, is that this limits such claims to use in asserting the existence of objects. But even the Fregean would want to say in some way that there are properties, of various orders. If the Fregean construal of existence claims is inadequate for this task, that undermines its plausibility because it would then seem insufficient even to make the existence claims which someone subscribing to the Fregean position would want to make.

However, this problem seems to be one which may be resolved. In his (2013) Bob Hale develops a neo-Fregean position which is designed, among other things, to provide a satisfactory resolution to the problem of ‘the concept ‘horse’’²² and allow for a consistent

²² The problem of ‘the concept ‘horse’’ is a problem with Frege’s account of the nature of concepts that became apparent due to objections pressed against him by Benno Kerry, objections to which Frege responded in ‘On Concept and Object’ (1892/1980). Kerry had suggested that since Frege took concepts to be the sort of thing designated by predicates and objects to be the sort of thing designated by names (including definite descriptions), sentences such as ‘The concept ‘horse’ is easily attained.’ should lead one to conclude that the concept ‘horse’ is both a concept and an object and thus that, contrary to what Frege had claimed, there could be concepts which were also objects. Frege (1892/1980) responded by

statement of Frege's position. Hale allows for this in part by arguing in favour of the rejection of what he calls the reference principle:

expressions can stand for the same thing only if they are of the same syntactic type, which will be the case only if they can be interchanged in all contexts *salva congruitate*

(Hale, 2013, 25).

Hale argues that the reference principle not only leads to Frege's problem of 'the concept 'horse'' but also undermines a crucial thesis underlying Frege's approach, viz. that there is a single semantic relation holding between expressions of different types and entities of different categories, i.e. that expressions of different types all stand for something but for different kinds of things:

It is not just the specific relation of reference that holds between expressions and objects that is debarred from holding between expressions and entities of any other type – there can be no semantic relation of any kind whose domain comprises expressions (a kind of object) and whose range comprises entities of different types... Since Frege's semantic theory says – or attempts to say – that expressions of different logical types all have both sense and reference, it is – by the lights of the Reference Principle – simply incoherent! (Hale, 2013, 33)

The problem which I mentioned above, that of how, on the Fregean approach, existence claims can be made concerning the higher-level properties which Frege accepts, is not that which Hale is aiming to resolve²³ in rejecting the reference principle. Nevertheless, if we follow him in his rejection of the reference principle, that allows us to claim that

rejecting Kerry's claim and insisting that being an object and being a concept were mutually exclusive. However, that left him with the problem of explaining sentences such as Kerry's example in which a term apparently standing for a concept could occur as a name. The problem is a general one, as Frege pointed out in his reply, since when one tries to say something *about* a concept, one will be inclined to put the term for the concept in subject position but, given Frege's general position, insofar as one does that one will fail to speak about the concept one wanted to speak about (1892, 47-9). Frege's response in his (1892/1980) is to bite the bullet. He claims that expressions such as 'the concept 'horse'' do fail to designate the concept in question (because that concept is essentially predicative and unsaturated). Such expressions instead designate an object which Frege says goes proxy for the concept (1892, 47-9). Frege suggests that the resulting sentence about the proxy object can still express the thought that a sentence properly about the concept might, just presented a different way. Nevertheless, Frege did accept that the issue presented a problem which could lead to the failures of sentences to express an intended thought. He claimed this was something that would just have to be accepted and accommodated (1892/1980, 54) but many others who have come after him have thought that it could not or should not be accepted and so the issue of 'the concept 'horse'' has persisted as a problem to be solved.

²³ With his rejection of the reference principle Hale aims to allow for a resolution of Frege's problem of 'the concept 'horse'' and make it possible for Frege's theory to be articulated consistently.

relations and concepts do not have to have a specific level built into their argument places. Given this, we can claim that to say of a property that it is instantiated need not require that property to be of one specific level e.g. first level.

This mostly resolves the problem of the implausible limitation of existence claims to existence claims for objects because it allows there to be existence claims regarding properties as well. However, the problem of the limitation of existence claims to fewer than those we might want to make and fewer than those to which we might think the Fregean is committed is not completely resolved because by construing existence claims concerning entities as predicative claims concerning entities of the level above the entities in which we are interested, the Fregean position creates a situation where their ontological commitment will always exceed their stated ontological position on what exists; whatever existence claim is made will presuppose the existence of an entity a level up, and no matter how high you go this will be the case. This might not be considered a serious problem as it is not obvious that we need to be able to say what there is all at once. However, I think it is still a problem and I shall try to show how this is so in the second objection I bring against the Fregean approach to existence claims.

First, I shall argue that there is another problem with interpreting the claim that some objects exist as the claim that a relevant first-order property falls under/within²⁴ the second order property ‘...is instantiated’. It is a version of the problem which I suggested afflicts all approaches to the construal of existence claims which attempt to avoid presupposing the existence of the entities in question by having the predicate do the work of saying what it is that there is. Since I have gone over the problem in detail previously I shall be as succinct as possible in explaining how I think it comes up for Frege’s approach.

§11.1

Frege’s approach to existence claims is supposed to avoid presupposing the existence of the entity or entities whose existence is being asserted because the *existence* of first-order properties is not taken to depend on there being an object which satisfies those properties.

²⁴ Frege claims that the relation of falling under which an object bears to a property differs subtly from the relation of falling under that a first-order property can bear to a second order property and one way of reflecting this would be to speak of the former relation as a relation of falling under and the latter relation as a relation of falling within. (Frege, 1892/1980, 50-1)

For Frege, there will be uninstantiated properties, properties of which it is true to say that the number of things falling under them is zero.

If I say ‘Venus has 0 moons’, then there is no moon or aggregate of moons at all about which anything could be asserted; but the concept ‘moon of Venus’ thereby adds a property, namely that of including nothing under it. (Frege, 1884/2007, 56)

Given this, you can take the second order property denoted by ‘ $\exists x \dots x \dots$ ’ to exist without presupposing the existence of any particular objects, and you can take a relevant first-order property such as ‘...is a number’ to exist without presupposing the existence of any particular objects, and you can then make the claim that the first-order property falls under the second order property. This claim is supposed to be such that its content does not presuppose the existence of any particular objects, and certainly does not presuppose the existence of the particular objects in question. Nevertheless, its truth would require the existence of those objects and so it can be used to assert that those objects exist.

My objection to this account is going to focus on the question of how the uninstantiated kind properties required for the expression of ontologically interesting existence claims are to be available to serve as the semantic values of the predicates for first-order kinds which will feature in the relevant existence statements.

Answering the question of ontology requires *saying what* there is. This point is one for which I have argued throughout this chapter and which will be important here. I could press it against Frege whether he accepted it or not, but I think it is worth noting that he makes a point repeatedly (1891/1980, 21, 40-1) on account of which I think he should accept it. The point in question notes the difference between using terms which require that a thing of a certain sort exist and saying what the thing that those terms require the existence of is. The terms initially in question are terms for functions. Frege notes that (1891/1980, 21) mathematicians were using terms for functions adequately at a time when, if asked, they would give utterly implausible answers about the nature of the semantic values of those terms. Later in the same paper (1891/1980, 40-1), he presents the move from using terms of a given kind to being able to articulate an adequate conception of the nature of the semantic values of those terms as a move from level to level.

I have tried to show through the course of this chapter how difficult it is to *say what* there is without presupposing that there are those things. The way I want to press this point against the Fregean approach will easily be seen to be a version of the general

objection I have been developing against approaches of the sort in question albeit adapted to the specifics of the Fregean account of existence statements.

My objection is based on the claim, for which I have argued previously in this chapter, that we aim with the existence claims with which we answer the ontological question to *say* what there is. If we are to do this with existence statements having the form ' $\exists xFx$ ', then the work of expressing *what* there is will fall on the predicate 'F'. We might try to use novel kind terms for F, or we might try to use ones already in use. If we go for the former course, we will have to fix the meaning we intend our kind term to have. Alternatively, we might go for the latter course, and use kind terms already in use. However, it should be accepted that the natural language kind predicates with which we might do this are unclear, and often subject to differing interpretations. The kind terms current in philosophical discourse with which we might do this will certainly be subject to conflicting interpretations. So, even if we go for the latter course and take a term already in use for 'F' we will have to either fix or clarify its intended meaning if it is to play its role as the part of the formula ' $\exists xFx$ ' which does the work of expressing the *what* in our claim about what there is.

My objection to the Fregean approach is that there is no way of doing this work of fixing or clarifying the intended meaning of F in a way which avoids presupposing the existence of fs. If this is right, then using an instance of the formula ' $\exists xFx$ ' to provide a full or partial answer to the ontological question, will presuppose the truth of that full or partial answer. If that is the case, then we should not accept that ' $\exists xFx$ ' as Frege construes it is the form of the existence statements with which we answer the question of ontology. Since we should accept that those are existence statements, we should not accept that ' $\exists xFx$ ' as understood on this construal is the general form of an existence statement²⁵.

Part of the problem for the Fregean approach is that, given the construal, you need to both give the meaning of 'F' and use it to make your existence claim. But, for the 'F's that might plausibly feature in an answer to the ontological question, all the ways of fixing or clarifying their intended meaning are such that their actually having that meaning would

²⁵ It may be that the form of existence statements like 'There are tropes', 'There are mental properties', 'There are numbers' is not the same as the form of existence statements like 'There is a red book on the second shelf'. I make no claims about this issue either way. My interest is in the existence claims of interest in ontology. These are clearly existence claims, so if it should turn out that examples such as that given above concerning the red book demand a different analysis, then perhaps we should say that there is no general form for existence statements. In any case, if a form is not adequate to the existence claims of interest in ontology, then it cannot be the general form of existence claims and that is all I need for my claims.

presuppose the existence of the relevant things. But if the term F can only have its intended meaning if there are fs, then using it (or trying to use it) with that meaning presupposes the existence of those things, the fs²⁶.

To defend my objection to the Fregean approach I need to show that the available ways of fixing or clarifying the intended meaning of a term for a first-order kind property are such that their actually having that meaning would presuppose the existence of the relevant things. It is to this task that I shall now turn. For Frege, properties are a type of function: “a concept is a function whose value is always a truth value” (Frege, 1891/1980, 30). Concepts are functions of one argument place whose value is always a truth value. Relations are functions of two argument places whose value is always a truth value (Frege, 1891/1980, 38-9). Functions of all types are, by their nature, unsaturated (Frege, 1891/1980, 24-5). Objects, by contrast, are whole and can serve as the arguments which complete an unsaturated function (Frege, 1891/1980, 25).

§11.1.1

The first option I shall consider is fixing the meaning of a property term. On the Fregean approach, the way you secure reference to functions in general and concepts in particular is to empty a complete expression of content by removing from it a term for an object; by splitting it into function and argument.

We get the expression for a function by splitting up the complex sign for an object into a saturated and an ‘unsaturated’ part. (Frege, 1891/1980, 11)

Since concepts are functions whose value is always a truth-value, to secure reference to a concept you have to split a sign for a truth-value into expressions for function and argument. Sentences which are either true or false are the signs for the truth values (Frege,

²⁶ One way out of this might be to insist that you do not need to fix or clarify the intended meaning of your kind term. I argued above that if one does not do this one will not be able to make with it any determinate claim about what there is, in part because all the relevant terms in this area are opaque or contested. One philosopher who defends the position that you can and should simply use kind terms as they occur in natural language in your existence statements is Amie Thomasson (2015). In the next and last section of this chapter I shall argue that Thomasson’s position should be rejected. I shall argue that the framework she uses to allow us to avoid the task of fixing or clarify the meanings of our kind terms should be rejected. However, for the moment I shall set aside the objection, both on the basis of the previously defended response to it to which I alluded and also on the basis that it is not a plausible position to take to defend Frege who certainly thought (1884/2007)(1892/1980)((1892/1980(b))) that terms for kind predicates like ‘...is a number’, ‘...is a function’, ‘...is an object’, ‘...is a concept’ stood in need of clarification if they were to be used in specifying his ontology.

1891/1980, 28) so to secure reference to a concept and fix it as the content of your predicate F, you need to remove a term for an object from a sentence which is either true or false.

However, it has been assumed that your predicate is not antecedently understood, at least not adequately or clearly. And it has been assumed that you are trying to fix its meaning in a way that will allow it to be understood so that you can use it to *say* what there is. But if that is the case then fixing the meaning by removing terms for objects from a false sentence which could yield a term for the property will be inadequate for the purpose. Such a procedure would meet the narrow requirements for fixing reference to a property but would not do so in a way that allowed that property to be understood; removing the term 'Peter' from the sentence 'Peter is a proposition' to yield '...is a proposition' would not allow that predicate term to be understood in an intended sense if it wasn't already so understood. Repeating the procedure with numerous false sentences might help but would still be insufficient. The only use of false sentences that would seem sufficient would be a use of all the false sentences that could yield the predicate along with the claim that they were all the false sentences that could yield it and a specification of what remained in the domain but hadn't been named in any of the sentences. However, that last clause is where the procedure runs into a problem because that procedure would only work to allow understanding of the predicate if there were things remaining in the domain, things which the referent of the predicate won't map to false. But if fixing the content of 'F' in a way that allows for understanding requires there to be such things, then this method of fixing the content of 'F' in a way that allows for understanding requires there to be fs.

§11.1.2

The problem is more obvious if true sentences are used. Intuitively, if one removed names from (what one took to be) true sentences which could yield the predicate in question fewer sentences would be needed to fix the content of the predicate in a way that allowed for understanding. Indeed, something like this seems to be one way that we do fix and clarify the meaning of many of our predicates. However, if one needs there to be true sentences from which one can remove a name to yield 'F' in order to fix or clarify the intended meaning of 'F', then one needs there to be fs in order to do this; the named objects whose names are removed from the sentence will be objects that F maps to the true.

§11.1.3

How else might one fix or clarify the intended interpretation of a predicate ‘F’ that one wished to use in an existence claim? The problem is: if the term is to be a candidate for use in an answer to the question of what there is, it won’t be such as to be subject to definition from below^{27 28}. If we cannot define it, and we cannot reach it by abstraction without presupposing the existence of the relevant things, then the remaining option seems to be making it intelligible from above. Indeed, this is the position that Frege took with respect to his terms ‘concept’ and ‘object’.

Concerning the term ‘object’, Frege writes:

the question arises what we are here calling an object...I regard a regular definition as impossible, since we have here something that is too basic to admit of logical analysis. It is only possible to indicate what it meant. Here I can only say briefly: An object is anything that is not a function, so that an expression for it does not contain any empty place. (Frege, 1891/1980, 7)

However, indicating what is meant only secures content if there is appropriate content there to be secured. This is a point that I made in the initial statement of the presupposition

²⁷ The definition would only be as clear as the term used to define it, and our attention would simply turn to that term. The problem would be restated for that term. At some point, if a determinate answer was to be given to the ontological question using these terms, we would need one of them not to be defined from below in terms of another. It would simply be that term in which we were interested.

²⁸ The problem I am raising is a problem for such terms as might feature in an answer to the ontological question. The problem is a problem of how you might fix or clarify the meaning of such a term in a way that did not presuppose that there are things it is true of, i.e. in a way that would allow it to feature in a true negative existential claim. It is noteworthy that the true negative existential claims that Frege considers in detailing his approach to existence statements do not feature terms like this. Instead, they tend to feature terms for concepts which are complex in some way. This allows for nothing to fall under them while they get their meaning from their parts. One example of a true negative existential that Frege considers is the sentence ‘Venus has 0 moons’ (Frege, 1884/2007, 56) Although this is a number statement, for Frege, such statements are equivalent to existential statements: “Affirmation of existence is indeed nothing other than denial of the number 0” (Frege, 1884/2007, 60). For Frege, ‘Venus has 0 moons’ says of the concept ‘moon of Venus’ that it has the higher-level property of nothing falling under it. We can understand the concept term ‘moon of Venus’ without relying on moons of Venus because ‘Venus’ is a name with a meaning and ‘moon of...’ is a functional expression with a meaning. Filling in the latter with the former as argument yields a concept which we can understand on the basis of our understanding of its parts.

Interestingly, Frege also introduces talk of concepts formed from other concepts of the same level (e.g. the concept ‘is a rectangular, rectilinear, equilateral triangle’ (1884/2007, 60)). He takes this concept, and others like it, to be constituted by component concepts, e.g. in this case one of the components is ‘rectangular’. (1884/2007, 60). He calls these components *characteristics* of the concept that they constitute and writes:

In fact, one can also arrive at a concept from characteristics; and then it is possible that no thing falls under it. If this did not happen, one would never be able to deny existence, and therewith the affirmation of existence would also lose its content. (Frege, 1884/2007, 58)

problem for kind terms. Frege does not intend the meaning of ‘object’ to be ‘is not a function’, especially since ‘function’ is also supposed to be logically simple. He is not, in Kripkean terms, specifying the meaning of ‘object’ as that of ‘not a function’. He is trying to fix the meaning of ‘object’, by saying that to be an object is to be something other than a function. But, for that to work there have to be things that are not functions and those things which are not functions all have to be the same in some way, otherwise ‘not a function’ and ‘the expression for it does not contain any empty place’ wouldn’t serve to indicate a single notion, that of object. Frege thinks this is how the world is made up. He thinks that there are objects and functions and that these notions are mutually exclusive and jointly exhaustive of the things that there are. So long as he is right, it seems that he will be able to fix the meaning for his basic predicates in the way that he tries to, by making them intelligible from the top down. But the issue is that he will only secure such an intended meaning for a predicate²⁹ ‘F’ if the world is as he takes it to be, i.e. in this case, if there are fs. But then, the predicate ‘F’ having its intended meaning will rely on there being fs. So, if the predicate is used in its intended sense in an existence claim of the form ‘ $\exists xFx$ ’, that claim will presuppose that there are fs.

In conclusion: we need to fix or clarify the intended meaning of ‘F’ if we are to use it in saying what there is but all the ways of fixing or clarifying this content which are available to the Fregean presuppose the existence of fs. Given this, the use of an instance of the formula ‘ $\exists xFx$ ’ to provide a full or partial answer to the ontological question, will presuppose the truth of that full or partial answer. That being the case, we should not accept the Fregean construal of the existence statements with which we answer the question of ontology.

§11.2

The second problem I want to press against the Fregean approach to existence statements returns to the point that, given the Fregean construal of existence statements, you can only make an existence claim about some thing or things by making a claim about properties

²⁹ It has to be a predicate for the purposes of this argument because it will have to feature in an existence claim as one.

of a higher level whose existence you have to assume in order to make the claim. Ontological commitments will always outstrip the affirmations of existence made³⁰.

Given the Fregean construal of existence claims, every affirmation of existence presupposes the existence of a relevant property of the next level along with the property of being instantiated. The existence of a property of some level is presupposed by every existence claim. Appreciating this lets us see that the Fregean construal of existence claims presupposes a broadly Fregean ontology of objects, first-level properties, second level-properties etc. which is used to interpret existence claims. The truth conditions given for existence claims are given in terms of properties falling under further properties of higher order.

The ontological question asks us to answer the question: what is there? As is noted often, in asking this question we are not looking for a list of entities. We seem to be asking, in some sense, what kinds of things there are; how the world is made up. As answers to the question, object-property ontologies are in competition with, for example, states of affairs ontologies which consider objects and properties to be abstractions from states of affairs. By construing existence claims in terms of possession by properties of higher level properties, the Fregean account is building at least a partial answer into the content of the question; for anything to exist is for properties, and higher order properties to stand in some relation (and for objects to stand in a certain relation to such properties, otherwise we would not be able, by talking about the relation of one property to another, to make claims about the existence of objects.)

The Fregean account provides a construal of existence statements which cannot be used consistently by those who have states-of-affairs ontologies such as that described above. It cannot be used consistently by trope theorists or nominalists. If we tried to use such existence statements to say that there are objects and properties, the construal of the statement would presuppose the truth of the very claim which we were trying to make with it. However, if we tried to use the proposed construal to say that there are no objects or properties, or that there are states of affairs such that properties are only abstractions

³⁰ It was suggested above that this might not be a problem because we do not need to make all our existence claims at once. I shall now develop this second problem for the Fregean in a way that makes it clear that this response would not allow us to avoid it. The problem of the ontological commitments needed to make existence claims on this construal of them need not rely on a requirement that one be able to make all one's existence claims at once.

from them, we could not do so consistently³¹. The form of our statement would undermine our claim. The form of the statement presupposes that there are properties.

One could make the objection that statements of this form need not presuppose that there are any specific properties or objects (for reasons given above and reasons to be given below I do not accept this), but even one who would make this objection would still have to accept that the construal presupposes the truth of the claim that there are things correctly classifiable as objects, and first-order properties, and second-order properties, etc. Even if one accepted the objection (which I do not), one should still accept that, on the construal given, existence statements presuppose that there are properties. Given the points made previously, notably that a claim and its negation cannot be given different truth conditions, what this makes clear is that neither the statement that there are objects and properties, nor the statement that there are tropes, nor any other such statement, can have the form ' $\exists xFx$ '.

These claims certainly seem to be ontological claims which might be used in answers to the question of what there is. Indeed, the question of whether properties exist is a paradigmatic ontological question. If a construal of existence claims cannot serve as the form for such claims as those in question, it would seem to be so much the worse for that construal.

§11.2.1

One way a Fregean could respond to this objection to the Fregean construal of existence claims is to claim that there is a distinction to be made concerning the questions at issue. One could distinguish between the question of what the fundamental categories are and the question of what specific entities there are. However, insofar as we are interested in the existence claims with which we answer the ontological question, this has the problem that it is generally accepted that the answers sought by this question are not lists of entities or putative entities. In his (2013) Bob Hale makes a different distinction between the questions that might be taken to be at issue. He distinguishes between the question of what the fundamental categories are and the question of what specific kinds of entities there are.

The central question of ontology, then, is: what kinds of things are there?...one way of taking our general question is as asking what basic or fundamental

³¹ The claim would be understood as saying something along the following lines: the property '*...is a state of affairs*' possesses the higher order property of '*...being instantiated*'.

categories or types of entity we should recognize – where candidates include objects, individuals, particulars, substances, properties, relations, universals, events, processes, states of affairs, facts etc. Clearly, we may also – presupposing some such categorisation – ask more specific but still highly general questions, e.g. What kinds of objects (or properties, events,...) are there? Are there abstract as well as concrete objects? Are there mental properties (or events) as well as physical ones? etc. (Hale, 2013, 9).

I concluded above that the claim that there are objects and properties cannot plausibly be taken to have the form ‘ $\exists xFx$ ’ as that form would be understood by a Fregean. Given that, insofar as Hale takes the question of ontology to be the question of what fundamental categories we should recognise, the existence claims with which we provide the answers to that question could not have the form ‘ $\exists xFx$ ’. Hale does not take the claims concerning ontological categories to have the form ‘ $\exists xFx$ ’, but he also does not take these claims to provide full satisfactory answers to the ontological question.³² Satisfactory answers are provided by giving answers to both the questions.

There are a number of points that should be noted concerning where such a proposal would leave the claim that existence statements have the form ‘ $\exists xFx$ ’. First, if making claims about what there is requires saying what categories we should recognise, and then saying what specific kinds of things of those categories there are, and statements of the form ‘ $\exists xFx$ ’ cannot be used to provide the first part of that answer, then, insofar as both parts are required to make claims about what there is, statements of the form ‘ $\exists xFx$ ’ are not adequate for the task of making these claims. Second, according to the proposal, claims about what there is have two parts which are separate from each other; the second builds on, and thus requires the first.³³ Why should we accept this separation? Insofar as the two parts are needed, why hold them separate? Why not make use of a notion which includes both answers and allow the two parts of the answer to work together? Since the notion used to provide the second part of the answer builds on the first, and thus includes it, why not just use it? E.g. say that there are abstract objects, rather than saying that there are objects and some of the objects are abstract. The answer to this question seems to be that the first is required to defend the form ‘ $\exists xFx$ ’ used to provide the second. The idea

³² I shall discuss Hale’s account of categories and existence claims in greater detail later in the thesis but at this point I shall cover it succinctly in order to argue against an objection that some might have to the second objection I pressed against the Fregean approach to existence claims.

³³ I shall discuss this aspect of Hale’s proposal in greater detail later in the thesis but at this point I shall simply give a brief argument as to why we should reject it.

would be that to provide a satisfactory answer to the question of what there is you need to use a statement of the form ‘ $\exists xFx$ ’ which clearly uses terms for entities of certain categories and thus presupposes the existence of things of these categories. So, you include the first part, that concerned with recognizing categories, to allow for the second part³⁴ which includes reference to entities of such categories. This reason for keeping the parts separate depends on the claim that to provide a satisfactory answer to the question of what there is you need to use a statement of the form ‘ $\exists xFx$ ’ (as that form is understood by Fregeans).

I shall contend that we should reject that claim. If we reject that claim, then we undermine the proposed basis for holding the two parts of the question of what there is apart and thereby undermine the potential response that could be made from Hale’s neo-Fregean position to my second objection against the Fregean construal of existence claims; that objection being that the construal presupposes an ontology of objects, first-order properties, second-order properties etc.

The reason that I claim we should reject the position that to provide a satisfactory answer to the question of what there is you need to use a statement of the form ‘ $\exists xFx$ ’ (as that form is understood by Fregeans) is based on the conclusion I reached in the first objection I raised against Frege’s construal. I argued there that a relevant predicate ‘F’’s having the content it would need to have, in the way it would need to have it, in order to be used in saying what there is would depend on there being the very things of which ‘F’ was true. If that is the case, then a statement using the predicate ‘F’, such as a one having the form ‘ $\exists xFx$ ’, cannot serve as an acceptable way of asserting the existence of Fs. Given that, I conclude we should reject the claim that to provide a satisfactory answer to the question of what there is you need to use a statement of the form ‘ $\exists xFx$ ’ and also to reject the position I have taken that claim to support, i.e. the claim that we should hold there to be two separate parts to answers to the question of what there is. In rejecting this, I resolve the potential response to my second objection to the Fregean approach.

§11.3

On the basis of the two objections for which I argued above, I am setting aside the Fregean construal of existence statements as statements of the form ‘ $\exists xFx$ ’ where this form is

³⁴ It provides some support to this construal to note that Hale accepts that the claims functioning as the second part of an answer to the ontological question presuppose an answer to the first:

Clearly, we may also – presupposing some such categorisation – ask more specific but still highly general questions, e.g. What kinds of objects (or properties, events,...) are there? (Hale, 2013, 9).

understood to predicate the second order property of being instantiated, $\exists x\dots x\dots$, of a first order property taking the place of F. I have concluded this construal does not capture the content of the existence claims with which we answer the question of ontology, the existence claims whose truth is presupposed by our use of putative terms for entities of various kinds.

As I noted earlier, part of the problem for the Fregean approach is that in order to use existence claims as it construes them to provide an answer to the ontological question, you need to both give the intended meaning of the 'F' which will feature in your claim and then *use* it to make your existence claim. If the need to do both of these things is part of what leads to a problem for the Fregean construal, one way to avoid that problem might be to find a way to reject the claim that you need to do both of these things. The final construal of existence claims which I shall consider in this chapter defends a position along these lines. The construal is that defended by Amie Thomasson in her (2015).

§12

Thomasson takes her approach to existence claims to be one that draws on the Fregean approach but changes it in a number of crucial ways. One of the differences is that Thomasson explicitly defends taking terms with the meaning they have in natural language when using them to make existence claims. If Thomasson's defence of this claim were accepted, then her view might avoid the problem I have raised for the Fregean because by rejecting the need to fix or clarify the meaning of the terms featuring in her existence claims, Thomasson would avoid the need to both explain the intended meaning of her terms and then use them with that meaning.

I shall argue that we should not accept Thomason's construal of existence claims. I shall contend that she does not succeed in providing a construal of existence claims which is such that the terms have meanings which do not need to be clarified or fixed and do not presuppose an ontology. I shall argue that the way in which Thomasson's account runs into the presupposition problem shows that we need to understand existence claims to feature ontological category notions, construed along certain lines. It is an appropriate notion of ontological category which I shall then be concerned to develop over the course of the next three chapters.

§12.1

In her (2015), Amie Thomasson argues that, when properly understood, ontological questions are easy to answer (Thomasson, 2015, 112-4) and the answers are usually positive (Thomasson, 2015, 145). Understanding this, she claims, leads one to both a deflationary metaontological position and also to a position Thomasson calls ‘simple realism’ regarding the subjects of most first order ontological debates (Thomasson, 2015, 112-4). Thomasson’s construal of the notion of existence is crucial to her argument for this result. On her account, many existence claims turn out to be trivially true because the *rules of use* for relevant terms license the inference of the existence claims from widely accepted truths (Thomasson, 2015, 145-57), or sometimes, it seems, from observation (Thomasson, 2015, 110-11). The rules of use allow for this because they centrally involve application conditions. Application conditions are to be something fulfilled or not by a situation (Thomasson, 2015, 90). Rules of use will stipulate certain situations as ones in which it is appropriate to use a certain term and this will determine the application conditions for the term to be such that the term applies in those situations (Thomasson, 2015, 89-94). Thomasson avers that consideration of the rules of use for the terms for entities on which ontological disputes focus will reveal that these rules determine that application of these terms just is warranted by various commonplace situations (Thomasson, 2015, 145-58). She argues that this licences the inference of existence statements by presenting a construal of the notion of existence according to which to claim that something exists just is to claim that some application conditions are fulfilled (Thomasson, 2015, 86). This allows her to draw her positive conclusions regarding the existence of most philosophically contentious putative entities because she simply needs to say that terms were introduced by being stipulated to apply in certain situations, it is accepted that there are those situations and so it should be accepted that the entities exist because nothing more is involved in the claim that the entities exist than the claim that there are the situations which the terms for the contentious entities were stipulated as applying to.

In this section, I am going to argue that Thomasson’s construal of the notion of existence should not be accepted and neither should the construal of existence claims she defends with it. First, I shall argue that her construal cannot be accepted as a completely general position concerning the form of existence claims. Next, I shall argue that the problem with the cases I discuss first, generalises, and prevents us from accepting it for any of the

cases of interest in ontology. The problem, as might be predicted at this point, is that instances of Thomasson's construal will presuppose the existence of the very entities they would be used to assert the existence of.

§12.2

Thomasson claims that the notion of existence which she aims to capture with her construal is a formal one (Thomasson, 2015, 84-9). She takes this formality to consist in topic neutrality (Thomasson, 2015, 63-9). She emphasizes that, unlike other deflationists who argue that the existential quantifier has varying meanings, her deflationism does not involve the idea that 'exists' has different meanings for different people or communities. Instead, along with defenders of realism about metaontology (van Inwagen, 2009) (Sider, 2011) Thomasson proposes to understand 'exists' as univocal. She proposes the following as "an invariant core formal rule of use" (Thomasson, 2015, 83) for 'exists':

"E: Ks exist iff the application conditions actually associated with 'K' are fulfilled" (Thomasson, 2015, 86)

This construal of 'exists' is introduced by Thomasson as related to the Fregean understanding of 'exists' as a second order quantifier but Thomasson notes and accepts objections that claims of existence are not claims about either concepts or words (Thomasson, 2015, 85-7). She remarks that accepting the biconditional 'the proposition that p is true iff p' does not involve taking 'p' to be about a proposition (Thomasson, 2015, 87). Similarly, she contends, we can accept her biconditional as expressing a core rule of use for 'exists' without taking existence claims to be about terms; the term 'K' is used in the existence claim on the left-hand side but only mentioned in the right-hand side explication of that claim. Thomasson speaks of this as "moving up and down the semantic scale" (Thomasson, 2015, 87).

§12.2.1

As noted in §12.1, Thomasson's construal of existence plays a very important role in her argument for metaontological deflationism, and her explicating biconditional is supposed to express a core formal rule of use for 'exists', a rule which does not vary regardless of

the topic discussed. In this section, I shall argue that the claim that her construal can be accepted in a completely general way should not be accepted. My argument for that conclusion relies on Thomasson's use of the notions of application conditions and situations, so in this sub-section I am going to discuss Thomasson's treatment of application conditions and situations.

Thomasson's arguments centrally involve the notion of application conditions. This leads her to raise and attempt to answer the question "What are application conditions?" (Thomasson, 2015, 89). The importance of this being a legitimate question is something which I shall return to but for the moment I shall follow her in addressing the question itself. Thomasson defines application conditions as semantic rules which specify the situations in which a speaker is entitled to apply a term (Thomasson, 2015, 89-96).

One objection that might be raised against her construal is that we do not always have to know exactly what is required of the world to justify the application of a term that we are nevertheless competent users of. To allow for the insights of causal theories of reference which might address this objection, Thomasson allows that application conditions may "involve deference to experts and to the world" (e.g. the application of a kind term might require that something be of the same composition as an originally ostended thing, but we might not know what that involved). For Thomasson, application conditions "need not be descriptive" (Thomasson, 2015, 94).

Another point that someone might raise is the point that competent users of terms may not have complete or accurate propositional knowledge concerning the conditions in which it is appropriate to use the terms that they use. This is specifically accommodated in Thomasson's account. She explicitly affirms that mastery of rules does not require the ability to articulate the rules mastered and specifies that competent users of terms of a language need to be able to apply and refuse these terms correctly but don't need to be able to articulate the rules they are using in doing so (Thomasson, 2015, 91-3). Thomasson also attempts to allow for semantically basic terms by not requiring that all application conditions be stateable. Semantically basic terms are still to have application conditions, but these conditions are to be such that they will not be stated using other terms with application conditions (Thomasson, 2015, 91-3). Instead, the application conditions for these terms may be defined directly in terms of the situations in which the terms will and will not apply (Thomasson, 2015, 91-3). Importantly, even in these cases, Thomasson is still thinking in terms of the fulfilment of application conditions.

it is plausible that any language must include some ‘semantically basic terms’, that is terms that cannot be learned just by way of learning definitions stated in other terms...speakers may learn to master the rules of use for those terms by other means, for example, ostensively, we learn that a term is to be applied in situations like this (and not in situations like that), or via judgements of similarity to ostended paradigms (Thomasson, 2015, 92).

In a section specifically addressing existence claims made using putatively basic terms, Thomasson reiterates this position. In this section, she is concerned to deny that there are any terms ‘K’ which are such that determining whether the application conditions for ‘K’ apply would involve determining whether Ks exist (Thomasson, 2015, 96-112). This, she takes it, would provide a justification for non-deflationary metaontological positions at least with respect to the question of the existence of Ks.

To address the issue, Thomasson first distinguishes two senses of basicness for terms. Terms might be thought to be basic in the sense that we learn them before learning any other terms or alternatively terms might be thought to be basic in the sense that they are to stand for ontologically basic entities. Existence claims involving terms with the second sort of basicness are quickly dismissed as not presenting the sort of problems in question i.e. as not being such that the application of the term depends on there being such things as those in question. The basis for this conclusion is the contention that existence claims involving terms for certain putatively ontologically basic entities, specifically numbers and propositions, can plausibly be addressed using the deflationary metaontological approach (Thomasson, 2015, 104).

On the issue of conceptually basic terms, Thomasson makes two claims. First, she claims that although terms which are basic to a conceptual scheme may not actually be learnt through definitions stated in other terms, it may be that they could be so learnt. If we can provide definitions of application conditions for terms which are actually conceptually basic, then we can show that these terms could be learnt on the basis of mastery of other terms. The fact that they are not so learnt is to be understood as an idiosyncrasy of the particular language. Thomasson reiterates this point later in the book in defending her view against Hofweber’s objections.

if we took that view, then what things there really are would have to parallel what terms happen to appear originally as (underived) nouns in our language. If we

spoke a different language, say a fundamentally feature placing language or van Inwagenese...we would come to very different conclusions about what ‘objects’ ‘really exist’ ‘out there in reality’...What objects we accept as ‘out there in reality’ shouldn’t hinge in this way on what terms happen to be basic versus derived in our language. (Thomasson, 2015, 283)

It is worth noting that it is an assumption of this first argument that the terms which are basic in our language merely *happen* to be so. We might easily have happened to speak a feature placing language instead of the language we do speak. This is an assumption which one might want to reject but for the moment I shall not pursue this objection.

The second claim that Thomasson makes about existence claims involving conceptually basic terms is the claim that even if we were to find that there are terms say ‘K’ such that we cannot give a definition of their application conditions using other terms, it still wouldn’t be the case that the application conditions for such a term ‘K’ required the existence of a K and so blocked the deflationary approach. Instead, Thomasson contends, we would just have a case where there were application conditions which situations would fulfil or fail to fulfil but we would determine directly by observation of situations whether the situations fulfilled the application conditions (Thomasson, 2015, 110-112).

As an example of such a case, Thomasson considers the case of the ‘object’ considered as a sortal and contends that:

In determining whether the object concept applies...they [infants] make use of perceptual information, using what Carey calls ‘perceptual input analysers’ that track such input as spatiotemporal continuity, boundedness and cohesiveness (2009, 115). In short infants apply the basic object concept empirically on the basis of observable conditions. Those who become more linguistically sophisticated and use this conceptually basic concept are entitled to conclude that there is an object in a given situation by tracking the relevant features. (Thomasson, 2015, 110-11)

Thomasson dismisses as ill-formed the idea of a notion of object which is neither a sortal in its own right nor what she calls a covering sortal (a sortal which applies whenever any sortal does). This is something to which I shall return below but first there is one more point to make about the framework which Thomasson uses to provide her deflationary

ontological position. It is a point which I shall contend is related to Thomasson's dismissal of the non-sortal notion of 'object'. The final point to note concerns the role of situations.

For Thomasson, situations are what fulfil application conditions. Above I outlined the role of application conditions in Thomasson's account and *what* she takes them to be. Although Thomasson mentions situations less often, and sometimes uses the terms 'circumstance' or 'condition' instead, it is clear on the basis of the occasions where she does mention them that situations are what allow application conditions to do the work they do in the theory. Application conditions are a kind of thing which are fulfilled by situations.

I shall conclude this section with a few quotes which illustrate this.

Concerning application conditions, Thomasson writes:

Mastery of these rules of use enables competent speakers to evaluate actual and hypothetical *situations* as ones in which their term (given the rules that govern its use in the actual world) would or would not refer (Thomasson, 2015, 90).

Thomasson claims that we should think of application conditions as rules

which speakers master in acquiring competence with applying and refusing a new term in various *situations*, and that (once mastered) enable competent speakers to evaluate whether or not the term would be properly applied in a range of actual and hypothetical *situations* (Thomasson, 2015, 93) (*italics added*)

§12.3

Thomasson's account is given in terms of situations and the application conditions they fulfil or fail to fulfil. She raises and addresses the question of what application conditions are. She needs there to be application conditions and situations which fulfil or fail to fulfil them in order for her account to be viable. She needs there to be application conditions and situations which fulfil them or fail to fulfil them in order to secure truth for the right-hand sides of any of the biconditionals she uses to secure her 'easy' conclusions concerning existence.

My contention is that the existence claims concerning application conditions and situations which Thomasson needs to count as true in order for her arguments to run cannot be satisfactorily analysed using a construal of 'exists' which is given in terms of them. If this is right, then I will secure my first conclusion which was that even if

Thomasson's construal of 'exists' is viable with respect to existence statements made using certain types of terms, it should not be accepted in a completely general way. Such a conclusion would entail the rejection of the claim that Thomasson's construal of 'exists' articulates a core rule of use of a univocal notion of 'exists'. At the very least, such a conclusion would limit the scope of the deflationary results of Thomasson's position and allow that some questions of ontology may not be easy. Alternatively, if one wants to hold on to the claim that 'exists' is univocal, the conclusion for which I shall argue would undermine one of the key elements of Thomasson's deflationary argument and so block its conclusion.

§12.4

How would Thomasson's approach deal with the following two claims?

- (1) Application conditions exist.
- (2) Situations exist.

According to schema E of Thomasson's account, "Ks exist iff the application conditions actually associated with 'K' are fulfilled." (Thomasson, 2015, 86) Substituting in 'application conditions' and 'situation' for 'K' this gives us:

- (1) Application conditions exist iff the application conditions actually associated with 'application condition' are fulfilled.
- (2) Situations exist iff the application conditions actually associated with 'situation' are fulfilled.

To appreciate the problem here, it is important to remember how Thomasson's easy ontological method is supposed to work. Although these are biconditionals, the direction our reasoning is supposed to take is right to left. We are supposed to determine whether some application conditions are fulfilled, empirically or by reasoning from a conceptual truth, and we are then supposed to use this to make what is to be a trivial move from right to left. Put another way, we can say that existence claims are supposed to be the conclusions of easy inferences from the right-hand side to the left. Can we make these inferences in these cases? What would it be for the right-hand side of the above biconditionals to be true?

This is where the consideration in previous sections of Thomasson's discussion of basicness becomes important. Thomasson was concerned to rule out the possibility that

there might be basic terms ‘K’ with application conditions which were such that Ks had to exist in order for the application conditions of ‘K’ to be fulfilled. She thought that that would allow back in exactly the sort of ‘hard’ ontology she was concerned to deflate.

The problem is that this is exactly what happens with the right-hand side of the biconditional for ‘application condition’ and ‘situation’. The reason for this is simply that the right-hand side claims are given *in terms of* the fulfilment or otherwise of *application conditions*, by *situations*. These right-hand side claims are supposed to be true and in order for them to be true there have to be application conditions and situations which stand or fail to stand in the appropriate relation. When we come to the question of whether application conditions themselves exist, and we understand the answer to this question to involve determining whether the application conditions associated with ‘application condition’ are fulfilled by a situation, we find that considering the question involves presupposing the answer. To consider the question, we have to accept that there are application conditions associated with ‘application condition’ (‘iff *the* application conditions associated with ‘application condition’...’) and so considering the question involves presupposing that there are application conditions (those ones at least).

Since Thomasson was concerned to argue against exactly this outcome, how is it that despite her arguments we get this conclusion anyway? And is the problem which leads to this outcome specific to the choice of application conditions and situations as that in terms of which to understand the right-hand side of a biconditional explicating ‘exists’?

§12.5

Before addressing these questions, I shall raise and set aside an objection that might be made to the cases I am considering. Thomasson presents the metaontology she defends as neo-Carnapian. But if one adopts a Carnapian approach, and considers Thomasson’s position, one might be inclined to object that the existence claims I have presented as causing problems for her account are external ones which are illegitimate as such. This objection can be addressed and set aside. There are two points to make against it.

1. One might claim that all external questions are illegitimate on a Carnapian basis. However, the actual justification which Carnap gave for the position that we

should reject external questions was considered earlier in this chapter and found to be easily resisted. Carnap's basis for rejecting external questions was that he interpreted them as questions about whether specific *systems* exist (Carnap, 1950/1956, 205) (italics added). On the basis of this claim, along with the claims that a system cannot be said to be an element of a system, and the claim that for something to exist is for it to exist within some system, Carnap argued that external questions lacked cognitive content. Each of Carnap's premises is contentious and more plausibly rejected than accepted. I think the versions of all three that Carnap was defending should be rejected. An objection that external questions are illegitimate needs to be supported and if its justification is that which Carnap supplies, I would conclude that it should be rejected.

2. The objection that the cases I was considering were external existence claims and could not be held against the account because of that seemed to have force mainly because Thomasson presents her view as neo-Carnapian. The status of Thomasson's account as neo-Carnapian is due to the Carnapian positions she adopts, but she does not adopt all of Carnap's positions on metaphysics, and she does not assume the truth of those that she does adopt. She defends them and defends the claim that a broadly Carnapian approach to metaphysics should be taken. In particular, she defends the rejection of external existence claims and her defence of it differs from Carnap's.

Thomasson argues that the best way to understand the internal to a framework vs external to framework distinction is as a distinction between the use and mention of terms (Thomasson, 2015, 36). This is an interpretation of the distinction which she adopts and adapts from Huw Price (Price, 2009, 324). She uses her construal of this interpretation of the distinction, along with her construal of existence claims, to defend the Carnapian conclusion that external existence claims are meaningless though given the differences in her interpretation, there are far fewer existence claims that turn out to be external. Claims that were external for Carnap (e.g. 'Numbers exist') are internal for Thomasson. For Thomasson, the claims that turn out to be external are claims attempting to use terms while separating them from their application conditions and thus rendering them meaningless.

Both Thomasson's interpretation of the internal vs external distinction and her construal of existence claims are given in terms of situations and application conditions. I have argued for the rejection of her construal of existence claims.³⁵ Since her construal of existence claims is used to defend her dismissal of external existence claims, her dismissal of external existence claims cannot be used to defend her construal of existence claims.

§12.6

Having set aside that objection, I shall return to the questions I raised at the end of the last section. (1) The conclusion I have claimed Thomasson faces is one she explicitly tried to avoid. How is it that it arose for her position anyway? And (2): Is the problem which leads to this outcome specific to the choice of application conditions and situations as that in terms of which to understand the right-hand side of a biconditional explicating 'exists'?

1. The problem with the arguments which Thomasson uses to avoid the conclusion which I have argued she faces is a problem with the argument she uses to deal with potential ontological basicness in the terms occurring in existence claims. On the basis of a contention that existence claims involving two specific sortal terms 'number' and 'proposition' can be satisfactorily dealt with by the deflationary approach, combined with the claim that numbers and propositions might be thought of as candidates for ontological fundamentality, Thomasson concludes that there is no problem dealing with existence claims involving terms for the ontologically basic.

Claiming that your account can deal with existence claims involving certain terms which *might be thought* of as denoting ontologically basic entities doesn't justify a conclusion that for any term the putative ontological basicness of its denotation does not present a problem.

³⁵ I would, if space permitted, also argue for the rejection of her position on what allows for use and mention because that position amounts to the claim that the meaning of terms is given by their association with application conditions, understood as Thomasson intends, with these being defined on situations, understood again as Thomasson intends. I would argue, along similar lines as I have elsewhere in this chapter that that view of meaning presupposes ontology of situations and application conditions.

Thomasson just does not deal with the problem that for any account, it might seem that some entities, but perhaps different ones from other accounts, will play the role of being ontologically basic. If this is accepted, then to show that your account of existence statements doesn't run into problems when the terms involved stand for ontologically basic entities, it is not enough to show that your account can deal with terms which might be taken to stand for ontologically basic entities, nor is it enough to show that your account can deal with existence statements involving terms other accounts take to stand for ontologically basic entities, as your treatment may simply show that the denotations of these terms are not ontologically basic in your account. (I would suggest that this is what happens in Thomasson's claim that the term 'object' fails to be well formed when it is not understood as a sortal.)

In order to show that your account of existence statements doesn't have a problem dealing with existence statements for ontologically basic entities, you need to show at least that your account doesn't have a problem dealing with existence statements concerning the entities which are ontologically basic in your account.

2. If this is right, then Thomasson's problem is not specific to the choice of application conditions and situations as ontologically basic. Indeed, the problem which arises for the Fregean approach concerning objects and properties echoes it.

§12.6

In defending her construal of 'exists', Thomasson doesn't satisfactorily consider the problems that might be raised for her construal by entities which are ontologically basic. I have argued that this leads to a problem for her account. This problem requires either limiting the scope of the conclusion and letting go of the claim that E expresses a core formal rule for 'exists', or else, holding on to the univocity of 'exists', and letting go of the deflationary metaontological position the construal of 'exists' as E was used to argue for. Either way, there are certainly cases of existence claims, those concerning situations or application conditions, for which her construal is not acceptable. At the beginning of this section, I said that I would first argue that there are cases of existence claims for which Thomasson's construal could not be accepted, and that I would then argue that the

problem with these cases generalises to all those existence claims which are ontologically interesting. I have established the first conclusion. I shall now defend the second.

§12.7

The reason to think that the problem I have raised for existence claims concerning situations and application conditions generalises to all other ontologically interesting cases given Thomasson's construal is that ultimately her construal turns all ontologically interesting existence claims into claims of the existence of situations or kinds of situations.

To show this I shall return to her schema E and consider how she uses it to deliver some of the results that constitute her simple realism. Schema E, which is said to be a core formal use for 'exists' is:

Ks exist iff the application conditions actually associated with 'K' are fulfilled.

(Thomasson, 2015, 86)

As noted before, for Thomasson, application conditions are things fulfilled or not by situations so a fuller expression of schema E runs: Ks exist iff the application conditions actually associated with 'K' are fulfilled by some situation. The fact that application conditions are only fulfilled by situations is important to Thomasson's easy ontological conclusions. If they are fulfillable, they need to be fulfillable by something, but Thomasson is specifically concerned to deny that there could be any question of having, or failing to have, the objects to fulfil them. This shows that her situations are not entities which are made up of components of different types. That would leave open the question of whether a situation contained a relevant object or did not and that, for Thomasson, would be a re-entry of hard ontology because the question of whether an application condition was fulfilled by a situation would depend on a further existence question, whether the situation included an object of the right type. That type of question is explicitly ruled out; application conditions are defined on situations and are fulfilled or not by situations and there is no further question that can be asked.

This can be seen by considering Thomasson's comments on the existence of composite material objects. Thomasson claims that there is no real difference between what someone like van Inwagen accepts and what a believer in middle sized artefacts accepts, certainly no difference concerning existence.

even if one lacked a term like ‘cup’, but instead (with the eliminativist) merely used such phrases as ‘there are particles arranged cupwise’, one could perfectly well introduce a term ‘cup’ as follows: if there are particles arranged cupwise, we are entitled to infer ‘there is a cupwise arrangement of particles’, and so to infer: ‘there is a cup’. This enables us to state a sufficient condition for the application of a new noun (indeed one for a common sense concrete object) without that statement making any appeal to the existence of the disputed object. Of course, this is not to say that there must be particles (arranged cupwise) for the application conditions for cup to be fulfilled; plenum stuff arranged cupwise would equally well ensure the application of the everyday term. (Thomasson, 2015, 107)

The reason why the above holds, given Thomasson’s account, is that the application conditions are defined on situations, generally ostensively, and so the differences between the different ways that metaphysicians might take that situation to be made up and describe it as such, are collapsed. There can be no question of how the situation is made up, so all the descriptions come to the same thing. Our terms have application conditions defined on situations and so situations, and perhaps application conditions, will be that which provides the content of our terms.

One other way this can be seen is in Thomasson’s rejection of any notion of ‘object’ other than the notion of ‘object’ as a covering sortal and the notion of ‘object’ as a sortal with application conditions fulfillable by situations (that the application conditions have to be fulfilled by situations is built into her notion of application condition even though it is not mentioned below.)

How else might ‘object’ be used in asking whether there really are enough *objects* in the world to make good on the promises of the existence entailing principles? If ‘object’ is not being used with any application conditions at all...then – given the deflationary approach to existence questions – the question is simply ill-formed and unanswerable.

(Thomasson, 2015, 219)

If all the terms ‘K’ which can be used in existence claims have to, on Thomasson’s account, be terms whose meaning consists in expressing application conditions fulfillable by situations, then the only existence claims we will be able to make, given this account, will be claims that situations fulfilling certain application conditions exist. For a parallel with the Fregean account, application conditions fulfillable by situations are serving as

Thomasson's version of first-order properties and by saying that these application conditions are fulfilled (the application conditions actually associated with 'K' are fulfilled) we say that the entity exists which fulfils them. For the Fregean, this will be an object. For Thomasson, it will have to be a situation. So, for any 'K', saying that Ks exist will be a way of saying that some situation fulfilling K's application conditions exists. Given this, we can see that all the controversial existence claims which Thomasson defended as part of her simple realism are conclusions that situations exist. I argued earlier that on Thomasson's construal of existence claims, such claims presuppose the existence of situations and so her construal of existence claims cannot provide the form of the statement with which we could claim that situations exist. The problem generalises because it turns out that all the existence claims that Thomasson defended are claims of the existence of situations.

There are two ways we might understand the more specific existence claims (e.g. 'numbers exist', 'propositions exist', 'tables exist') which Thomasson defends as part of her simple realism. Either way these claims presuppose the existence of exactly the things they are used to assert the existence of. On the first way of understanding them the ontological part of the claim is just provided by the claim that situations exist. This is then added to in different ways by different predications none of which are ontologically ampliative. On this understanding, these statements assert the existence of situations and the problem is the same as the problem I raised in the first objection.

A second way of understanding the claims takes them to be asserting the existence of different kinds of situations, e.g. F-situations, K-situations etc. On this way of understanding the statements also, they will presuppose the existence of exactly the things they are used to assert the existence of. The reason this is so is the same reason that Thomasson's easy approach to existence statements leads her to affirm simple realism; there can be terms whose application conditions are not fulfilled by any situation, but these will tend to be terms whose application conditions are descriptive and complex ('witch' is an example Thomasson provides. She claims the application conditions involve having been given powers by Satan). But the kinds of terms which will figure in answers to the ontological question are not like this and given Thomasson's account of how the application conditions for terms are fixed (generally ostensively), these terms will only have a meaning (i.e. associated application conditions) if there existed a situation which could be used to fix it. Given this, if 'F' is to be a plausible candidate for

using in an answer to the ontological question, then 'Fs exist' will presuppose the existence of exactly the entities which it is being used to claim exist.

I have argued for two conclusions concerning Thomasson's construal of existence claims. First, that her construal cannot be accepted as a completely general position concerning the form of existence claims because it is not adequate for claims concerning the existence of situations or application conditions. Second, that the first problem generalises (because it turns out that given her account, all the existence claims will be claims that situations exists), and that this prevents us from accepting it for any of the cases of interest in ontology (because on either of two plausible construals of them they presuppose the existence of exactly the entities whose existence they are used to assert). On the basis of the above we can conclude that Thomasson's construal of existence statements cannot be accepted as the form of the existence statements with which we answer the question of ontology.

§12.7

The reasons why Thomasson's construal, as well as the construals considered earlier in this chapter, cannot be accepted as providing the form of the existence statements with which we answer the question of ontology are instructive. They can help us to see what will undermine a construal and what will allow a construal to succeed.

Part of the problem for Frege's construal of existence claims was that he needed to both fix or clarify the meanings of his terms and then use them in his existence claims. The problem was that he couldn't fix or clarify the intended meanings of candidate kind terms and then try to use them with that meaning without presupposing the existence of the things whose existence he was trying to assert. Despite the difficulties it leads to, the first part of this task always seemed compulsory. In part because the goal in providing an answer to the ontological question is to make explicit what there is, to find a way to say what there is, and in part because terms in natural language do not seem to have meaning which is determinate enough to feature in answers to the ontological question (in either precision or content relating to basicness. I argued in the first part of this chapter that a term like 'state-of-affairs' whose meaning was partially specified but left it open whether its constituents were dependent on it or it was dependent on its constituents was not one which was determinate enough to feature in existence claims).

One of the reasons for considering Thomasson in this chapter was that her account was to be one in which the terms featuring in existence claims did so with their natural language meanings. It should be clear from the above discussion that this did not end up being the case. Defending her metaontology, and the specific existence claims she affirmed using it, involved reconstruing the meanings of terms like ‘table’ and ‘cup’ and ‘number’ and ‘object’ in terms of situations and application conditions. All of these turned out to be terms having application conditions fulfillable by situations as their semantic values. The things that could be talked about using them were situations. In Thomasson’s account, ‘situation’ and ‘application condition’ are the notions in terms of which everything else is understood. In other accounts considered, other notions play this role, but the role always seems to be played by some notions.

On account of the role these notions play as providers of the worldly content in terms of which everything else is to be understood, it turns out to be incredibly difficult to say anything about the world without presupposing the existence of the entities corresponding to these notions. This is why sentences about the world having the interpretation intended by a metaphysician turn out to presuppose the existence of the entities which would serve to provide the semantic values required. Even the existence claims asserting the existence of those entities, which cannot be allowed to presuppose their existence, do so.

Or at least they do so as long as the metaphysician is correct about what there is. That which does not exist cannot serve as the semantic value corresponding to an intended interpretation of some sentence or range of sentence. This threatens the meaningfulness of some of the sentences of metaphysicians who go wrong on questions of ontology but the meaningfulness of the sentences with which we express our existence claims cannot depend on the correctness of our ontological position. We need to secure a meaning for our existence claims which will avoid their doing so. What we want to express with those existence claims is the existence of those things whose existence is so difficult to avoid presupposing, the things serving as the semantic values of our terms, the things in terms of which everything else is understood.

In Thomasson’s account the notions of ‘situation’ and ‘application condition’ (or perhaps ‘F-situation’, ‘G-situation’ etc, and ‘application condition’) are candidates for this role. In the Fregean account, the notions of ‘object’ and ‘first-order property’, ‘second-order property’ etc. (or perhaps, ‘abstract object’, ‘concrete object’, ‘mental event’ etc) are candidates for the role. Whatever our candidate basic entity notions are, they will be that

in terms of which everything else will be understood, that which putatively serve as the semantic values of our terms.

In the first half of this chapter, I argued for a general approach to ontology according to which the goal of ontology is to make explicit what entities in fact serve as the semantic values of the terms we use in expressing truth-apt sentences. The candidate basic entity notions are the notions for entities which are claimed to do this. But in making claims about the entities which serve this role, one can be right or wrong. If one is wrong, one will not be able to use terms for the putative entities in question. If one is right, then one's sentences will tend to presuppose the existence of the entities in question (as will everyone else's). It will be difficult to secure the content either way for the relevant existence claims but that content needs to be secured. Given the earlier established requirements for acceptable truth-conditions for existential claim, it is clear that appropriate content will not have been secured for these claims if they are construed in such a way that it is secured only for the existence claims which get the ontology right, or if it is not secured for false negative sentences concerning the entities of a correct ontological theory.

I have claimed that our truth-apt sentences depend systematically on the entities which serve as the semantic values of the terms featuring in them. If this is right, then our truth-apt sentences presuppose the truth of certain existence claims. To understand what these presuppositions amount to, we need to understand the content of the relevant existence claims. We will not do so long as we construe them in such a way that their content depends on their being correct.

I am going to defend a construal of existence claims featuring category notions understood in a broadly Lowean way. Over the course of the next three chapters I will clarify the relevant notion of category and use it to provide a construal of the existence claims with which we answer the ontological question. Finally, I shall compare my notion of ontological category to others in the literature before going on to draw out some modal consequences of the construal of existence claims I have defended and the ontological categories which I have claimed feature in them. To begin this work, I shall, in the next chapter, introduce and discuss E.J. Lowe's construal of the notion of an ontological category.

Chapter 2

§0

In the last chapter, I argued that there is a presupposition problem for the category/kind terms which we use in providing answers to the ontological question. The claim is that our language depends systematically for the content it has³⁶ on the entities in the world that serve as the semantic values of the various kinds of terms in the language. I argued that to answer the question of ontology we use category/kind terms to make claims about which terms in our sentences we should take to be referring terms and to what we should take them to refer. In doing this, we use category terms to specify the interpretation of some range of putatively referring terms. However, to understand how we can use category terms to do this, we have to answer the question of how we specify an interpretation for the category terms themselves.

The conclusion which I had reached by the end of the last chapter was that we cannot use classes of the putative entities in question or a property of being an entity such as that putatively in question to interpret the relevant category term because such content would only exist for the category term if the ontological claim it was being used to make was correct. I demonstrated this by focusing on the question of how existence claims should be understood. The truth of some categorial existence claims is what is presupposed by our language's having the content it does, and these existence claims feature category terms but cannot be given an interpretation that presupposes the existence of entities of those putative categories. The challenge of interpreting existence claims illustrates the ubiquity of ontological presuppositions, brings the problem of presupposition to the surface, and forces us to recognise that we need a new way of interpreting these category/kind terms that feature in the existence claims the truth of some of which is presupposed by everything truth-apt that we say. That's the presupposition problem as it occurs for category terms.

As outlined above, on the basis of the arguments of chapter one, I concluded that the presupposition problem for category terms forces us to reconsider the question of how we should understand the category/kind terms which we use to answer the ontological question.

³⁶ When things go right and we manage to express determinate propositions

In this chapter, and the next, I shall argue that adapting E.J. Lowe's construal of the notion of an ontological category can allow us to avoid falling afoul of the presupposition problem and provide a more plausible interpretation of the answers we give to the ontological question using category terms.

I shall begin, in this chapter, with an exposition of Lowe's construal of the notion of an ontological category. Having done that, I shall raise some problems for his construal to explain why I cannot adopt it as it stands. I shall go on, in chapter three, to explain how I think the construal should be altered to avoid the problems which I have raised for it.

There are three positions taken by Lowe which I take to be central to his construal of the notion of an ontological category. They are the following:

1. Ontological Categories are not entities.
2. Ontological Category notions are involved in the individuation of entities
3. Ontological Categories are associated with the existence and identity conditions of the entities that belong to them.

All three of these positions are responsible for the potential of a Lowean construal of the notion to allow us to provide a construal of categorial existence claims which avoids running afoul of the presupposition problem. One can see this by focusing just on the first. The position that ontological categories are not themselves entities is not unique to Lowe³⁷ but, as I shall illustrate in chapter four, it is uncommon in the philosophical literature on ontological categories. However, it is crucial to a construal of the notion which will allow us to provide a construal of existence claims featuring category terms which avoids falling afoul of the presupposition problem. There are two obvious reasons why this is so.

The first is that if ontological categories are themselves entities then, to use talk about them to make existence claims will presuppose *their existence*. If that is the case, then our original existence claims having the content intended also depends on this new background presupposed existence claim being true (the presupposition of the truth of existence claims concerning ontological categories). We should then ask how we should

³⁷ For example, Hale's (2013) linguistic construal of the notion of an ontological category does not take such categories to be entities either. However, although the position is not unique to Lowe, he does make it more explicit than others and defend it for reasons which bear some similarity to the reasons for which I shall defend it.

construe this existence claim on which our original existence claim, and through it our original sentences, depend for their content.

Either we will at that stage deny the need for an entity to interpret a categorial term in an existence claim (the categorial term ‘ontological category’) in which case we will just have pushed the problem of providing a no-entity interpretation for categorial terms back one level to little benefit and some consequence³⁸, or we will insist that an entity is again needed to interpret the claim (perhaps a class of classes). If we choose the second option, the presupposition problem will simply recur unresolved and in need of resolution.

The second obvious reason why a no-entity view of ontological categories is crucial to a construal of the notion which will allow us to provide a construal of existence claims featuring category terms which avoids falling afoul of the presupposition problem is that the entities which philosophers take to be plausible candidates for the position of being an ontological category tend to be ones which depend for their existence and identity on the very entities which belong to that category³⁹. As should be obvious on the basis of the arguments in the last chapter, the use of reference to such categories to make existence claims cannot be accepted. Such existence claims would presuppose the existence of the very entities whose existence they were being used to assert because the categorial term in the existence sentence having its intended content would depend on the existence of the entities in question.

The second and third theses are also crucial to the task of providing a construal of existence claims which meets the challenge posed by the presupposition problem. The way in which the second and third theses are crucial to this task is more complicated than the way in which the first is, so I shall leave the task of explaining this to chapter three where I shall develop and defend versions of these theses as part of my attempt to provide a construal of categorial existence claims which avoids the problems I have raised for alternative construals.

In chapter three, I shall adopt and defend versions of all three of these claims of Lowe’s. The versions of these positions which I shall defend will not be exactly the same as those which Lowe defends. I shall have argued (in chapter two) that Lowe’s account faces a number of problems which require that it be modified. However, it is because of my

³⁸ Among the consequences: an implausibly disjunctive view of existence claims.

³⁹ I shall demonstrate this in chapter four when I compare the construal of ontological categories which I defend to others from the literature.

adoption of versions of the three claims stated above that I take my construal of the notion of an ontological category to be a development of Lowe's construal of that notion. It is because my construal is a broadly Lowean one that I take it to be incumbent upon me to properly explain what Lowe's account of ontological categories is and defend my claim that it cannot be accepted as it stands. That is the work of this chapter. I shall begin by presenting Lowe's construal of the notion of an ontological category and explaining how the three positions mentioned above figure in it.

§1

Lowe (2006) presents and defends his account of ontological categories in the course of arguing for a specific answer to the ontological question. He argues for an ontology comprising four fundamental ontological categories: substantial particulars (objects), substantial universals (kinds), non-substantial particulars (modes), and non-substantial universals (attributes).

Lowe accepts a hierarchy of ontological categories but claims that the interesting question, the question that is at issue in ontology, is the question of which such categories are fundamental (2006, 7). He contends that ontological categories should be individuated by the existence and identity conditions of entities belonging to them (2006, 6) and he takes an ontological category to be a fundamental one if and only if:

the existence and identity conditions of entities belonging to that category cannot be exhaustively specified in terms of dependency relations between those entities and entities belonging to other ontological categories (2006, 8).

Lowe's position is that his four ontological categories are fundamental. In his (2006) and (2009) there are categories both above and below these. In his (2013) there are no longer categories above the four fundamental ones, but there remain categories below.

The initial way in which Lowe (2006) generates his four fundamental categories is through the combination of the distinctions between universals/particulars and objects/properties (Lowe, 2006, 21-2). He argues against collapsing these two distinctions into one in part by noting that some nominalists who reject universals accept particular properties or tropes. He then argues (Lowe, 2006, 20-33) that the best way of understanding these distinctions is as follows; universals are instantiated whereas particulars are instances and cannot be instantiated; and objects bear properties but cannot

be borne whereas properties are borne. On the basis of this understanding of the distinctions, he argues for the distinction between substantial versus non-substantial universals (a kind vs. an attribute) and substantial versus non-substantial particulars (an object vs. its particular properties).

If you accept all of this then what you have are Lowe's four categories with their characteristic relationships. You have kinds which are instantiated by objects and characterized by attributes. You have objects which are instances of kinds and which are characterized by modes. You have attributes which are instantiated by modes and which characterize kinds. Finally, you have modes which instantiate attributes and which characterize objects.

Lowe's main arguments for taking the four categories of his ontology to be fundamental are arguments which proceed from his distinction of them and then provide reasons relating to explanatory utility in favour of recognizing all four and not reducing any of the four to any of the others. He presents a number of arguments in favour accepting each of his four categories as fundamental (i.e. not reducing it to one of the others) on the basis that accepting it allows one to give the best explanation for some phenomenon. He then argues that accepting all four as fundamental provides one with an elegant system which allows one to give all of these best explanations.

Very briefly, Lowe contends (2006, 20-33) that: if we don't accept objects as fundamental (e.g. if we reduce them to tropes) then we cannot provide a satisfactory account of trope individuation. If we don't accept tropes/modes we can't give a satisfactory account of the involvement of the properties of objects in causal interactions like perception. If we don't accept attributes, we can't give other than a constant conjunction account of the laws of nature, and finally if we don't accept kinds we can't give the best account of laws of natures (Lowe's account, on which laws consist in kinds being characterized by attributes) and we can't give a satisfactory account of an object's dispositions. Central to Lowe's argument in favour of accepting all four of his categories as fundamental, i.e. not reducing any of them to, and not understanding them completely in terms of, another category, is his contention that accepting all four as he presents them provides the best version of what he refers to in the subtitle of his (2006) as 'A Metaphysical Foundation for Natural Science'.

Lowe's account of laws of nature is based on his contention that exemplification is a relationship⁴⁰ which can be realised in two different ways. Lowe takes instantiation (which holds between kinds and objects, and between attributes and modes) and characterization (which holds between attributes and kinds, and between modes and objects) to be primitive relationships. Exemplification, a relationship which holds between objects and attributes, is non-primitive. Lowe takes there to be two species of exemplification (2006, 121-140). An object can exemplify an attribute either through the kind it instantiates or through a mode which characterises it. He claims that the distinction between these two forms of exemplification corresponds to and accounts for the distinction between that expressed by statements involving dispositional predication and those involving occurrent predication e.g. between 'Table salt dissolves in water.' (dispositional) and 'The table salt is dissolving in the water.' (occurrent). If an object (e.g. Earth) instantiates a kind (e.g. Planet) which is characterised by some attribute (e.g. Having an elliptical orbit), then a statement involving the dispositional predication of that object by that attribute will be true. In contrast, if the object is characterised by a mode which instantiates the attribute, then a statement involving the occurrent predication of that object by that attribute will be true.

Lowe argues that his account of dispositions allows him to provide an account of laws of nature which is superior to the alternatives (2006, 121-55). He takes laws of nature to consist in the characterisation of a kind by an attribute, exactly that which he takes to give rise to dispositions. When this is the case objects instantiating that kind will be disposed to possess that attribute but crucially they need not possess it. Lowe contends that a major advantage of his account is that he can avoid a constant conjunction account of laws of nature. He argues that such accounts fail to accommodate the fact that laws of nature can have exceptions (e.g. when the water is saturated and so the table salt doesn't dissolve). He also contends that his account is superior to other alternatives such as David Armstrong's by arguing that Armstrong's second order necessitation relation is mysterious (2006, 131), and that it is an advantage of Lowe's account over Armstrong's that it (Lowe's account) does not have to appeal either to second order relations or to general causal relations such as 'bringing about' (2006, 144-5)

⁴⁰ Lowe distinguishes between relations, which are entities belonging to the category of attributes, and relationships, which are not entities at all and are better thought of as that expressed by primitive predicates.

§2

Lowe's focus in his (2006) is the defence of his four-category ontology. His focus is not primarily metaontological. However, in the course of specifying his ontology in terms of four *categories*, Lowe makes clear that he takes the ontological question to be a categorial one. According to Lowe, ontological category notions are that in terms of which we provide an answer to the question of what there is. He takes the alternatives to his four category ontology to be rival ontologies also specified using categories. He lists these alternatives as Keith Campbell's trope ontology, Armstrong's object-property ontology, C.B. Martin's object-trope ontology, and his own previous object-attribute-kind ontology (2006, 10).

Lowe's reasons for thinking that ontological categories should not be taken to be entities draw on his other two central claims regarding ontological categories ((2) and (3) mentioned above) and provide the explanation for his taking the ontological question to be a categorial one. For these reasons, a good way to approach the task of explaining Lowe's notion of ontological category is to explain why, for Lowe, such categories should not be considered entities.

Lowe takes ontological categories not to correspond to entities and he takes them instead to be what he calls formal notions. For Lowe, formal notions are those which do not have entities corresponding to them. Lowe claims that formal notions play an indispensable role in ontology; he claims that we make ontological claims by using formal notions. In both his (2006) and his (2013), he defends this claim with a number of different arguments. The first is based on the claim that there will be irresolvable problems of fit if we try to fit entities corresponding to ontological categories into an ontology specified by those categories. A second is based on the claim that we recognise distinctions without appealing to further entities as the basis on which we do so. A third is based on the claim that a vicious regress threatens if we insist that every notion we use in explanation corresponds to a further entity.

§2.1

The first of these arguments is the one which Lowe most emphasises in both his (2006) and his (2013) discussion of this issue (2006, 40-9) (2013, 50-66). As presented, the argument doesn't necessarily deliver a conclusion as strong as that given above. It is

presented largely as an argument addressing a question internal to Lowe's ontology, in his 2006 discussion of it, or to Aristotle's, in his 2013 discussion. On this approach, the conclusion would be conditional: if you subscribe to Lowe's four category ontology, you shouldn't take ontological categories to be entities. The force of the first argument as an argument for the general conclusion would be limited by the need to demonstrate it specifically for any given ontology but, although Lowe focuses mainly on making the case that ontological categories will not fit into any of the categories of his own ontology, there are indications that he does not intend the conclusion to be limited to his own ontology.

In his (2013) he makes the argument with respect to Aristotle's four-fold division of being (2013, 63) and even in his 2006 the argument is not limited to his own ontology. He considers and rejects there the suggestion that ontological categories should be considered higher order properties despite not including higher order properties in his ontology (2006, 42). The considerations Lowe raises against that proposal are the following: a category of kinds could be a second order property having the first order kinds as instances, but a category of objects would have to be a first order property to have objects as instances so ontological categories would belong to different ontological categories. Also, Lowe contends, it doesn't seem possible for there to be a category of universals of any order under this proposal, given the proposed status of such a category as a universal, because that category would have to be a universal of a higher order than itself.

In making the case with respect to his own ontology, Lowe argues that we shouldn't take categories to be universals because then one of the four categories, the category of kinds, would, if taken as a universal, be the universal of kinds, and the instances of such a universal would be specific kinds but on Lowe's view universals are supposed to have particulars as instances. Alternatively, if the categories were construed as being objects, on the most plausible construal of this suggestion whereby the categories were sets, there would be a problem with the set corresponding to the category of object as it would seem to be self-membered (2006, 41-2)

As noted above, Lowe's first argument against taking ontological categories to be entities is focused largely on, though not limited to, his own ontology. With respect both to Aristotle's ontology and to his own, he argues that since ontological categories, if they are construed as entities, won't fit into the ontology specified by those categories, we should instead not take them to be entities. In each case the argument depends on considerations internal to the ontology in question, such as the position internal to Lowe's

notion of universal that universals should have objects as instances. This appeal to considerations internal to specific ontologies makes the force of this first argument dependant on the correctness of a specific ontological position in a way that the force of Lowe's second and third arguments for the same conclusion are not.

§2.2

Lowe's second argument for the claim that ontological categories are not entities is based on the claim that we recognise categorial distinctions between entities (e.g. between an object and a mode) as real without appealing to further entities as the basis on which we do so.

On one way of reading Lowe here, the claim is just that we *can* make categorial distinctions between entities without doing so on the basis of their relations to further entities called categories. Understood in this way, Lowe isn't making a positive argument here for the claim that categories are not entities. Instead, he is just arguing that even if, as he has already concluded, categories are not entities, we can still make categorial distinctions.

However, his explanations for why this is so involve claims about what we do when we categorise. Those claims eliminate the need to appeal to category entities in order to explain the truth of a categorial predication and the lack of any role for category entities in grounding the truth of categorial predications could be considered a positive reason for thinking that the categories in question are not entities. Read in this way Lowe can be understood to be making a positive argument for the claim that categories are not entities.

In his (2006) Lowe claims that we categorise entities (existent or non-existent) on the basis of their existence and identity conditions:

we categorise correctly when we categorise by correctly apprehending the existence and identity conditions of the things concerned (2006, 44)

and so, we can be realists

concerning the distinctions that are captured by a system of ontological categories without having to maintain that the categories themselves are elements of being. (Lowe, 2006, 43).

In this argument, the categories concerned seem to be the products of categorising. However, Lowe doesn't seem to intend that the ontological categories at issue here be understood as the products of categorising entities.

In his (2013) he again argues that categorial predications do not require category entities as truthmakers. One would think these predications do require category entities as truthmakers if one thought that the truth conditions of a claim like 'a is of category G' were: 'a is of category G' is true iff *a* instantiates the universal *G*; or that it is true iff *a* is a member of a set *G*. In the (2013) version Lowe replaces existence and identity conditions with form but once again talks about categorising entities. Despite this, it is clear that the ontological categories in question need not be considered entities which are the product of our categorising of other entities.

First, if they were, we would need to start off with the entities, but Lowe takes the terms for entities categorised as they occur in these claims not to be ontologically committing:

'Dobbin is a primary substance' can be known to be a true – indeed a *necessarily* true – categorial predication whether or not Dobbin is known to exist...just an a priori truth arising from an ontological necessity concerning the correct ontological categorization of any such item as Dobbin is conceived to be, whether or not Dobbin actually exists. (2013, 66)

Second, Lowe takes the sentences expressing categorial predications to be true, where they are true, in virtue of existence and identity conditions (2006) or logical form (2013). Lowe argues repeatedly (2006, 52-65) (2013, 50-66) that first order predicate logic with identity is based on specific ontological positions, that it is not appropriate for the expression of alternate positions (such as his), and that alternative formalisms with expressions for items from each category accepted in an ontology should be introduced by those with ontological positions differing from that on which first order predicate logic with identity is based. It is in the context of this overall view that Lowe makes his (2013) claim about categorial predications being true in virtue of form. The idea is that a categorial predication will be true if the categorial predicate matches the sort of the term to which it is applied, and it will fail to be well-formed otherwise, so that if it is well-formed it is guaranteed to be true.

If a categorial predication is true when the category predicated matches up with the category which is in some sense implicit in that of which it is predicated anyway, either through the existence and identity conditions which allow for its individuation or else

through its form, then the category should not to be considered the product of our activity of categorisation because it is the basis of that activity, something made explicit when we categorise correctly. The idea that a category will be implicit in the form of an entity and should be reflected in our terms for it is connected to the other two main claims that Lowe makes concerning ontological categories; (2) that ontological categories are involved in the individuation of entities, and (3) that ontological categories are associated with the existence and identity conditions of the entities that belong to them. These will be discussed in the explanation of the third argument below.

By providing an account of what is required for the truth of categorial predications which does not involve category entities, Lowe not only supports his contention that we can be realists about categorial distinctions even if we have concluded that categories are not entities, he also provides a positive reason for thinking that categories are not entities; there is not only no need for, there is no role for, category entities in making true the statements which express categorial predictions.

§2.3

Lowe's final argument for the claim that ontological categories, as formal notions, are not entities is based on the claim that a vicious regress threatens if we insist that every notion we use in ontological explanation corresponds to a further entity. This is not an argument that Lowe makes specifically with respect to categories though category notions are among the notions at issue when he makes it. The argument is one Lowe presents to support his claim that there is a distinct notion of form which is relevant to ontology. However, when he presents it he doesn't make the full argument explicit.

He makes a claim (2006, 45-6) which he intends as support for his notion of form in ontology. The claim involves category notions and he takes these to be formal notions. In order to draw out why the claim is supposed to suffice to defend the notion of form, one has to discuss a number of Lowe's background claims. In doing so one can expand the compressed defence to a full argument in favour of the claim that ontological categories are not entities. This is what I am going to try to do in this subsection.

Lowe claims that there is a distinction between content in ontology (roughly: what entities there are) and form in ontology (roughly: how those entities are). Lowe contends that notions connected to form will not correspond to entities. Between content and form, it is

form which Lowe thinks is most important to ontology and most unlikely to be accepted by his readers. It is thus the notion of form in ontology that he seeks to defend.

The first point Lowe makes to this end is that the 'how' used in the explication of form in ontology (form in ontology: roughly, how things are) cannot always be interpreted as standing for a universal of some kind. The argument Lowe presents for this conclusion is an argument for the recognition of primitive predication, or in his terminology, formal relationships.

Lowe argues that failure to accept formal relationships at some level will lead one into Bradley's regress (2006, 30); a relation itself will always be a third thing between two relata, and then it itself will also have to be connected to them and so further relations will have to be appealed to and so on. To avoid this, Lowe argues, we have to accept relations which are not themselves entities. He contends that we should just insist that, for instance, the possessing of properties is a formal relationship between an object and a particular property; that possessing is not a relation standing between them; it is not another element of being.

Having argued for the recognition of form by arguing for the recognition of formal relationships, Lowe's next move takes us over to category notions which he also takes to be formal. He contends that it is precisely the formal, here the relevant formal notion is that of categories, which allows us to individuate entities. It is categories which allow us to talk about anything more specific than Dummett's amorphous lump of a universe (2006, 46). It is at this point that the claims numbered (2) and (3) above become relevant to this argument for the formal character of categories. Lowe thinks we need category notions in order to make reference to specific things in the world, and that without such notions we could not succeed in picking out specific things and distinguishing them from others. He takes existence and identity conditions to show how we appeal to categories in our individuation of entities.

To defend the claim that we need category notions to make reference to things in the world, Lowe focuses on his category of objects and the way the existence and identity conditions he has supplied for objects involve his category of kinds. He argues out that ostension alone is always insufficient to pick out any specific object because there are too many potential candidate entities one could be intending to refer to. Lowe's favourite example here is one of a lump of matter versus what it might be taken to constitute e.g. a statue, or a person, etc. With simple ostension, which entity is picked out? Without appeal to a

category/kind notion to distinguish between the candidates (even one that is not articulated but simply made salient in the context), Lowe claims that it is implausible to claim that either a lump of matter or a statue is successfully picked out. The ostension will simply fail to pick out anything because there are too many candidates and nothing to distinguish them. This is taken to show that category notions are required for individuation. In the case discussed, for Lowe, the category notion of object determines the relevance of the category notion of kind for the individuation of objects and kinds are thus appealed to in the individuation of objects in a way that is prescribed by the category notion of object.

So, Lowe's position is that category notions are appealed to for the individuation of entities. The next relevant claim of Lowe's is his claim that existence and identity conditions are connected to these category notions and can illustrate the way we appeal to them in our individuation of entities.

The idea here is that any notion which is adequate for distinguishing between putative candidate referents is going to be a notion which determines existence and identity conditions for the entities falling under it. The category notion determines certain conditions as ones in which entities of that category exist and further determines the conditions in which entities of that category will be the same. These conditions will show how the category and/or kind notions allow us to distinguish between different potential referents. The different potential referents will be such that they persist in different conditions. By considering what we would do in various cases, we can show how different identity conditions governing usage distinguish between different potential candidate referents.

In cases in which two initially coinciding objects, such as a cat and a hunk of matter, go their separate ways in the course of some extended perceptual episode, the correct way to track those different objects will be determined precisely by their respective criteria of identity – whence it is reasonable to conclude that subjects who succeed in correctly tracking those objects exhibit at least an implicit grasp of the criteria of identity governing those objects, and thereby an implicit grasp of the categorial concepts under which they fall and which determine those criteria of identity.

(2013, 25)

The connection between categories (and/or kinds) and existence and identity conditions is taken by Lowe to be such that the latter can be used in explicating (both of) the former. In his (2006) Lowe contends that ontological categories are to be individuated on the basis of “the distinctive existence and/or identity conditions of their members” (Lowe, 2006, 6) and that entities belong to the categories that they do on the basis in virtue of their existence and identity conditions.

So, according to Lowe, we need categories to individuate entities and categories allow us to do this in part by determining existence and identity conditions for those entities. The final point which is relevant for this argument is the following: for Lowe, any claim that an entity exists involves taking certain conditions to be conditions in which an entity would exist and to do that is to accept a category. Lowe places consideration of ontological categories prior to specific existence questions.

In his (2013) he replaces ontological categories as determiners of existence and identity conditions with a formal notion of essence as the determiner of the existence and identity conditions of entities. Still, allowing for the shift, the approach he takes to existence claims remains the same.

One is in no position to be able to judge whether or not there is evidence in favour of the existence of Ks unless one knows what Ks are supposed to be – what their essence is. (2013, 110)

Once again, a formal notion is taken to determine existence and identity conditions and to be required for any existence claim. And, once again, the formal notion which allows for this has to be taken to be formal at the risk of a vicious regress.

Part of the point here is that all entities have essences, so that if we took essences themselves just to be entities of a certain kind, then they too would have to have essences, and so on, ad infinitum. (2013, 110)

Shifting back to categories we can see now how the final argument for the claim that ontological categories are not entities is supposed to run. Lowe claims that we need categories to individuate entities. These categories determine existence and identity conditions for entities belonging to them and we implicitly appeal to these existence and identity conditions when we make an existence claim. The categories which we use to individuate, and which determine these conditions, cannot themselves be entities because if they were we would need to use a further category to individuate and refer to the

categories themselves before we could use them to individuate and refer to the entities belonging to them, and we would need to use a further category to refer to that further category etc. Categories are needed to make existence claims and these categories cannot themselves be further entities which exist on pain of a vicious regress. If we are committed to the position that we sometimes succeed in making existence claims and referring to the entities which we have argued exist, then we have to accept a formal notion of ontological category which allows us to do this.

§3

Having outlined Lowe's account of ontological categories, and the four-category ontology in conjunction with which this account is presented, I shall now argue that his account of categories, as it stands, faces serious problems and is in need of modification. It is only such a modified version of the account which I propose to adopt. There are numerous arguments that might be made against Lowe's specific ontology and the arguments with which he defends it, for example one might dispute whether failure to accept his substantial universals forces one to accept a constant conjunction account of natural laws. However, I will not engage with such arguments because my concern is not with Lowe's ontology but with the construal of categories he provides in the course of defending that ontology. What I shall focus on are the arguments which can be presented against the construal of ontological categories which Lowe presents.

There are four main issues which I shall contend are serious problems for Lowe's account:

1. The presupposition problem
2. The broadness of his notion of ontological category
3. The duplication of work
4. His construal of existence and identity conditions

§4

The main reason I am interested in Lowe's construal of ontological categories is that I think it is such that a modified version of it will allow one to evade the presupposition problem I introduced in chapter one. Nevertheless, as it stands, Lowe's construal of ontological categories runs into this problem because of Lowe's claim that category notions can be elucidated and used in a way that is free of ontological commitment. He

wants the question of what categories there are, and which is fundamental to which, to be questions distinct from the question of what exists. Further, he wants categorial predications to be able to be true in virtue of form in a way that is not ontologically committing (2013, 65). This approach runs into the presupposition problem because it assumes that the coherence of the category notions can be guaranteed in a way that is not built on any assumptions about what there is. But they can't be. In this section, I will argue that Lowe's own system and the arguments he uses to defend his four-category ontology illustrate this. If this is correct, then to be viable Lowe's construal needs to be modified to avoid the presupposition problem.

The first way it can be shown that Lowe's own arguments demonstrate the presupposition problem as it occurs for his account is by considering one of his arguments for distinguishing properties from universals. Lowe argues against considering properties and universals the same thing by noting that some trope theorists who reject universals accept properties (2006, 21-2). The mere fact that some people do this should not be enough to get the result Lowe wants and in other cases it is not enough. In formulating the categories of his ontology Lowe rejects distinctions other ontologists might want to make (e.g. between an event and an object) and indeed rejects the very construal of tropes that trope theorists want to defend. (He adopts dependent modes instead of independent tropes.)

Lowe doesn't just need it to be the case that some people make the distinction between universals and properties. He needs it to be the case that they are correct to do so. He is arguing that those who don't accept this point and take there to be just a single notion of universal are incorrect in doing so. They are conflating distinct notions. Here it is clear that Lowe's arguments for his ontology are based on arguments about the category notions but if this is the case then it is also clear that what category notions there really are and how they should be understood are not issues which are ontologically innocent.

One reason why Lowe can seem to avoid the above issue in his discussion is that he accepts a hierarchy of categories and presents the question of ontology as the question of saying which is fundamental. So, it seems like everyone is dealing with the same category notions, they're just disagreeing about which categories are fundamental. In his argument for a distinction between the notions of universals and properties, Lowe doesn't have to argue that there is no such notion as that which covers both. Instead, he allows that there is but says, just like the notion of entity, it is an abstraction from the fundamental level. The problem is that given his construal of the notion of categories and the way he understands fundamentality for categories, Lowe cannot say this. He cannot claim that

everyone is dealing with the same categories but disagreeing about whether they are fundamental.

The reason is that for Lowe categories are individuated by the existence and identity conditions they confer upon the entities which belong to them (2006, 6) and a category is fundamental if and only if

the existence and identity conditions of entities belonging to that category cannot be exhaustively specified in terms of dependency relations between those entities and entities belonging to other ontological categories (2006, 8).

As an example of existence and identity conditions which are exhaustively specified in terms of dependency relations in this way, Lowe provides the case of a reduced version of the category of particulars.

This is why particulars cannot comprise a ‘fundamental’ ontological category if, in fact, they are wholly constituted by coinstantiated universals: for in that case, a particular exists just in case certain universals are co-instantiated, and is differentiated from any other by the universals which constitute it (2006, 8)

These are not the existence and identity conditions which will be associated with the category of particulars by someone, such as Lowe, who takes that category to be a fundamental one because it is the form of the existence and identity conditions which mark it as non-fundamental. But category notions are, according to Lowe, individuated by the existence and identity conditions associated with them, so a fundamental category of particulars simply cannot be the same category as a non-fundamental category of particulars. It is not and cannot be the case, given Lowe’s construal of the notion of an ontological category, that everyone is dealing with the same category notions but disagreeing about which one is fundamental. The ones which are fundamental are those to which the others are reduced, in terms of which they are given. The question of what the fundamental category notions are is, for Lowe, the question of ontology, but if all of the notions have to be explicated in terms of the fundamental ones, then none of them can be explicated in a way that doesn’t presuppose an answer to the question of what there is.

Finally, given his construal of the notion of an ontological category, Lowe cannot claim that there are categories which are abstractions from the fundamental ones, such as entity and the abstracted notion of universal because these will be categories which do not determine existence and identity conditions. They will not determine existence and

identity conditions because they are not notions which can be used to individuate anything. Their status as unfit to be used in individuation is a result of Lowe's specific ontology so a construal of them as such is not independent of that ontology. For someone who takes universals to be a fundamental category, this category will determine existence and identity conditions and given Lowe's claim about the individuation of categories, it cannot be the same notion as any notion which is such that everything falling under it does not share the same existence and identity conditions. In making his claim about the distinction between the notions of universal and of properties, Lowe does have to claim that someone who conflates these does so wrongly, that there is no such category notion as that to which they try to appeal. Once again, explication of category notions is not ontologically innocent.

§5

The next problem for Lowe's construal is related to some issues discussed with respect to the first but the focus is different. The next problem is the problem of the broadness of Lowe's construal of the notion of an ontological category.

The broadness of Lowe's notion of ontological category is a problem, both within his account and for my purposes, because that broadness results in failure to distinguish clearly the relevant and interesting notion of ontological category and keep it apart from different notions.

Perhaps to accommodate the traditional view that ontological categories are hierarchically organised, when Lowe (2006) addresses the notion of an ontological category, he accepts that these categories are hierarchically organized, and he accepts two levels of categories above his four fundamental categories, suggesting as he does so that to do so is both uncontentious and, with respect to his own position, unproblematic.

It is a matter of debate how, precisely, ontological categories are hierarchically organized, although the top-most category must obviously be the most general of all that of entity or being. Everything whatever that does or could exist may be categorized as an 'entity'. According to one view which I favour myself, at the second highest level of categorization all entities are divisible into either universals or particulars (Lowe, 2006, 7)

The claim that the top-most category is the category of entity is not at all obvious. Aristotle, for instance, with whose four-fold division of beings Lowe has compared his own four category ontology, denies this. Further Lowe himself at various points in his (2006) insists that neither the notion of entity, nor that of universal or particular, *really* denote categories because there are not distinctive existence and identity conditions associated with these putative categories. Nevertheless, Lowe (2006) considers combining these two positions unproblematic. He later reiterates the categorization noted above while noting that:

The higher-level categories of universal, particular, and entity are not more fundamental than those of the third level because they are mere abstractions and do no serious ontological work on their own account. (Lowe, 2006, 39).

He goes on to note that although the universal/particular distinction is

an important distinction, it serves to explain nothing in ontology that is not fully explicable in terms of the defining features of the four categories at the third level (Lowe, 2006, 39).

However, these notes do nothing to address the problem of calling these putative higher-level categories categories at all. The problem is that they simply do not qualify as categories on Lowe's account of what categories are; they do not provide, and are not associated with distinctive existence and identity conditions for entities. Saying that they are mere abstractions does not help. There are other accounts of what is going on in ontological categorization, some of which would hold that what one is doing in categorizing is precisely abstracting away from entities, so for Lowe to include among his categorical hierarchy some categories which are 'mere abstractions' seems like an unfortunate and unnecessary mixing of notions *within* the notion of ontological category as it occurs in his account.

In his (2013), Lowe seems to have partially come around to this point and in the course of discussing the categorial terms which he, in that book, associates with identity conditions, specifically denies that 'thing' and 'object' are ontological category terms, calling them instead *transcategorial* terms:

But ‘thing’ is not a categorial term: it is a transcategorial term: it is a transcategorial term, like ‘object’. It carries with it no specific criterion of identity (Lowe, 2013, 27)

However, there is another facet of the broadness of Lowe’s notion of ontological category evident in his (2006) and (2009). It is his inclusion of subcategories as ontological categories. This remains in place in his (2013). It is a serious problem because if we are to have a notion of that which does the individuating work which we are claiming ontological categories do, it will not be that of subcategories. Given this, grouping subcategories as categories and creating the need to then draw a principled division between subcategories and fundamental categories is unhelpful. It makes the target notion of an ontological category less clear and creates the impression that that target notion is a species of the broader notion.

That doesn’t seem to be a position Lowe wants to, or can, take. Lowe’s subcategories are those reduced to the fundamental categories. Everything there is will belong to a fundamental category. One way one might understand Lowe’s fundamental ontological categories is as ontological primitives, they are that which cannot be reduced to anything else and in terms of which everything is given. But if this is right, then the broadness of Lowe’s construal of the notion of ontological category actively obscures this; it presents these primitives as a species of something more general and focuses on that more general notion. It obscures the distinctive role the primitives play, that of providing the content in terms of which everything else is defined, and it obscures the distinctive problems which need to be addressed in a construal of a notion which is to play this role.

The problem presented by the broadness of Lowe’s notion of ontological category is that this obscures the important notion doing the work, the notion presented by Lowe in terms of the broader notion as that of fundamental ontological category. The broadness of Lowe’s construal may have been motivated by a desire to maintain his claim that we are all dealing with the same category notions but disagreeing about which ones are fundamental. In the previous sub-section I argued that that claim should be rejected. If it is it cannot provide the motivation for maintaining the broad construal of the notion of ontological category. The broadness of Lowe’s construal obscures the target notion. The construal should be modified to more clearly capture the target notion of fundamental ontological category as ontological primitive.

§6

The next problem to be discussed is the duplication of work in Lowe's account. The source of this problem is an internal issue for Lowe concerning his distinction between ontological categories and substantial universals/kinds. Ontological categories are not elements of being for Lowe, and kinds are, but often the same notions seem to be playing the roles of both subcategories and kinds for Lowe. This is obviously untenable. The problem is that fundamental categories, subcategories, and kinds all do some of the same work for Lowe. By the time one gets to his (2013) one finds essences doing some, but not all of the work of categories and kinds. However, the reasons for this are not easily resolved, and reveal, I think, a serious tension in his overall account.

For Lowe, both categories, and kinds, and ultimately essences, are understood as providing and grounding the identity conditions of that which belongs to them:

an ontological category is a *kind of being*, that is, a kind of entities, membership of which is determined by certain distinctive existence and identity conditions

(Lowe, 2006, 20)

A sortal concept is a concept of a distinct sort or kind of individuals...Sortal concepts are characteristically governed by criteria of individuation and identity – metaphysically grounded semantic principles which determine what are to count as individual instances of the sorts or kinds in question and the conditions for their identity and diversity at a time and (where this is appropriate) over time

(Lowe, 2009, 1).

The identity conditions of entities of any kind K are grounded in the essence of Ks – what it is to be a K. The essence of a kind K is not, however, a further entity of any kind, neither abstract nor concrete

(Lowe, 2013, 115)

However, despite their similar characterization and vastly different ontological status, Lowe does not offer much in the way of argument for his sharp distinction between categories and kinds.

There are four main problems raised by the duplication of the work attributed to both sortals and categories (and later essences).

1. With respect to objects, the work seems really to be duplicated in a way that cannot be accepted.
2. Insofar as Lowe takes the work to need duplication in the case of objects, this raises a problem for the other categories of his ontology because there is nothing to play the role of sortals for them.
3. In explaining relevant notions, e.g. identity conditions, Lowe focuses on the notion as connected to sortals and so produces an account which is not applicable to entities of the other categories.
4. In what can be viewed as a by-product of the general duplication of work, certain notions are counted both as subcategories and as kinds. But this is untenable.

§6.1

With respect to objects, some work seems really to be duplicated in a way that cannot be accepted. Lowe takes objects to be a fundamental ontological category, but he takes the relationship of instantiation which objects bear to kinds to be definitive of that category. He then takes the role of kinds with respect to objects to be one of facilitating individuation. However, as noted above, allowing for individuation is work attributed to ontological categories. How can both the category and the kind play this role? It seems the category allows for the individuation of objects by specifying that they are to be individuated by the kinds they instantiate.

One place this comes up as an issue is in one of the claims discussed in §2.3 above as part of the final argument for the formal status of categories. Lowe claims that the pure thing ontologist has no basis for claiming the world involves multiple things rather than just an amorphous lump. He claims you need formal categories to allow you to do that. An aspect of Lowe's argument which I didn't include in the above discussion of it is the following: one of the things Lowe is doing in this argument is making a case for the position that even though we have to recognise some formal attributes and relationships, we should still recognise some universals and/or properties as entities. The argument seems to be that the category of objects determines the need for the existence of kinds to allow for the individuation of objects (2006, 45-6)

But now we may begin to wonder why we included properties and relations among the elements of being at all. Why not restrict ourselves to a one-category ontology

of undifferentiated entities, or things... What, we may ask entities, the adherent of such a view to say in answer to the question of what there is, that there are things in the plural as opposed to just something? An adherent of the four-category ontology... can point out that *objects* can be many and distinct, in virtue of instantiating different kinds, which confer upon their instances their distinctive identity conditions. (2006, 45-6)

The problem is that there is nothing in Lowe's account of individuation that allows for individuation to be staggered in this way. It just doesn't seem to make sense for it to be so.

Given Lowe's account of individuation, our individuation of, and reference to, one and the same thing can't be governed by distinct identity conditions. First, observance of distinct identity conditions is supposed to be what determines that we are referring to distinct things even when those things coincide. Second, individuation is the picking out of a thing and insofar as an entity, a kind, was needed to supplement the existence and identity conditions supplied by the category, it seems that what we should say is that what was provided by the category fell short of being existence and identity conditions. The category did not allow us to individuate. Insofar as the conditions supplied by the category had a gap which needed to be filled it seems we have to say that those conditions were not identity conditions. They were not a specification of necessary and sufficient conditions for the identity of a thing. At this point it seems that what is doing the individuating work is the kind. The kind provides the existence and identity conditions for its instances. The kind allows us to individuate those instances.

This interpretation is supported by much of Lowe's discussion. In his (2013) defence of the claim that we individuate and make reference to entities using notions which determine identity conditions, the notions determining those conditions are entities, kinds, though he there refers to the highest kind associated with some identity condition as a category notion, insisting nevertheless on the important distinction between these categories and the ontological categories which are not entities.

However, even though much support for the position in question can be found in Lowe's work, the position can be challenged with the argument discussed in §2.3 which I take to be Lowe's best argument for his claim that ontological category notions are not entities. According to that argument, we should accept that the fundamental ontological category notions are not entities because we need these notions to get started in individuating and

making reference to entities and if we say that the notions we need for doing that are themselves entities we set up a vicious regress.

So, the first problem is that the work of picking out one and the same entity doesn't seem to be such as to be able to be done twice over in different ways. However, if we address this first problem by diminishing the work of the category to allow for the work of the kind we run into a different problem which is the vicious regress outlined above. We then need to provide notions which allow us to individuate and make reference to those things which we are using to individuate and make reference to objects, i.e. kinds, and so on. This brings us to the second problem raised by Lowe's duplication of work between categories and kinds.

§6.2

Insofar as Lowe takes the work to need duplication in the case of objects, this raises a problem for the other categories of his ontology because there is nothing to play the role of sortals for them. Obviously, the viciousness of the regress is a serious problem, but even at the first level of it Lowe cannot accommodate a need for entities playing the role of kinds for the other categories. Lowe does not accept second order kinds or attributes. There are no entities of which kinds or attributes are instances and so no entities to play the role of kinds for them.

The category for which it would seem most likely that Lowe could provide something to play the role of kinds is the category of modes because, for Lowe, modes are instantiations of attributes. However, even here, we find that Lowe does not take attributes to determine the existence and/or identity conditions of modes. Attributes and modes, although they stand in the same relationship of instantiation as kinds and objects, nevertheless are not related in exactly the same way. Lowe takes the category of modes to determine that they depend for their identity on the object that they characterise. This identity dependence is different again from the dependence for identity conditions which holds between objects and kinds. The idea is that the object characterised makes up part of the essence of the mode characterising it, so that the mode is e.g. *Peter's tallness*. Another way it can be made clear that Lowe does not take the identity conditions of modes to be determined by attributes in the same way that identity conditions of objects are apparently determined by kinds is to consider the way Lowe explicates the notion of an identity

condition/criterion of identity.⁴¹ Lowe explains what he means by identity conditions in a way that only addresses objects and the way their identity conditions are conferred upon them by kinds. This lead one to the next problem.

§6.3

It is a problem connected with Lowe's duplication of work between categories and kinds that in explaining relevant notions e.g. identity conditions, Lowe sometimes focuses on the notion as connected to objects and sortals and so produces an account which is not applicable to entities of other categories. This is a problem insofar as we want to hold on to the idea that categories determine existence and identity conditions. In light of the two previous problems discussed it seems that we should want to do that, but doing so would require that Lowe's construal of the notion of identity condition be modified.

I think that this is not the only problem with Lowe's construal of the notion of an identity condition. Other problems with that construal will be discussed in §10 so I shall postpone further discussion of the construal until that point.

§6.4

The final problem caused by Lowe's duplication of work between categories and kinds which I shall discuss can be viewed as a by-product of the general duplication of work. Certain notions are counted both as subcategories and as kinds. But this is untenable.

In some cases, Lowe's duplication of work between categories and kinds manifests as a claim that two different notions do the same work for a single entity. However, in other cases, the duplication manifests in a different way. It is not claimed that two different notions do the same work, instead the notion which does the work is counted twice over as both a category and a kind. But this is untenable. The same thing cannot be both a category and a kind. Categories are not supposed to be entities, or to use Lowe's term, elements of being, at all, whereas kinds are supposed to be entities of a specific nature.

⁴¹ Lowe uses 'identity condition' and 'criterion of identity' interchangeably.

Part of the problem seems to be that Lowe doesn't have a basis for the sharp distinction he makes between categories and kinds given that they do much of the same work for him.

They do also do some different work. Kinds are utilized in the account of dispositions and laws of nature which Lowe provides. He needs kinds to be entities for that account and he takes the ability to provide that account to be one of the main virtues of his ontology. The formal character of categories is used to avoid the infinite regress discussed above and to provide the construal of the question of ontology which Lowe wants to defend. However, Lowe's defence of the claim that there are the kinds he wants to make use of in his account of laws involves attributing to them, just for the case of objects, much of the work that he previously attributed to categories.

It is not clear that he can maintain the construal of categories he originally introduced, along with a construal of kinds according to which they do, in a limited way, much of the same work. The problem is exacerbated by Lowe's acceptance of a hierarchy of categories and the broadness of his notion of ontological category which results. This exacerbates the problem because in his counting of notions as both categories and kinds Lowe is often counting them as categories by counting them as subcategories.

What follows are some examples of the numerous notions which are characterized by Lowe sometimes as categories and sometimes as kinds. Lowe offers set as an example of a category in his (2006):

Sets themselves comprise just one category of entities amongst many, and one which certainly could not be the sole category of entity existing in any possible world

(2006, 6)

and then as a kind/sort in his (2009):

Another point which emerges here, however is that where a criterion of identity for a given sort ϕ does make use of the notion of identity itself, it can apparently do so informatively only by alluding to the identity of things of another sort or sorts. Thus, the criterion of identity for sets is stated in terms of the identity of their members... What criterion of identity is applicable to any given set member will simply depend on what sort of thing that set member is – for example, planet, number, or indeed set. (2009, 22).

Similarly, in both in his (2006) and his (2009) Lowe offers arguments against identifying a living organism with the matter of which it is constituted. However, in his (2006) ‘living organism’ seems to be a category:

Thus, the category of *living organism*, to which an individual tiger belongs, is a sub-category of the higher-level category of *individual substance* or *particular ‘object’* (in one sense of that dangerously ambiguous term)

(2006, 20)

whereas in his (2009), ‘living organism’ seems to be a kind/sort:

my main concern once more is merely to emphasize the difference that must be acknowledged to obtain between any adequate criterion of identity for living organisms and any adequate criterion of identity for either parcels of matter, or collections of material particles – the consequence of this difference being, of course, the non-identity of individuals belongs to sorts or kinds governed by these different criteria

(Lowe, 2009, 110).

Although Lowe may claim that there are degrees of abstraction involved in the distinction between categories and kinds⁴², and in knowledge of them, these degrees do not seem sufficient to provide him with the basis for making a sharp distinction between categories and kinds. They don’t seem to provide him with a cut-off point in terms of level of abstraction, as can be seen from the fact that he doesn’t seem clear on where the cut-off point should be. This is a problem as is especially clear when one considers that categories are not supposed to be entities at all whereas kinds are. This problem can be viewed as a by-product of Lowe’s general duplication of work between categories and kinds.

⁴² “An ontological category is a *kind of being*, that is, a kind of entities, membership of which is determined by certain distinctive existence and identity conditions whose nature is determinable *a priori*. Such a kind, then, is not to be confused with so-called ‘natural’ kinds, referred to by specific sortal terms such as ‘tiger’ or ‘gold’. For, although the members of such natural kinds will, of course, be entities belonging to appropriate ontological categories—as, for example, a tiger is a *living organism* and a portion of gold is a *quantity of matter or stuff*—the nature of such kinds is determinable only *a posteriori*, by scientific observation and experimentation. Ontological categorization, as I understand it, operates at a higher level of abstraction than does scientific taxonomizing, and the latter presupposes the former.” (Lowe, 2006: 20).

§7

The final problem with Lowe's construal of the notion of an ontological category which I shall discuss in this chapter is the specific construal of existence and identity conditions which it is connected to.

On Lowe's construal, the notion of an ontological category is closely connected to the notions of existence and identity conditions. Ontological categories are to be individuated by the existence and identity conditions of their members (2006, 6) and entities are categorised correctly when they are categorised on the basis of their existence and identity conditions (2006, 44).

§8

Although Lowe mentions existence conditions repeatedly, he doesn't specifically address the question of what he understands existence conditions to be. In defending her construal of 'exists' in her (2015) Amie Thomasson argues against numerous substantial existence conditions but what she considers under the heading of 'existence conditions' are claims that something only counts as existing if it meets some specific condition(s), e.g. making a causal contribution. (Thomasson, 2015, 115-122) It is clear from what he does say that Lowe is not proposing any such condition. Instead what he seems to have in mind are conditions which are different for different categories and which specify the conditions in which a thing of that category would exist.

Although Lowe does not provide a detailed explication of what he means by 'existence condition', he does give an example of an existence condition, along with an identity condition, for a reduced category of particular:

This is why particulars cannot comprise a 'fundamental' ontological category if, in fact, they are wholly constituted by co-instantiated universals: in that case, a particular exists just in case certain universals are co-instantiated, and is differentiated from any other by the universals which constitute it (2006, 8)

Here the existence condition is given in terms of a putatively fundamental category of universal. For this reason, the form used here would not be adequate for an existence condition associated with a fundamental category.

What is most interesting about fundamental ontological categories is that they are the *highest* kinds. They are that in terms of which everything else is defined but they themselves cannot be defined. This raises a problem of how to explicate them and Lowe's proposal of explicating them through the existence and identity conditions of entities belonging to them provides a potential way of addressing that problem. However, since fundamental ontological categories are the highest kinds, the existence conditions for entities belonging to these categories cannot be given in terms of an even higher category and so cannot be given along the model of the example supplied above.

Lowe does specify various relations of existential dependence which he takes to hold between entities of certain fundamental categories and those of others (2006, 35-40). For instance, he takes modes to be rigidly dependent for their existence and their identity on the objects they characterise. He defends an Aristotelian conception of both kinds and attributes according to which they depend for their existence on their instances but only non-rigidly, i.e. they depend for their existence on having instances, but they don't depend for their existence on having any specific instance. These claims about existential dependence are partially specified necessary conditions for the existence of the entities concerned. They are clearly not sufficient conditions and they are not plausible as candidates for the role of existence conditions for the relevant entities.

Lowe does not provide examples of existence conditions or explain what he would take their form(s) to be or how he would take them to function. These are pressing questions which need to be addressed if one is to have a non-trivial notion of existence condition which can help in the explication of fundamental category notions. The lack of such a construal of existence conditions is therefore a problem for Lowe's account.

§9

For the notion of identity condition there is no such problem with Lowe's account. Lowe provides a very detailed construal of the notion of identity condition/criteria of identity.

Given the connection he proposes between categories and individuation, Lowe might be expected to articulate his construal of existence conditions for fundamental categories in

the course of explaining the role of those categories in individuation, but he doesn't. In discussing individuation, he tends to focus instead on the work of identity conditions/criteria of identity⁴³. This is one way his notion of individuation comes away from that which I shall propose in the next chapter.

In his discussion of individuation Lowe focuses on singular reference. For Lowe, individuation is “a kind of cognitive achievement, namely the successful singling out of an object in thought” (Lowe, 2013, 19) and in his discussions of individuation he focuses on the achievement of distinguishing an entity *from others of its kind*. Some version of this is supposed to be that which the understanding of the identity criterion of a kind allows for.

§9.1

I shall begin by presenting Lowe's construal of identity conditions, and I shall then raise some problems for it. I shall argue that these problems with the construal of identity conditions present problems for the construal of the notion of ontological category which Lowe explicates using it.

§9.2

The distinction between the function it may be claimed a proposition has to fulfil if it is to be a criterion of identity and the content it is claimed the proposition serving as a criterion of identity has is an important one in discussions of criteria of identity.

In the literature, discussions of criteria of identity often distinguish between metaphysical and epistemic understandings of these criteria. It is held that the criteria can be metaphysical or epistemic in either of these two ways, function or content⁴⁴. Most of the participants in the discussion accept that the content of a proposition which serves as a criterion of identity is metaphysical; such a proposition states necessary and sufficient conditions for entities of some kind to be identical. However, this agreement doesn't

⁴³ Lowe uses these terms interchangeably and I shall do so as well.

⁴⁴ One might want to reserve the term 'criteria of identity' for the epistemic and use 'identity conditions' for the metaphysical. Lowe considers this but claims that 'criteria of identity' as it is used in the literature is not exclusively or primarily an epistemic notion. He claims that since this non-exclusively epistemic usage is entrenched, it wouldn't be helpful to use it for purely the epistemic notion.

preclude disagreement on the question of how we should understand the notion of a criterion of identity.

This is in large part because the question of function remains open. The disagreements about the function of criteria of identity drive several of the disagreements about the notion of a criterion of identity. Once this is seen, it can be seen that some of these disagreements about the notion may be unnecessary; the participants may just be talking about different notions. However, there is reason to think that sometimes participants might, in addition to thinking that their understanding was the correct one, also think that we should not accept the opponent's notion even if it is not as considered as being a notion in competition with their own. It seems that Williamson would say this about the notion of criteria of identity which Lowe defends.

In this section, I am going to draw out the approach to the notion of a criterion of identity which is defended by Lowe. This construal was defended by Lowe over the course of a number of books and articles in which he engaged in a debate on the topic with Timothy Williamson. I shall illustrate how the different functions Lowe and Williamson take criteria of identity to have underlie other positions they take on the criteria.

A good starting point for understanding Lowe's construal of the notion of a criterion of identity can be found in what are important points of agreement between Lowe and Williamson. Both agree that criteria of identity express necessary and sufficient conditions for the identity of entities of some kind. Both also agree that identity is neither a notion which can be defined in more fundamental terms, nor an ambiguous notion which has different senses for entities of different kinds. These points of agreement set up a basic question to which Lowe and Williamson each provide different answers. The question is: what is the point of criteria of identity? Given that both Lowe and Williamson agree that the notion of a criterion of identity is a theoretical one, another way of putting the question might be: what role do criteria of identity play in philosophy?

Lowe gives a developed answer to this question in his 1989 article ‘What is a Criterion of Identity?’⁴⁵ and he restates much of what is defended there in his (2013), albeit with one very important difference⁴⁶.

In his (1989), Lowe claims that sortals⁴⁷ are required for reference and that criteria of identity convey some important semantic information about sortals. Grasping the information conveyed by these criteria is necessary if one is to have full grasp of the relevant sortal and this full grasp of the relevant sortal is required if one is to be able to make reference to the entities falling under it. Lowe’s claim is that the criteria of identity convey important information about the sortal by expressing what identity *consists in* for the entities falling under that sortal. So, for Lowe, criteria of identity have two functions, the second of which they fulfil by fulfilling the first. The first is allowing for a full grasp of sortals, the second is allowing for reference to the things falling under those sortals.

Lowe’s project, in both his (1989) and in the relevant section of his (2013), is to clarify the notion of a criterion of identity. He takes criteria of identity to be semantic principles which are useful in metaphysics, but which are subject to controversy and scepticism. His later clarification of this claim is that criteria of identity are both semantic and metaphysical principles because in fulfilling the first function noted above they convey information about both the meanings of the sortal terms and about the natures of the sortals:

We could sum this up, perhaps, by saying that criteria of identity are metaphysically grounded semantic rules (Lowe, 2009, 26).

Lowe’s goal is to defend the notion of a criterion of identity by clarifying it and addressing what he takes to be the two main points of contention concerning it. These are the following: first, whether we should accept criteria of identity in which terms for the entities whose identity is in question occur on the right-hand side of the criterion. Lowe claims that we should. Second, whether sortals understood through the grasp of criteria

⁴⁵ On some occasions, notably Lowe (1997), Lowe deviates slightly from the answer defended in this article. However, the view defended in Lowe (1989) is defended over numerous articles and is returned to in Lowe (2009) and for this reason I am presenting and considering it here simply as his view as opposed to considering it as his early view.

⁴⁶ In his (2013), Lowe no longer claims that there are criterionless sortals which allow us to achieve our first understanding of what it is to make singular reference.

⁴⁷ The term ‘sortal’ is used by Lowe in discussion of this topic in part, it seems, because its usage in connection with identity criteria is established. I shall follow him in using the term in this subsection. However, despite the change in terminology, there is no change in ontology here. For Lowe, sortals are substantial universals, i.e. kinds, and sortal terms are kind terms.

of identity underlie all of acts of reference, even the most basic. In his (1989) he answers no to this question, but by the time of his (2013) he had reconsidered and changed his answer to yes. His answers to these questions, as well as the overarching question of what the form of an identity criterion is, structure his defence of the construal he provides. His defence of the answers he gives to these questions is based on the function he takes criteria of identity to fulfil.

Crucial to Lowe's approach is the connection he takes there to be between criteria of identity, sortals, and our capacity to refer to entities in the world. Lowe contends that Locke recognised the fact which we recognise in giving criteria of identity, the fact that identity *consists in* something different for things of one sort than for things of another. Nevertheless, Lowe does acknowledge Frege as the person responsible for introducing the notion under the term 'criteria of identity', for providing a well-known example of such a criterion, and finally, for recognizing the crucial connection between criteria of identity, sortals, and the making of singular reference. It is the general version of this connection which provides the force for most of Lowe's arguments in favour of the positions he takes on the contentious issues concerning criteria of identity.

One of the central aspects of Lowe's construal of the notion of a criterion of identity is the claim he makes about the logical form such criteria should be taken to have.

Having traced the notion of a criterion of identity back to Frege, Lowe begins by presenting what he calls the Fregean Thesis using a quote from Frege's *Grundlagen*:

If we are to use the symbol a to signify an object, we must have a criterion for deciding in all cases whether b is the same as a , even if it is not always in our power to apply this criterion (Frege, *Grundlagen* §62, quoted in Lowe, 1989, 2))

As an example of a Fregean criterion of identity, Lowe considers the criterion of identity for directions (for all a, b , the direction of $a =$ the direction of $b \leftrightarrow a$ is parallel to b). Lowe calls criteria which share the form of this one criteria of type A. Where $f()$ is a functional expression and R is an equivalence relation, the general form of criteria of type A is said to be:

$$\forall x \forall y (f(x) = f(y) \leftrightarrow Rxy)$$

Lowe notes that the form Frege's criterion takes is one in which the entities whose identity is in question are referred to by means of a functional expression on the left-hand side of

the biconditional and are not referred to at all on the right-hand side. However, Lowe argues against taking such a form to be a requirement for all criteria of identity on the basis of the general version of the Fregean thesis noted above which Lowe subscribes to.

Using Williamson as an example, Lowe notes that some people have tried to formulate criteria of identity in the form noted above for such entities as persons. Lowe contends that we shouldn't go along with this because (a) there isn't a good reason to think that our primary means of referring to persons is through the use of functional expressions, and (b) there is a good reason not to think this; the ontological dependency of directions on lines makes it natural to refer to the former through the latter but trying to refer to persons in this way just neglects the fact that there is nothing on which persons are ontologically dependant in the way that directions are on lines.

Lowe uses this argument to reject the position that the form of the Fregean examples of criteria of identity is the required form for criteria of identity. The argument is based on the function he takes criteria of identity to have, which he contends is the same one Frege took them to have. The claim that criteria of identity should have *a* form is an assumption which drives this argument.

Having rejected the explicit form of the Fregean examples as characteristic of the notion, Lowe considers Frege's description, as given in the Fregean Thesis quoted above, of what we want from a criterion of identity:

a criterion for deciding in all cases whether *b* is the same as *a*, even if it is not always in our power to apply this criterion (Frege, *Grundlagen* §62, quoted in Lowe, 1989, 2).

Lowe finds this too general a desideratum, noting that Leibniz's Law provides a trivial such criterion which nevertheless fails to differ between kinds as Frege wanted the criteria in question do. Since it doesn't differ between kinds, it also doesn't shed light on the meaning of the general sortal terms involved in the criteria and Lowe observes that this was one of the things Frege hoped to achieve with criteria of identity; the criterion was to shed light on the meaning of the sortal term occurring in the functional expressions on either side of the identity sign, and this was to allow us to grasp that general sortal and use it to refer, specifically on the meaning of 'number' as it occurs in the functional expression 'the number of ()'

Lowe notes that once we have moved to a general or universal version of what he called the Fregean Thesis, the connection between the singular term occurring either side of the identity sign and the general sortal term on the meaning of which we might require the criteria to shed light has to be taken to change from being an explicit one to being an implicit one. Still, he claims, this is plausible. If the desideratum of shedding light on an associated general term can be met in this way, on the basis of an implicit connection between a singular term, e.g. a name for an artefact, and a sortal term, e.g. 'Big Ben', then the universally appropriate form for a criterion of identity which was being sought to replace the Fregean template can be found, Lowe avers, in what he calls type B criteria.

Lowe's type B criteria of identity are criteria which share the form of the axiom of extensionality for sets ($\forall x \forall y ((x \text{ is a set} \ \& \ y \text{ is a set}) \supset x = y) \leftrightarrow \forall z (z \in x \leftrightarrow z \in y)$), so, taking F to stand for some sortal concept, and R to stand for an equivalence relation, the general form of what Lowe calls a type B criterion is the following ' $\forall x \forall y (((Fx \ \& \ Fy) \supset x = y) \leftrightarrow Rxy)$ '

Lowe claims, given that we are seeking universal applicability, that it is a point in favour of the type B form of criteria, that it can be used to express criteria of the form found in the Fregean examples but that the reverse is not the case. Again, this consideration in favour of type B is driven by what Lowe takes the function of criteria of identity to be; we are seeking universal applicability because Lowe takes criteria of identity to be required for, and serve the function of, allowing for reference quite generally.

§9.3

According to Lowe's account, criteria of identity serve to allow us to grasp the meaning of the sortal term which occurs in the antecedent of the left-hand side and is associated with the singular terms on either side of the identity sign, and this grasp of the meaning of the sortal term allows us to use that sortal term to refer, by means of singular terms in which it is implicit, to entities in the world. However, Lowe thinks that one aspect of his type B criteria might look like it presents a problem for this account. The problem is that in type B criteria singular terms in which the sortal in question is implicit occur on the right-hand side of the biconditional as well as on the left-hand side. Given this, unlike the Fregean criteria where it can be claimed that our understanding of the right-hand side allows us to understand the terms on the left, in a type B criterion it looks like, unless we can understand the use of the singular terms at issue we can't understand the criterion,

but the criterion is supposed to be what allows us to understand the use of the singular terms at issue (and thereby the sortal a term for which occurs in the antecedent).

Lowe's defence of type B criteria against this potential criticism is again driven by his interpretation of the function of identity criteria. He notes that Frege initially tried to use criteria of identity for definitional purposes and that type B criteria would be unacceptable if criteria were to serve that purpose because that would be a case of the definiendum occurring in the definiens. However, he claims, Frege realized that criteria of identity aren't capable of providing a full definition of a sortal like number as they only explain a limited number of cases in which the term may occur. Similarly, he says, he does not intend his criteria of identity to constitute definitions. He contends that they can, despite this, shed some light on the meaning of a sortal term.

Lowe's claim is that we don't need to be in a position to successfully use *a* and *b* to refer in order to be in a position to understand criteria of identity, we just need to be in a position to understand the general type of terms *a* and *b*, i.e. that they are individual variables referring to particulars. According to Lowe, that much understanding allows us to grasp what is being conveyed by the criteria of identity, which in turn allows us to fully grasp the relevant sortal concept and then to be in a position to use *a* and *b* referentially, and to understand their use as referential terms.

The crucial point then is that what a type (B) criterion of identity is intended to convey (namely, an aspect of the sense of a certain general term) can be sufficiently grasped by a person not already equipped to deploy singular terms governed by that criterion, provided at least that that person understands in general what it is to make singular reference to, or quantify over, particulars.

(Lowe, 1989, 13)

§10

The point of considering Lowe's construal of the notion of criteria of identity was that he connects criteria of identity, along with existence conditions, to the notion of ontological categories. He doesn't provide a clear construal of existence conditions, but he does, as shown above, provide a very detailed construal of the notion of criteria of identity. Nevertheless, that construal was included in this section as part of problem four for Lowe's account of ontological categories, the problem of his construal of existence and

identity conditions. Why think that Lowe's construal of identity conditions is a problem for his account of ontological categories?

There are two main problems with Lowe's construal of criteria of identity which I think should persuade us to think this. In the next chapter, when I give my alternative construal of identity conditions, these problems will be developed and further supported, but these issues raise problems for Lowe even without that development.

Problem 1: The construal unduly limits the notion of a criterion of identity

This problem was discussed previously and is, to a large degree, internal to Lowe's account. The problem is that Lowe, in presenting his notion of an ontological category in his (2006) and (2009), presents criteria of identity as connected to all four ontological categories, but, given his ontology, this is not compatible with his construal of the notion of a criterion of identity. It was noted above that criteria of identity need to be understood in terms of their function not just their content. The function of criteria of identity on Lowe's construal, as detailed above, is to shed light on the meaning of different *sortal* terms and thereby allow for singular reference to *objects* of different kinds because terms for objects of these kinds will include as part of their sense the sense of the (highest) sortal under which they fall. Lowe's construal of the notion of a criterion of identity limits that notion to allowing for reference to *objects* by illuminating sortals used to make that reference. This is just too narrow to be a satisfactory construal of a notion he claims is connected to all four of *his* fundamental categories, and also to both categories and fundamental categories generally.

A problem internal to Lowe's account which would arise in an attempt to generalise the construal is that Lowe doesn't accept properties of any order higher than first. I argued earlier that even if one did accept such properties a problem would still arise but Lowe's rejection of second order properties would make the problem arise quickly in any attempt to generalise his construal of the notion of a criterion of identity so that criteria of identity weren't such that they could only be given for things from the category of objects.

Problem 2: Lowe's criteria run into Williamson's triviality problem and fail to fulfil their function

For Lowe, the function of a criterion of identity is to allow for singular reference to objects which one did not have the capacity to singularly refer to before coming to know the criteria. Criteria of identity are supposed to fulfil this function by fulfilling the subsidiary function of allowing for understanding of a relevant sortal and thereby allowing for its use in making singular reference to things falling under it. As noted above, one reason that one might think that Lowe's type B criteria were not capable of fulfilling this function is that in type B criteria the variables on the right-hand side are to be understood to range over entities of the kind in question. Also, the relevant sortal term occurs in the antecedent. It seems that unless we understood the kind term already we would not be able to understand its use in the antecedent, and unless we were already able to use singular terms in which it was implicit to make singular reference we would not be able to understand the right-hand side of the condition which is supposed to allow us to do so.

As outlined above, Lowe attempts to resolve this problem by claiming that we don't need to be able to make singular reference to things of the kind in question to understand the condition, we just need to be able to understand what it is in general to make singular reference. Presumably, he would have to say something similar about the occurrence of the sortal term in question in the antecedent. First, he might note that he doesn't intend the identity condition to provide a complete definition, he only intends it to provide some semantic information, albeit information which is necessary for any grasp of the sort adequate to allow for the use of it to make singular reference. Then he might add that to understand the condition we don't need to start with a full understanding of the sortal term which occurs in the antecedent. We just need a partial grasp of the kind for which that sortal term stands and an understanding of what it is in general for a kind to be predicated of objects in the way that the kind in question is in the identity condition.

One problem with this is that it is not clear how we should understand claims about partial grasps of kinds and grasps adequate for use in making reference. What distinctive information is conveyed by type B identity conditions which is not necessary for understanding the condition but is necessary for any grasp of the relevant sortal which is adequate for its use in making reference? Attempting to find an answer to this question allows us to see that Lowe's construal runs into Williamson's triviality problem, a problem Williamson takes to be a specific problem for Lowe, and a general problem for anyone who seeks to provide a useful notion of identity condition.

If Lowe's construal runs into Williamson's triviality problem, then it will not be able to fulfil its function of conveying some semantic information about a sortal the grasp of

which is necessary for anyone who is to be able to use that sortal to make singular reference. If identity conditions as Lowe has construed them do not fulfil this function that is a problem for his construal of identity conditions. However, it is also a problem for a position on ontological categories which depends on that construal.

§10.1

So, what is Williamson's triviality problem?

In considering how we should understand the notion of an identity criterion, Williamson starts with the understanding of an identity criterion as a statement of necessary and sufficient conditions for identity and focuses on the potential triviality of such a condition. Given that identity can't be stated in more basic terms, why, he asks, should we not think that a statement of identity is itself the most basic way to state the necessary and sufficient conditions for identity to hold between entities of any kind? Given that identity cannot be satisfactorily and non-circularly defined, why think that any other way of claiming the same thing is more informative? Williamson's consideration of the notion of criteria of identity proceeds from this point:

if the demand (for a criterion of identity) is not to be trivially satisfiable, it must be for a necessary and sufficient condition meeting a certain constraint, where such and such does not itself meet that constraint...it would not do to say just that the constraint is that the condition should be interestingly different from such and such, for then the demand would look merely capricious. Why suppose such a condition to exist or hope to find one? (Williamson, 1990/2013, 144)

The constraint is thus an additional requirement which a necessary and sufficient condition for identity of entities must meet in order to be an identity criterion. If any necessary and sufficient conditions of identity are to count as identity criteria they must satisfy some specific constraint and this constraint will be for this reason partially definitive of the notion of an identity criterion. Williamson calls his desired constraint, whatever it may turn out to be, a non-circularity constraint.

Given the way Williamson sets up the problem, it can be seen that the constraint will be provided by whatever is taken to be the function of identity criteria, the constraint will be satisfaction of that function. This can be seen by considering that the demand for the constraint is set up by the triviality problem – it seems that, unsatisfactorily, 'x=y' is an

identity criterion for itself, indeed the most basic identity criterion for itself. To avoid this Williamson imposes the requirement that to be an identity criterion a necessary and sufficient condition for identity of some entities must meet some further constraint which can't just be that it be interesting; we need a reason to have identity criteria in addition to statements of identity. So, Williamson's consideration of identity criteria begins with a search for the function which he allows will partially define the notion.

In addition to directly making the constraint, and thus the function, partially define the notion of an identity criterion, this approach immediately gives Williamson a different notion than Lowe has of the kind of circularity which is dangerous for identity criteria.

This difference comes out in Williamson's discussion of the different forms of identity criteria. Williamson calls identity criteria which have the form of the Fregean examples ($\forall x \forall y ((f(x) = f(y)) \leftrightarrow Rxy)$) two-level criteria and he calls identity criteria which have the form Lowe favours ($\forall x \forall y (((Fx \ \& \ Fy) \supset x = y) \leftrightarrow Rxy)$) one-level criteria. Williamson favours the two-level criteria and he does so for reasons connected with his non-circularity constraint.

Williamson describes the one-level criterion of identity for sets as a criterion in which "the identity sign is flanked by terms for sets, and the right hand side states a relation equivalent to identity between those sets"(Williamson, 1990/2013, 146) Considering whether to subsume one-level under two-level as limiting cases "in which the function takes everything to itself" he writes that "the move looks trivial and the non-appearance of the function symbol on the right hand side would no longer be an effective non-circularity constraint"(Williamson, 1990/2013, 146). Finally, as part of the debate with Lowe, he claims that one shouldn't reduce two-level to one-level criteria because "the point is to say when lines have the same direction without mentioning directions. Given Lowe's construal, no such explanation is possible" (Williamson, 1991, 194).

He contends that "Lowe's construal does not permit a principled rejection of an intuitively unacceptable answer", saying that Lowe cannot even "accuse the new answer of circularity or total uninformative" (Williamson, 1991, 194-5). The proposed new answer is that directions are identical when some line has both. Lowe rejects it on the basis that it is not informative in the right way; it doesn't say what identity consists in for directions. Williamson's response to this is to note that in talking about what identity *consists in* for various things Lowe seems to be asking for something more basic than identity but he won't find it.

So, for Williamson, it seems the right-hand sides that Lowe seeks will always be unsatisfactory because they state a relation logically equivalent to identity between the entities whose identity is in question and this falls afoul of his favoured non-circularity constraint. For Williamson, satisfaction of the non-circularity constraint requires that the right-hand side state a relation which is between the entities by which the entities whose identity is in question *are presented*. Although the non-circularity constraint is not at this point in his account specified, his later investigation finds only one satisfactory candidate, an epistemic function fulfilled by a metaphysical principle⁴⁸, and it is the constraint

⁴⁸ Williamson presents the position he finally commits to as a combination of the metaphysical and epistemological interpretations of identity criteria. He writes that criteria of identity are “metaphysical principles apt to explain epistemic facts” (Williamson, 1990/2013, 144) The propositions are metaphysical principles because they still state necessary and sufficient conditions for the identity of entities of some kind. The epistemic component comes in with the function. It is this which selects as appropriate for the right-hand side of the criteria one among the great many less basic way of expressing the identity statement which occurs on the left-hand side and provides a point to the expression of this right-hand side with the left-hand side. What distinguishes the equivalence relation which occurs on the right hand side of the identity criteria from all those which could occur truly in an expression of necessary and sufficient conditions for the entities in question is that the necessary and sufficient condition expressed by the equivalence relation in the identity criterion states the relation to which we do in fact attend, and on the occurrence of which we rely, *on those occasions on which* we successfully discern identity or difference among entities of the kind in question.

By construing criteria of identity as explanations of what we do when we succeed in recognizing and differentiating entities, Williamson provides a point for criteria of identity while maintaining them as expressions of necessary and sufficient conditions for identity of entities of varying kinds. This point is one which he holds requires the two-level form in order that the right-hand side express the basis of our knowledge that the left-hand side is true. On Williamson’s account, we do not use criteria of identity to make reference. To begin with, criteria of identity are limited to complex singular terms. Further, on Williamson’s account identity criteria are an explanation of what we do in recognizing and differentiating when the result is knowledge. Such an explanation would not underlie the very practices on which it is based, and of which it is a description. Williamson in any case explicitly denies that criteria of identity provide the basis for these acts of identity and discrimination. (Williamson, 1990/2013, 153)

Williamson’s identity criteria serve an epistemic function which it seems to me would never get off the ground. Williamson’s identity criteria require that we examine the occasions where we got identification or discrimination right, where we had knowledge of identity and difference, and they allow us to produce from this an explanation of that knowledge albeit just an explanation of what we were doing when we got it right. It is hard to see what function this serves; it is hard to imagine a scenario in which we had the

provided by this function which retroactively justifies the inchoate non-circularity constraint at work in Williamson's defence of the claim that identity criteria have a two-level as opposed to a one-level form. Thus, it is the function Williamson identifies for identity criteria which justifies this position he takes on what counts as an identity criterion.

§10.2

Williamson's triviality problem is a serious problem for Lowe because it is not clear why we should think criteria of identity as Lowe has construed them would be as singularly important in allowing for the understanding of sortals as Lowe's account requires. As Lowe presents it, one acquires satisfactory understanding of a sortal only by acquiring understanding of the associated criteria of identity. Lowe construes criteria of identity as conditions which are satisfied by objects and claims that to conceive of a thing as something which would fall under a specific sortal, we conceive of it as something which would satisfy the relevant criterion. This makes a criterion of identity something which can be satisfied. What condition is expressed by a criterion of identity? Lowe contends that we should think of his type B as the form for criteria of identity, so it would be a condition of the following form; ($\forall x \forall y ((Fx \ \& \ Fy) \supset x = y) \leftrightarrow Rxy$). The important question here is what would go in for R. The point which Williamson presses against Lowe in their debate is that for all Lowe has said this could be any equivalence relation which holds between x and y whenever $x=y$. R could be anything which holds between x and y whenever they are identical.

This makes the notion of a criterion of identity collapse into the notion of an essential property. But Lowe can't plausibly be requiring that knowledge of all essential properties is required for a grasp of a sortal which allows one to use it to make reference. But if not all, if just one, then, which one? Which is the singularly important one that identity conditions convey?

knowledge required to pick out the relevant occasions when we got things right and yet we still sought the kind of explanation Williamson's criteria would yield. If his function isn't compelling, to that extent his notion of an identity criterion in itself isn't compelling.

As Williamson notes, Lowe's appeal to his informativeness condition cannot help him here because there will be many such conditions which are to some degree informative. If criteria of identity collapse into the broader collection of an object's essential properties, why should we think that there will be one of these which will be both required for and sufficient for allowing for understanding of the relevant sortal?

Lowe's response to Williamson's triviality problem is to insist that one such condition will reveal what identity *consists in* for objects of the kind in question. But it seems, as Williamson contends, and as it sometimes seems that Lowe accepts, simply implausible to think that there is something more basic going on than identity. Lowe's repeated claims that one of the conditions will reveal what identity for things of the kind *consists in* just seems as Williamson contends "to make the hopeless demand for something more basic (in some sense) than 'x=y'" (Williamson, 1991, 194).

§10.3

If Lowe's construal of the notion of criteria of identity is such that these criteria become simply some essential properties among others, that is a serious problem for the viability of the construal itself, at least insofar as the notion that construal aims to capture is supposed to be a distinctive one. It is also a serious problem for Lowe's account of ontological categories because that account uses what is supposed to be a distinctive notion of identity conditions to explicate the notion of an ontological category and to characterise what it is for such a category to be fundamental. If the notion of a criterion of identity which Lowe's construal yields is not distinctive, then that, to some extent at least, undermines his account of ontological categories.

To sum up: Lowe's account of ontological categories is given in part by appeal to the notions of existence and identity conditions but the specifics of his construals of existence and identity conditions are such as to raise serious problems for that account. If they are to be used to support and explicate an account of the notion of an ontological category, Lowe's construals of existence and identity conditions cannot be accepted as they stand but need to be developed and modified.

§11

The above discussion concludes my presentation of the fourth of four problems with Lowe's account of ontological categories.

These four problems were:

1. The presupposition problem
2. The broadness of Lowe's notion of ontological category
3. The duplication of work between categories and kinds
4. Lowe's construal of existence and identity conditions

As I noted earlier, there are three key positions from Lowe's account which I intend to adopt and defend, specifically:

1. Ontological Categories are not entities.
2. Ontological Categories are involved in the individuation of entities
3. Ontological Categories are associated with the existence and identity conditions of the entities that belong to them.

However, the problems presented above demonstrate that Lowe's account should not be adopted as it stands. In the next chapter, I shall attempt to develop an alternative version which nevertheless incorporates and defends versions of the above three positions.

Chapter 3

§0

In the last chapter, I presented Lowe's account of ontological categories. I emphasised what I take to be key claims of that account (versions of which I propose to adopt) and I explained the arguments Lowe provides for them. I also argued that as it stands Lowe's account has problems. In this chapter, I shall develop my own construal of the notion of an ontological category. In the course of doing so, I shall explain how I have modified the aspects of Lowe's account which I adopt. I shall argue that my construal of ontological categories avoids the problems which I raised for Lowe's and allows the ontological categories of the account to be suited to play the central role which I contend ontological categories do play in ontology.

As I noted in the last chapter, there are three key positions from Lowe's account which I intend to adopt and defend versions of. These are:

1. Ontological Categories are not entities.
2. Ontological Categories are involved in the individuation of entities
3. Ontological Categories are associated with the existence and identity conditions of the entities that belong to them.

Avoiding the problems which I have argued face Lowe's account requires that the versions of these claims which I defend diverge from the versions which Lowe defends. This divergence is most serious with respect to (3).

The versions of the three claims above that I adopt are crucial to my construal of ontological categories and that construal plays a central role in my account of existence claims. For that reason, the influence of Lowe's construal of ontological categories on my own will be evident. However, in order to let my account stand on its own, I shall put off until the end of the chapter the task of explaining how the categories of my account draw on his construal but diverge enough to allow me to avoid the problems which I raised for Lowe at the end of chapter two.

§1

I have claimed that language, as used in truth-apt sentences, depends systematically on the world for the content it in fact has. It does so because it depends for that content on the entities which serve as the semantic values of its terms. For this reason, our truth-apt sentences having the content they in fact have (when things go right and we manage to express a determinate proposition) presupposes the existence of the entities which are needed to serve as the semantic values of the terms in those sentences. If, as seems likely, our language features some terms which occur in certain contexts and others which occur in others, then we will need kinds of term and correspondingly the sentences will presuppose the existence of the entities serving as the semantic values for the one kind of terms and also the entities serving as the semantic values of the others.

The question of ontology is the question of what there is. As I showed in chapter one, it is very difficult to understand the form of answers to this question. It is difficult to understand the form of the statements we express by saying 'fs exist'. One reason it is very difficult to understand the form of these statements is that most construals of that form presuppose the correctness of an answer to the ontological question. They do so even though statements of the form 'fs exist' will be those with which one provides answers to the ontological question. The result will be that the instance(s) of the statement 'fs exist' with which such an interpreter gives their own answer to the ontological question will, given their preferred construal, presuppose its own truth. It will depend for the content it is intended to have on the correctness of the answer it is being used to give.

This result cannot be accepted but it should not really be surprising. If we accept that truth-apt sentences depend for their content on the entities serving as the semantic values of their terms, then we should expect that in trying to specify the correct interpretations of these sentences we will make use of the entities we think are there to serve as semantic values. The entities we think are there to serve as semantic values of terms will be those with which we specify what we take to be the correct interpretations of sentences. So then, when we come to the question of how we should understand the form of existence claims, it should not be surprising that ontologists make use of the entities they think are available to serve as the semantic values of terms in specifying what they take to be the correct interpretations of those sentences.

Further, when one is using the entities one thinks there are to specify the correct way to interpret a sentence 'fs exist', securing the content aimed at for 'f' ends up leading one to

select a semantic value for 'f' which requires that fs exist. In chapter one, I gave a general argument to the effect that this is the case and I then demonstrated the problem by considering different philosophers' construal of statements of the form 'fs exist' and showing how the problem arose for each case.

We cannot accept a construal of 'fs exist' which has the result that instances of it presuppose the truth of the claims that they are being used to assert but it turns out to be incredibly difficult to avoid doing so.

§2

The challenge we face is as follows: our truth-apt sentences having the content that they do have presupposes the existence of entities appropriate to serve as the semantic values of their terms. This phenomenon of the presupposition of the existence of these entities extends even to most construals of existence claims. But that cannot be accepted. We need to find a way of construing the form of existence claims such that instances of them avoid presupposing the correctness of the claim they are used to assert. If we manage to do this, we will also have given an account of what it is that is presupposed by our language's having the content that it in fact has.

How can we say that 'fs exist' without making reference to fs in order to say this?

The approach for which I shall argue in this chapter is a version of a metalinguistic approach to the construal of existence claims. Given the desiderata I have established for construals of existence claims, the motivation for adopting some such construal is obvious. In order to capture the intended content of a claim 'fs exist' we will generally have to specify content for 'f' that would only be available if fs did in fact exist. I argued for this conclusion at length in chapter one. But if we specify such content for 'f', and then *use* 'f' in our existence claim, our use of 'f' will presuppose the existence of whatever would provide the appropriate content for it. In this way, we will run into the presupposition problem. Since this is the shape of the problem, a move that appears promising is the move whereby we avoid using 'f' and merely talk about it instead. However, although the motivation for moving to a metalinguistic approach is obvious, finding a version of this approach which will succeed in capturing the intended content for our existence claims presents difficulties.

In his (1960), Quine argued that facilitating ontological debate required what he called semantic ascent (“the shift from talking in words to talking about them” (Quine, 1960/2013, 250)). Recommending the acceptance of this view, he wrote that when this is not done a debate, for instance over the existence of miles is:

lost in a jumble of invective and question-begging. When on the other hand we ascend to ‘mile’ and ask which of its contexts are useful and for what purposes, we can get on; we are no longer caught in the toils of our opposed uses. The strategy of semantic ascent is that it carries the discussion into a domain where both parties are better agreed on the objects (viz. words) and on the main terms concerning them.

(Quine, 1960/2013, 250-1)

In chapter one, I argued that the metalinguistic approach to linguistic questions which Quine recommends cannot be accepted by metaphysical realists. I noted that the pragmatic consideration which Quine presents as decisive in such a debate, (“ask which of its contexts are useful and for what purposes” (Quine, 1960/2013, 251)), would not be taken to be so by any realist about such questions. More importantly for present purposes, I noted that this version of the metalinguistic approach cannot work because although Quine claims that a move to the level of words will allow the disputants to agree on the objects of the debate, for this to be the case the words (e.g. ‘mile’) at issue will have to empty of content, they will have to be words considered merely as a string of symbols phonetically or typographically individuated. But discussion over such words and their application no longer captures the content of a target ontological debate. Adopting this approach, the truth of ‘organisms exist’ could be consistent with there being no living things. Kripke argues against such a metalinguistic approach to singular existence statements on the basis of this problem. (Kripke, 2013, 152-3).

The ascent to words cannot be motivated as a move to a level where disputants agree on the objects. Construing the existence claims made in such an ontological debate in these terms will simply result in failure to capture the content of the debate.

Thomasson argues for a different version of semantic ascent. Her construal of existence claims is given by her schema E which she presents as an articulation of a core formal rule of use for ‘exists’. Her schema E is: “Ks exist iff the application conditions actually associated with ‘K’ are fulfilled.” (Thomasson, 2015, 86). Thomasson presents this as a case of semantic ascent because ‘K’ is used on the left-hand side and only mentioned on

the right-hand side. This version of the metalinguistic approach doesn't have the same problem as Quine's, 'K' has not been emptied of content. Instead, Thomasson's construal has the opposite problem, the kind of content 'K' is to have has been specified on the right-hand side. 'K' is to have an application condition as its semantic value. The right-hand side of Thomasson's schema E becomes a statement about an application condition – that it is fulfilled by a situation (because it is built into Thomasson's account of what application conditions are that only situations can fulfil them). But on account of this, as I showed in chapter one, Thomasson's existence claims would presuppose the correctness of the existence claims with which she would answer the question of ontology.

Quine went wrong because he emptied 'K' of content in a way that made it useless for stating an existence claim. Thomasson went wrong because she specified the kind of content that 'K' was to have in a way that delivered existence statements presupposing her own ontology. How can we use the metalinguistic approach to provide a construal of existence claims in a way that avoids these problems and manages to capture the content of the categorial existence claims with which we answer the question of ontology?

§3

The starting point for my version of the metalinguistic approach to existence claims is acknowledgement of the fact that, if a construal of 'fs exist' is to be such that instances of it can express categorial existence claims, 'f' cannot be empty of content in the way that it is on the Quinean version of the metalinguistic approach. However, as I have argued at length in this thesis, the availability of the content needed for an intended interpretation of 'f' will itself be a subject of dispute. In general, those who deny that fs exist, should also deny that the content used by the defender of fs to interpret statements in terms of fs is available. This is to be expected. If language depends for its content on ontology, any dispute about ontology will extend to a dispute about the content of language. This was the root of the problem that arose, again and again for the positions I considered in chapter one according to which existence claims have the form ' $\exists xFx$ '. I argued there that such construals cannot be accepted because a predicate 'F' having its intended interpretation presupposes the existence of fs and, for this reason, statements of the form ' $\exists xFx$ ' fail to capture the content of claims that fs exist.

The metalinguistic approach to existence claims which I shall defend in this chapter works by embracing this fact rather than attempting to avoid it.

The intuitive idea is that if disagreements about ontology extend to disagreements about the content of language, then by making claims about the content of language we can make claims about ontology⁴⁹. It is an assumption of my approach, but an assumption with which I think most will agree, that we do in fact succeed, at least sometimes, in using language to make true and false statements about the world. Another assumption, with which I think most should also agree, is that the way in which we manage to use language to make true and false statements about the world is not transparent, or at the very least, it is not always transparent. The widely contested nature of the content of our terms and of the underlying forms of our sentences should be enough to convince doubters of the truth of the second assumption.

If we accept the dependence of language on what there is along with the above assumptions, then we can make claims about what there is by making claims about *how* we manage to use language to make true and false statements about the world. The construal of existence claims which I shall defend in this chapter is based on the contention that we make existence claims by making claims about this. I shall argue that the approach I defend allows us to provide a construal of existence claims such that instances of those claims do not presuppose the truth of the claims they are used to make.

If we build the notion of having a semantic value into the notion of a term, so that a term is any word that has a semantic value or refers⁵⁰ to something, the proposal is that we make claims about what there is by making claims about how our language features terms and how these terms should be understood to refer.

§4

The proposal assumes that the participants of ontological debates are competent users of the language that that debate is being conducted in. It is assumed that they have the rough grasp of the meanings of their sentences that that requires. But, as noted previously, the grasp of meaning that is required to be a competent user of a language does not involve

⁴⁹ In effect, this approach works by embracing the nature of referring terms as entities which depend for their existence and, in a number of different ways, for their identity, on the entities which serve as their semantic values.

⁵⁰ I am taking reference to be the relation a word of any type bears to its semantic value. Anyone who prefers to reserve 'refers' for the relation a name bears to an object can use a different term, perhaps 'denotes'.

knowledge of how that language features referring terms. So, for example, a competent speaker of the English language can have an adequate understanding of definite descriptions such as ‘the Queen of England’ as they occur in sentences such as ‘The Queen of England enjoys horse-riding.’ without knowing whether the expression ‘Queen of England’ as it occurs in the sentence ‘The Queen of England enjoys horse-riding.’ should be taken to be a referring expression as Frege takes it to be, or whether it should be given a Russellian quantificational analysis which would reveal that it does not function as a unit, or whether some other account again is to be given of it.

On the proposal I am defending, one will make claims about what there is in part by making claims about how the various types of truth-apt sentences of our language feature referring terms. In doing this, one will start off simply with rough sentence types but the interpretations one specifies can collapse some of these together or make further distinctions between them. In effect, what is at issue is the making of claims about the truth-conditions of sentences of various types, a task which obviously occupies much of the time of metaphysicians.

In doing this for a relevant case one targets some range of sentences, e.g. statements of natural laws. One assumes a rough understanding of these sentences on the part of oneself and one’s audience. One then specifies the truth conditions one takes them to have. The rough understanding of the target sentences is relied on to allow for the understanding of the terms in which its truth-conditions are given. The truth-conditions given using these terms then allow for a (hopefully improved) understanding of the sentences with which one started.

For example, Lowe provides an account of the truth-conditions of natural laws according to which a claim like ‘Planets have an elliptical orbit’ should be understood as a claim that a substantial kind, Planet, is characterised by an attribute, having an elliptical orbit. He contrasts this with the account Armstrong defends according to which the same sentence should be understood as a claim that the second order relation of necessitation holds between two first-order properties, that of being a planet and that of having an elliptical orbit. These two truth conditions feature different putative referring terms. Lowe’s will include referring terms for substantial kinds and attributes. Armstrong’s will include referring terms for the second-order relation of necessitation and the specific first-order properties in question. We understand the more specific referring terms each proposes for the interpretation of natural law statements in part by relying on our rough understanding of such statements. But having grasped how each intends the referring

terms they take to feature in these statements to be understood (e.g. the terms for kinds, terms for attributes, term for second-order relations), we then gain a more definite (and hopefully improved) understanding of the statements we began with.

§5

The rough understanding competent users of a language have of their sentences is important for my account in two different ways. They are crucial to the ability of my construal to meet two different conditions of satisfactoriness.

There are a number of requirements which any construal of existence statements must satisfy. I discussed and defended each of the following as requirements for a satisfactory construal of categorial existence claims in chapter one.

1. **Avoidance of Presupposition** - A construal of existence claims must not be such that instances of these claims presuppose their own truth.
2. **Extensional Correctness** – A construal of existence claims should be such that instances of them place intended requirements on the world. Existence claims should be true if and only if some intended requirement is met by the world. The thin version of the metalinguistic approach fails to meet this condition.
3. **Informativeness** – Answering the ontological question requires that we *say* what there is, not just that we say something that demands that there be whatever there is. Categorial existence claims must be claims with which we clarify or make explicit what things there are⁵¹. They should allow for understanding of what there is.

In chapter one, I argued that the need to meet condition (3) was part of what led Frege's construal of existence claims to fail to meet condition (1) in the first of the ways that it did so.

⁵¹ I have also argued that without fixing the content of the categorial term, the term will not be definite enough to express a determinate answer to the ontological question.

§5.1

The rough understanding I have claimed competent speakers of a language have of their sentences is part of how my construal of existence claims meets conditions of extensional correctness and informativeness. Meeting the condition of extensional correctness allows an existence claim to capture the claim that a disputant in an ontological debate wants to make. As I have shown in this thesis, meeting this condition without falling afoul of the presupposition problem, and so failing to meet condition (1), is very difficult. The problems that arise for Quine and Thomasson can be understood in terms of this trade-off. Quine meets condition (1) by taking a course which leads to failure to meet condition (2). Thomasson meets condition (2) but does so by taking a course which leads to failure to meet condition (1).

My version of the metalinguistic approach meets condition (1) by construing existence claims as claims about the content of language. It meets condition (2) by involving the specification of what the content is that one takes language to have. For my construal, the way that this is to be done without falling afoul of the presupposition problem, and thus failing to meet condition (1), relies on the rough understanding competent language users have of the meanings of their sentences. The stipulation that this understanding is not complete or precise enough to involve reliable knowledge of how the sentences of the language feature referring terms is required to allow us to make use of this understanding in specifying the content of existence claims without falling afoul of the presupposition problem. On my construal, existence claims will be claims about how various ranges of sentences, which are already roughly understood, should be given an interpretation; how they can be rewritten in a way that makes the occurrence of referring terms in them explicit. The rough understanding we have of the range of sentences we start off with is what allows existence claims which are instances of this construal to capture the right content. We will not produce statements like Quine's whose truth is compatible with the failure of the world to be as we intend to claim that it is because we will circumscribe the range of sentences in which we are interested and make claims that *they* should be understood to feature referring terms in specified ways.

§5.2

Appeal to the rough understanding competent language users have of their sentences is also what allows my construal to meet condition (3). How it allows the construal to meet this condition is closely tied to the general way in which existence claims as I have

construed them are supposed to work and because of this I will return to the point later in this chapter. However, succinctly, the way (3) shall be met on my construal is as follows: since, as I argued in chapter one, the notions with which we give satisfactory answers to the question of what there is will be notions which are, or are at least held to be, basic, or primitive, those notions will not be notions which are able to be *defined* from below. But their meanings have to be fixed or clarified, in part for explanatory purposes but also, importantly, because their natural language meanings will not be definite enough to allow for the expression of a determinate existence claim. Insofar as an understanding of ‘state-of-affairs’ leaves it open whether the constituents of such an entity are ontologically prior to it, that term does not have a definite enough meaning to allow it to be used in making a determinate existence claim. Since the categorial notions featuring in existence claims cannot be defined from below but their intended interpretation does have to be fixed or clarified, they have to be made intelligible from above.

This move, whereby the primitive entity notions in terms of which a theory will be given, since they cannot be defined from below, are instead made intelligible from above, is a move that both Frege (1891/1980) (1892/1980(a)) and Hale (2013) make. I have adopted the basic idea of this from them⁵².

I regard a regular definition as impossible since we have here something too simple to admit of logical analysis. It is only possible to indicate what is meant. (Frege, 1891/1980, 31)

One cannot require that everything shall be defined, any more than one can require that a chemist shall decompose every substance. What is simple cannot be decomposed, and what is logically simple cannot have a proper definition. (Frege, 1892/1980(a), 42-3)

Of course, it is exactly existence claims featuring primitive or basic entity notions with which we answer the question of ontology. So, we need to fix or clarify the content of our proposed primitive entity notions in a way that does not involve definition from below. We do this by making them intelligible from above. To do that we need something less basic but more accessible which we can use to fix or clarify the content of our proposed primitive entity notions. For my account, the roughly understood sentences of a speaker’s language are the less basic but more accessible thing used to fix or clarify how the

⁵² Hale (2013), in particular, focuses explicitly on the challenge of explaining how the fundamental ontological categories are to be understood. (Hale, 2013, 9-40)

primitive entity notions are to be understood. Existence claims, as I shall construe them will be, roughly, claims that some range of proposed primitive entity notions, succeed in allowing for reference. The use made of the roughly understood sentences of a speaker's language in fixing or clarifying the intended understanding of the proposed primitives with respect to which such claims are made is how my construal of existence claims meets the condition of informativeness. However, as noted above, it is also what allows the account to work at all. How it does this is what I shall explain in the next section.

§6

I argued above that we use sentences, which are less basic but more accessible than the primitive entity notions featuring in them, to indicate what those primitive entity notions are and how they are to be understood. There are two points to make at this point about this.

First, this is an example of the fixing of content rather than the specifying of meaning (to once again borrow and adapt Kripke's distinction). The sentences, roughly understood, are used to fix the content of a primitive entity notion. The content of that primitive entity notion is fixed as the notion of the primitives which feature in *these* sentences in *these* ways. Once the primitive is made intelligible, a sharpened understanding of the original sentences will be given in terms of it. This sharpened understanding would not be available if the sentences were simply used to specify the meaning of the primitives. Then the primitives would be no clearer than the sentences were and our understanding of the sentences with which we did this would be unchanged⁵³.

Second, it has been claimed that truth-apt sentences depend for their content on the entities which serve as their semantic values. Given this, for any target range of sentences, there will be a fact of the matter about how they depend on the world for their content. If this is accepted, then it should also be accepted that attempts to use some range of sentences to fix the content of a primitive entity notion as the notion of the primitives

⁵³ For examples of how we might understand a sentence more clearly when we understand it in terms of the primitives it might be taken to feature we might take the range of sentences which, roughly, pick out a subject and say something about it, e.g. 'Simon is witty', 'Mark is trenchant' etc. On one way of understanding these sentences, they feature terms for objects and terms for first-order properties, and they say that the objects in question satisfy the properties. A different way of understanding these sentences might take them to say that an object is characterised by a moment which instantiates a certain non-substantial universal. A different way again would take them to say that a certain bundle of co-instantiated tropes overlaps with a certain bundle of resembling tropes

which feature in *these* sentences in *these* ways can go wrong. There might not be anything such that terms for it feature in all the relevant sentences in the specified ways.

Not just any primitive we attempt to introduce is going to allow us to make reference to things in the world. Insofar as you think that some expressions, or combinations of expressions, are not properly understood as referential terms, you should accept that we can go wrong in thinking that an expression is one with which we can make reference to things in the world. Insofar as you think there are, or conceivably could be, things with radically different natures, one should accept that one legitimate response to an attempt to introduce a new form of primitive which was to occur in certain diverse cases but not in certain others might be to reject the coherence of a kind which would occur in these cases but not those.

This potential for us to fail to secure the intended content for our primitives is crucial to my account of categorial existence claims. My contention is that we fail in exactly this way when we get the answer to the question of ontology wrong and then theorise in terms of primitives for entities which do not exist⁵⁴. By contrast, what happens when we get the answer to the question right, is that our attempts to refer to things in the world using our primitives succeed. On my construal of existence claims, the claim that fs exist amounts to the claim that our attempt to secure the relevant content for our putative primitive referring terms succeeds.

We secure the relevant content for our putative primitive referring term 'f' not by securing content for individual 'f's. We do not have individual 'f's before we have the notion of an f and we do not secure content for terms individually. We secure the relevant content for our primitive referring term 'f' by securing content for the notion of an f. The notion of an f is the notion of *that which would* serve as the semantic value of a potential referring term of kind f. This will be an ontological category notion. If we succeed in securing content for the category notion that content will be supplied by the ontological category of fs.

How should we secure content for the notion of an f? We try to secure that content by securing content for our proposed primitive referring term 'f'. We will only succeed in securing content for the proposed primitive referring term 'f' if an ontological category

⁵⁴ One might be inclined to think that this is how we should understand theories which appeals to sense data. Others might think that this is how we should understand theories which are given in terms of tropes.

of fs can be used to fix its content. All of this might make ontological categories seem very mysterious, but I do not think they should be thought of as such. Ontological categories are simply natures. They are the natures in terms of which all other notions have to be defined. They supply the content in terms of which everything else is properly understood. Because of this they cannot be defined, and they are difficult to talk about. But if we are to say that there are fs, as we will need to if we take the notion of an f as a primitive, then we will need to explain how the notion of an f is to be understood.

We cannot simply push the work off into the predicate and say that an f is a thing which is (an) f. I argued at length in the first chapter that explaining what it is to be an f will be derivative of explaining the notion of an f. We need to start with that.

I suggest that two familiar philosophical notions can be of assistance here. The notion of implicit definition, and the notion of quantifying in. I shall start with the second.

We explain the notion of an f by trying to fix content for a proposed type of referring term 'f'. We do the latter by making claims about the sentences in which such terms could occur. One way of thinking about this draws on the notion of quantifying into sentences. If we adopted the convention of using a different kind of variable for each proposed primitive notion, we could explain what we meant by the notion of an f by making claims about which positions in which sentences we could quantify into with variables of this kind. The debate about whether or not we can quantify into predicate position can be seen in this way. Asking the question of whether we can quantify into predicate position is a way of asking the question of whether there are such things as there would need to be to allow for such predication. Hale (2013, 12) makes the point that if we can quantify into predicate position that is because the sentence into which we quantified was already ontologically committed to an entity serving as the semantic value for its predicate⁵⁵. Accepting this point, I can say that if we can quantify into a certain position in a certain range of sentences⁵⁶ then we can say that the content of those sentences is properly understood to depend on an entity which is such as to serve as the semantic value of (what was revealed to be) the term the variable replaced.

⁵⁵"it would be obviously and grossly implausible to claim that 'Something is wise', for example, introduces a commitment to the existence of objects of which 'Socrates is wise' is wholly innocent. On the contrary, it seems plain that quantification into a position in sentences, assuming it carries an existential commitment, merely generalises a commitment already borne by the constant expressions – whether names or predicates – which can occupy those positions and which its bound variables replace."(Hale, 2013, 12)

⁵⁶ I allow for limited ranges to allow that the primitives might be more specific than object, property, trope etc.

Some sentences might need to be entirely rewritten in order to explain how the proposed primitive referring term is taken to occur in them. This would be because the form which reveals the way they depend on the world for their semantic values⁵⁷ is so different from their surface form. Since the rewritten form is to be understood in terms of the original and in rewriting, one would be required to distinguish between the primitive entity notions occurring in the sentence, this procedure suits my purposes as well as the one above. Indeed, focusing on the entirely rewritten form, and the different ways different ontologists might propose to rewrite various sentences helps one to appreciate, I suggest, that not only do we need primitive predicates (as David Lewis argued in his (1983) and as is now widely accepted), we also need primitive entity notions. It is such notions for which I am arguing in this thesis. They, whatever they are, are what I take to correspond to the ontological categories. Part of my argument for them is the argument presented in chapter one to the effect that we need to recognise the futility of trying to export the content of all such notions into a predicate.

So, the first part of the task of attempting to fix content for a primitive term ‘f’ is by making claims about when a term of its kind should be taken to be used. I have argued that the task of ontology is to be approached as the task of saying how our language depends on the world for its content. Given this, it is useful to frame the task of fixing intended content for entity notions as a task approached by trying to produce schematic rewritings of sentences which make explicit the way they depend on the world for their content. In this light it can be seen that the first part of fixing the content of a proposed primitive referring term is approached by saying in what sentences in what ways terms of that kind occur. In the rewriting task, a claim about this will be a claim that in certain ways in certain sentences a term explicitly of this kind can be introduced. I will call claims about when fs can be used in rewritings use conditions⁵⁸ for the proposed primitive term ‘f’. To allow for the fact that we can form sentences featuring categorial mismatch which could not possibly be true, that almost any term (subject only to the restrictions of grammar) can feature in such sentences, and that such sentences will not facilitate fixing

⁵⁷ I do not, and need not, deny that those very sentences will also have forms which serve other purposes. Different representations of the form of a sentence can serve purposes of making clear the structure of arguments for example. I will regard such form as abstractions from, or specifications of, or in other ways derivative of, the form which makes explicit how the sentence depends on the world for its content.

⁵⁸ These are obviously related to Lowe’s (2006) existence conditions. I shall go into more detail on this at the end of this chapter. I am also drawing, in my construal of both conditions on Thomasson’s construal of identity conditions. For Thomasson (2015), identity conditions are metalanguage rules expressed in the object language. My conditions are proposals expressed in the object language which become rules if the terms they are used to fix the content of succeed in referring.

on the notion of a putative kind of entity in question, specifying use conditions requires specifying some range of sentences as ones in which a putative type of term can occur with truth. These will not be exhaustive. They would only need to be if the aim was to specify the meaning rather than to fix it. In some ways this is an intersubstitutability approach, but it differs importantly from those in the literature which generally use the condition of intersubstitutability to determine a class. I take making a (possibly contentious) claim about intersubstitutability to be a way of trying to fix on an ontological category.

Specifying use conditions goes some way towards one's attempt to fix the content intended, the entity will have to be one which would serve as the semantic value of these terms in these sentences, but this is not enough. Because we won't know how to rewrite the sentences in terms of the constants of the kind in question unless we know when the same term of this kind can be reused⁵⁹. Specifying that condition imposes serious and important requirements on the nature of the entity which would be apt to serve as the semantic value of the terms in question. It would distinguish, for instance, between persisting rivers and river stages. Between variable collections and sets whose members are not variable. And it would help to distinguish, to appeal to Lowe's favourite example, between a statue and the clay composing it, if we are to use the rewriting of sentences in terms of proposed primitive referring terms to try to fix the content of those terms by doing the rewriting of the sentences in such a way that only entities of the intended categories would be apt to serve as the semantic values of those terms then we will need to specify the conditions in which a term can be reused⁶⁰.

The point above about the requirement for both use conditions and reuse conditions for the various kinds of terms we use in our rewriting can be seen another way when it is remembered that the purpose of the rewriting is to use claims about language to make claims about the world by taking advantage of the status of language as dependent on the world for its content. In making claims about how various sentences feature referring terms we introduce tentative commitment to entities serving as referents for what we have taken to be referring terms. But what we don't want to do is commit ourselves to taking there to be different entities for each different sentence. That would get the ontology wrong. Use conditions introduce commitment to entities and reuse conditions specify the

⁵⁹ The conditions specifying when terms can be reused are obviously versions of Fregean identity conditions, a version of which Lowe took to be closely connected to his categories. Having spent chapter two preparing the ground, I am drawing on Lowe here but also modifying his account.

⁶⁰ As noted, these are obviously a version of identity conditions.

conditions in which the terms recognised as referring terms are coreferential. Together they allow us to try to fix on the content of a proposed referring term. In making our existence claims we shall be claiming that a proposed term understood to function in this way allows for reference. However, there will only be such terms if there are things of the nature aimed at. If there are things of that nature, then there will be such terms and our conditions will have succeeded in securing the relevant nature and letting it provide the content for our terms. Both our use and our reuse conditions aimed at such fixing of content. They were conditions for being a term such that it would feature in these contexts and be reused across these contexts. If there is in fact nothing that would do that then these conditions determine nothing. There are no terms that would feature in sentences in these ways because there are no entities apt to serve as the semantic values of terms featuring in these ways.

This point is important because it connects back to the role that the potential to fail to fix content plays in the current construal of existence claims. Content is secured for the proposed primitives if and only if the relevant entities exist. This is why we can make claims about what there is by making claims about the content of our truth apt sentences.

Before moving on I want to draw out the useful comparison with implicit definition. The procedure described above can be thought of as a version of implicit definition, albeit with some differences from some other versions of that procedure.

§7

Use and reuse conditions are my account's version of Lowe's existence and identity conditions. As detailed in the last chapter, one of the questions Lowe tackles with respect to his identity conditions is the question of how we should understand the occurrence in the identity conditions of the very terms they are supposed to be allowing for the use of, terms for entities of the kind in question. The answer I can provide to this question with respect to my versions of the conditions is that insofar as they serve to introduce a new kind of term and make a corresponding category notion intelligible, use and reuse conditions do not initially include genuine uses of the terms which they are being used to introduce. They can be understood to feature a gap where the term whose content is being fixed is. It is because of this that these conditions, insofar as they serve this role, are not, as they stand, truth-apt. They are to be understood initially more as proposals than complete statements.

Implicit definitions, too, initially, contain a gap on account of which the putative containing sentences fail to be truth apt as they stand.

An implicit definition of a word is supposed to work by our deciding that certain sentences (or rules) containing it are correct, and by our presuming that this decision fixes the word's meaning. But what is the justification for that presumption?...This question has a standard answer: namely, that the decision to regard "#F" as true is, implicitly, a decision to give "F" the meaning it would need to have in order that "#F" be true. (Horwich, 1997, 424)

If our decision to regard "#F" as true is part of how F acquires its meaning, and F's having this meaning is necessary in order for the containing sentence to be true, then what we start off with seems to be something which is not truth-apt, because it has a gap; F doesn't have a meaning, and this is to be changed by our decision to treat the containing sentence as true.

In a similar way, we can say that insofar as we use them to introduce kinds of terms (and corresponding categories) which despite this already occur in them, use and reuse conditions are not initially truth-apt because they have gaps; the kinds of terms which we are trying to use them to introduce are not such as to already be able to be used.

One of the important differences between use and reuse conditions and implicit definitions is the meaning of the rest of the sentence. For implicit definitions, this can be taken to be determinate: "it is being assumed that the rest of the sentence "#_" somehow already has a meaning" (Horwich, 1997, 424). This meaning in some sense constrains what "F" can mean if the sentence is to be true.

For use and reuse conditions, those given in terms of conditions which are ultimately supposed to be understood in terms of the primitives they are being used to introduce, the meaning of the rest of the sentence is not understood in a determinate way. We have to return to our appeal to a rough understanding of the sentences we are using to introduce the primitive and the corresponding category notion. I shall suggest below that we can use that as a constraint.

Another difference is that we are not trying to give meaning to a single term, we are trying to give meaning to a kind of term and thus to make intelligible the category which would correspond to that kind. Further, given our purposes, we need the terms of the introduced

kind to be primitive referring terms, it is of no use to have them acquire a meaning which can be further analysed.

In spite of all the differences it seems to me that we can with use and reuse conditions try to do something in some ways similar to what we do in determining the meaning of “F” by deciding to regard “#F” as true. The category introduced is just the way of being an entity which would allow the new terms to be used to refer. The terms have to be able to be used to refer if the conditions are to be true, so we can make the target category notions intelligible by taking the associated existence and identity conditions, or instances of them, to be true in the contexts the original sentences would be true.

I have argued that this process must be thought of as (slightly modifying Kripke’s terms) fixing the content of the introduced term, not specifying its meaning. I argued that if we treat the introduction as specifying the meaning we won’t get the required clarification of what were supposed to be non-basic notions appealed to in the introduction of the term. We won’t get the desired sharpened understanding of the content of the original sentences. Also, if we treat the attempts to specify how primitive kind terms should be understood not as fixing their content but instead as specifying their meaning we seem to miss our target. We end up with various instances of one kind, whatever corresponds to predicates, if any one thing does, rather than with entity notions which could be used to say what corresponds to predicates *or* to sentences *or* to terms like ‘Peter’s smile’ etc.

One serious problem for implicit definitions is the existence problem.

One commonly cited difficulty is the ‘existence problem’: the problem of whether there is any meaning that “F” could have that would render “#F” true...we can be sure to have implicitly defined “F”, in accordance with the standard conception of implicit definition, only if we can be sure that there exists a meaning for “F” relative to which “#F” would be true. (Horwich, 1997, 424)

Use and reuse conditions have some similarities with, but also some differences from, implicit definitions. Nevertheless, I want to claim that the existence problem does arise for them. However, for use and reuse conditions, understood as ways of explicating ontological category notions, the existence problem is not a problem but a feature. It is a feature which I claim allows the approach I am defending to avoid the presupposition problem I have raised for other accounts including Lowe’s.

Since the account of categories which I am defending is a Lowean no-entity account of categories, the way in which the existence condition arises for the explication of those categories using existence and identity conditions is different from the way that it arises for some implicit definitions. Ontological categories are not entities which exist. Ontological categories are natures or ways of being an entity. What it is for there to fail to be a target ontological category is not for an entity to fail to exist but for some suggested notion not to correspond to any way of being an entity. A proposed category notion would fail to correspond to a way of being an entity if the terms introduced in accordance with it failed to refer.

The claim that the existence problem is a problem which faces the explication of putative primitive category notions is the claim that I defended in chapter one when I argued for the presupposition problem. I argued there that the basic reason for thinking that the presupposition problem arises for the explication of primitives goes as follows: The primitive is explained as that which underlies, in some specified way, the less basic notions used to introduce it. If there is in fact nothing which underlies the less basic things in question in the way specified, then appropriate content is not provided for the term supposedly corresponding to the primitive. I noted in discussing this that a claim in the background is that the less basic things couldn't be as they are but be constituted differently but I contended that this is a claim we should accept. If the less basic things are to be properly understood in terms of the more basic, then they couldn't be what they are but have a different real definition. If a primitive is introduced by being used to provide an analysis of a roughly demarcated range of sentences, but there is nothing which occurs in the really correct analysis of the sentences in the way the primitive is said to, (perhaps the range of sentences are not correctly analysed together at all), then the term for the primitive which was being explained in this way has not been successfully explained. It has not been given the content that the introduction aimed to give it.

One way of thinking about how the existence problem arises for the explication of categories is as follows: the categories we try to introduce using use and reuse conditions given relative to some specific range of sentences are supposed to structure those sentences with respect to which they are given. Those categories are to be the ones with which we say correctly how the content of those sentences is provided by the entities serving as the semantic values of the terms in them. But we can be wrong about how sentences depend on the world for their content and when we are wrong but, unaware of this, we try to introduce some category notion as that which structures *these sentences* in

these ways, we simply fail to capture anything because there is no nature such as that which occurs in *those sentences* in *those ways*.

The point is one which I raised against Lowe in chapter two; the explication of notions to be understood as ontological primitives cannot be done in a way that is ontologically innocent. But if this is the case, how can we use ontological category notions to make the existence claims we want to make in ontology? How can we secure content for these claims which allows them to be both true and false? The problem is that the words only have the content we want them to have if the world is as we claim. That is the presupposition problem and I have argued that it arises for category terms as well. They only have the content we want them to if the world is as we claim.

The way I use my version of Lowean categories to avoid this problem relies on their association with use and reuse conditions and the fact that the role of the use and reuse conditions is to fix the content of the category notion. The approach I am taking to existence claims is a metalinguistic one

§8

On the metalinguistic approach to existence claims that I am defending, it is to be accepted that our truth-apt sentences depend systematically for their content on the entities which serve as the semantic values of their terms. This allows us to make claims about what there is by making claims about how our truth-apt sentences have the content that they do in fact have. We do this by making claims about how these sentences feature referring terms. Since the dependence of language for its content on the world is systematic, any referring term will be a term of a kind. Different kinds of referring terms will occur in different linguistic contexts. The ontological notion of a kind or category corresponds to the linguistic one. It is that of an entity whose nature is such that it would serve as the semantic value of a referring term of the kind in question i.e. one featuring in specified sentences in specified ways.

The two notions of kind, that of a kind of referring term, and of an ontological category of entity that would serve as the semantic value of such a term, are tied together. I have argued that we make claims about what there is by making claims about the entities that serve as the semantic values of our terms. The way we make claims about the entities which serve as the semantic values of our terms is by making claims about the kinds of

referring terms that feature in our truth-apt sentences. The systematic dependence of language on ontology determines that those claims amount to claims that there are entities of the kind required to serve as the semantic values for such terms because the status of an expression as a referring term of some kind depends on the existence of fs for it to refer to.

This is the reason why we should not accept the following construal of existence claims which is close to, but importantly different from the construal which I shall defend.

A construal we not accept is: fs exist iff f-terms allow for reference.

The reason we should not accept this construal of categorial existence claims is that it *uses* the expression f-terms. However, given the dependence of language on the world discussed above, there will only be f-terms if there are fs to serve as their semantic values. To be an f-term is to be a term which has fs as its semantic values. This points the way to an adequate construal of the metalinguistic construal of existence claims that I have been developing.

The construal of existence claims which I am defending is the following:

fs exist iff an expression of a proposed primitive kind, 'f', allows for reference

§9

One way of thinking about the proposal I have made and its connection of talk of what is required for introduction of referring terms of various kinds with existence claims is by comparison with the notion of a Carnapian linguistic framework.

If someone wishes to speak in his language about a new kind of entities, he has to introduce a system of new ways of speaking subject to new rules; we shall call this procedure the construction of a linguistic framework for the new entities in question.

(Carnap, 1950/1956, 205)

What similarity there is I can embrace. As I discussed in chapter one, I think that the interpretation of the importance of linguistic frameworks which Price (2009) proposes, and Thomasson (2015) adopts, can be understood in such a way that it poses the presupposition problem. (Roughly, terms of kinds, and terms for kinds, can't be used unless a relevant framework is adopted but if the relevant framework is adopted and the terms can be used then existence questions concerning them will be trivially true)

The comparison in fact facilitates understanding of my approach. The claim I defend in this chapter is exactly the claim which Carnap was most concerned to deny in his introduction of the notion of a linguistic framework in his (1950/1956). I have argued that you do need ontological insight to introduce a new kind of referring term successfully. Further, I have contended that the claim that you can introduce a new kind of referring term successfully, far from being ontologically innocent, is in fact a way of making a claim about what there is.

§10

To accept the above construal of existence claims is to accept that we can make claims about the world by making claims about language. Before moving on I want to raise one objection in order to set it aside.

First, one might object to the proposal by claiming that it makes ontology objectionably dependent on language.

My response to this objection is that it does not do so;

First, because the condition on the right-hand side is presented not as a condition for existence but as a construal of existence *claims*. It expresses the condition for the truth of an existence *claim*. There can be entities without there being language but there cannot be true existence claims without language⁶¹.

Second, because the reason the construal is supposed to work is that language is dependent on ontology, rather than the other way around. It is because I take the content

⁶¹ This response of mine draws on the response Thomasson gives to a similar objection to her account but diverges from it in important ways because Thomasson's response focuses on her notion of application conditions. (Thomasson, 2015, 85-7)

of language to be dependent on what there is that I take claims about what there is to be able to be made through the making of claims about language.

Third, and finally, I do not take the natures of things to inextricably involve language. Instead, because language is dependent on the nature of the world, I take the nature of language to be able to be used to explain the nature of things. The content of different kinds of referring terms is fixed with more or less explicit conditions. Where this fixing is successful, the natures of the corresponding entities are able to be understood as natures which make them such as to be referred to in this way. I take the response here to articulate an important broadly Fregean and neo-Fregean insight, that without taking entities to be dependent on the words we use for them, we can explain their natures by presenting the entities as apt to be referred to by certain kinds of terms. This is a central point on which my construal of ontological categories draws on the linguistic approach of Frege and Hale. I shall explain in the first part of chapter four why I have not simply adopted the linguistic approach.

§11

The final thing I shall do in this chapter is return to Lowe. Though, I have not focused on it in the course of presenting my view, it is nevertheless the case that the ontological categories which are at the centre of my account draw largely on his construal of the notion. It is also the case that, as I argued in chapter two, there are problems with that construal as it stands. In this section, I shall draw out the ways in which the ontological categories which play a crucial role in my account draw on Lowe's construal of the notion. I shall explain how the three theses mentioned at the beginning of the chapter feature in my account and I shall argue that the divergences between the versions of these theses which I accept and the versions which Lowe accepts allows my construal of ontological categories to avoid the problems I raised for Lowe.

§11.1

Ontological categories play a crucial role in my account of how we answer the question of ontology. Ontological categories, as I have construed them, are not entities which exist. Ontological categories are natures or ways of being an entity. There is no more to an ontological category than the nature which would allow a way of attempting to refer to

entities to succeed. This is crucial to my account of how we make existence claims. I have claimed that all referring terms are terms of kinds. As such, we refer to a thing, if we do, by referring to it as a thing of a kind. We use *use* and *reuse conditions* expressed over the sentences of our language to explicate the categories we intend to use to refer to things. These categories are natures which cannot be defined but can be explained as that which would make an entity apt to be referred to in these contexts, in these ways.

The above positions which are crucial to my account are easily seen to be versions of the Lowean theses about categories mentioned at the beginning of the chapter.

These are:

1. Ontological Categories are not entities.
2. Ontological Category notions are involved in the individuation of entities
3. Ontological Categories are associated with the existence and identity conditions of the entities that belong to them.

In the course of this chapter, I claimed that all referring terms are referring terms of kinds. I defended this claim on the basis that the way that language depends on the world for its content is systematic; referring terms come in kinds, all referring terms of the same kind require the same category of thing to serve as their semantic value. Given that there only exists a kind of referring term if there is an ontological category corresponding to it, and given that we use the latter to fix the content of the former, it can be seen that on my account we use ontological category notions to individuate entities (single them out in thought). Since this is the case, ontological categories could not be, and are not, further entities. If they were further entities, we would be left with a regress. Finally, it is clear that, on my account, ontological categories are still closely associated with the existence and identity conditions of the entities belonging to them, although I have called these conditions *use* and *reuse conditions* to emphasise their role in fixing the content of referring terms as those that are apt to refer to entities of a certain category. Where this is successful, these proposals become principles governing the use of terms of the kind in question. The modal consequences of this shall be the focus of chapter six.

§11.2

I shall conclude by reviewing the problems I raised for Lowe's account of ontological categories and considering whether they are problems for my account.

There are four main issues which I contended are problems for Lowe's account:

1. The presupposition problem
2. The broadness of his notion of ontological category
3. The duplication of work
4. His construal of existence and identity conditions

My account of ontological categories avoids the presupposition problem because of: (a) the change in the construal of existence and identity conditions and the precise role they play with respect to ontological categories, (b) the rejection of Lowe's claim that the explication of ontological categories is ontologically neutral, (c) the change in the construal of existence claims.

Lowe's account of categories faces the problem that it is too broad because it, like many other accounts, proposes a hierarchical understanding of categories and thus includes various levels of categories within the notion of an ontological category. My account avoids the problems this raises by only counting what Lowe would call the fundamental categories as ontological categories. This allows my account to present a notion of ontological category as ontological primitive.

On Lowe's account, ontological categories and substantial kinds do much of the same work. This leads to problematic duplication of this work. The absence of Lowe's substantial kind entities from my account allows me to avoid that which leads to the duplication of work in Lowe's account.

Finally, the main problems I raised in chapter two against Lowe's construal of existence and identity conditions were: (a) the absence of a construal of existence conditions, (b) the way the construal unduly limits the notion of a criterion of identity, (c) the way Lowe's criteria run into Williamson's triviality problem and fail to fulfil their function. The existence and identity conditions of my construal avoid each of these problems; (a) I have given a construal of existence conditions as use conditions for proposed referring terms; (b) I have construed the conditions in a way that is neutral between referring terms of any kind. One step that was important for my doing this was taking use and reuse conditions always to explicate ontological category notions, rather than sortal kinds as Lowe does; (c) My use and reuse conditions do not run into Williamson's triviality problem for two reasons. First, because they are not truth-apt as they stand, and second because they have a clear function, that of attempting to secure requisite content for a proposed kind of referring term.

§12

As I noted in the course of this chapter, there is another construal of ontological categories which has some important similarities with my own. In the next chapter, I shall begin by focusing on that construal, and I shall then move on to consider other construals of the notion of an ontological category defended in the literature. My interest in ontological categories is driven by the fact that we answer the question of ontology using categorial existence claims. The notion of ontological category that I am interested in is whatever notion is relevant to the content of the categorial terms occurring in those claims. The position for which I have argued takes the notion of ontological category which is relevant to these claims to be a broadly Lowean one. I shall argue, with respect to each of the construals of the notion from the literature considered in the next chapter, simply that it is not the notion of ontological category relevant to the categorial terms that feature in our answers to the question of ontology. For my purposes, I can set them aside on that basis.

Chapter 4

§0

In this chapter, I shall discuss alternative construals of the notion of an ontological category in order to locate the construal which I defend in the literature. I have presented my construal as broadly Lowean. I based the judgement that it is so on the three theses concerning ontological categories which are central to Lowe's construal of the notion and which I adopted from him. In chapter two, I raised some problems for Lowe's position on account of which, I claimed, I could not accept it as it stands. My own construal, presented in chapter three, diverges from Lowe's in a number of important ways with the result, I contend, of allowing me to avoid the problems I raised for Lowe.

The notion of an ontological category in which I am interested is the notion of that which is relevant for our understanding of the categorial existence claims with which we answer the question of ontology. In this chapter, I shall consider a number of construals of the notion of an ontological category from the literature. I shall argue that, insofar as one is interested in the notion of an ontological category relevant to our categorial existence claims, none of the construals of the notion which I consider in this chapter are construals we should adopt. With respect to some of them I shall argue further that the construal of the notion defended is a derivative one, obscuring a more fundamental one of the sort that I am interested in. In these cases, I suggest, focusing on the derivative version of the notion hinders recognition of the more fundamental one.

§1

I shall begin by focusing on the Fregean and neo-Fregean linguistic construal of the notion of an ontological category. In the last chapter, I claimed that the construal which I defend has some important similarities with, as well as differences from, the linguistic construal. In this chapter, by expanding my discussion of the linguistic construal, I shall draw out more clearly what those differences are. I shall focus on one particular version of the linguistic construal of the notion of an ontological category, that defended by Bob Hale in his (2013). In chapter two, §11, I presented a number of arguments against accepting the Fregean construal of existence claims. I specifically argued against acceptance of the staggered approach to answering the question of ontology which Hale defends (Hale,

2013, 9ff) according to which one asks first what category of things there are, and then asks what kinds of things of that category there are. I shall not recap those arguments here. What I shall do instead is try to show how much the linguistic construal of the notion of an ontological category is tied to, and justified by, that approach to existence claims. I shall argue that if we reject the associated approach to existence claims, then we should not accept the linguistic construal of the notion of an ontological category, though there are a number of different ways we might accept the linguistic construal of the specific notions with which Hale is concerned, those of object and property. One of these ways involves not taking these notions to be category notions after all.

§2

Hale accepts the connection between ontological categories and the question ‘what is there?’.

In fact, that’s his starting point. He notes that the question is a crucial question in ontology, and he notes Quine’s point that one might think one could answer the question with the word ‘everything’ but that that answer is unsatisfactory because it fails to answer what is being asked. Hale characterises the question which is being asked as one about what basic or fundamental categories should be accepted, noting that further more specific questions can then be asked about any answer which is given; one of the examples he gives here is that if we agree that there are properties we can ask whether there are mental properties as well as physical properties.

He takes this characterisation of the question ‘what is there?’ to give rise to what he calls ‘prior methodological questions’ and among these questions he takes the following two to be primary:

How are the various ontological categories to be understood?

How are questions about what kinds of things there are best tackled?

(Hale, 2013, 10)

He then goes on to develop and defend his linguistic approach to categories largely within the context of providing answers to these questions. To do this he starts from the assumption that,

central among the categories to which things belong are those of object, property, and relation (Hale, 2013, 10).

With this contention in place, Hale proceeds to address the first of the two questions he introduced as important methodological questions. This first question was “How are the various ontological categories to be understood?” (Hale, 2013, 10) Hale argues in favour of the answer given to this question by the linguistic approach to categories on the basis that only this answer is appropriately neutral.

What is the answer? And what is the linguistic approach to categories?

Hale’s linguistic approach to categories is a development of the linguistic approach to categories introduced by Frege. The idea is that we should start with a logical analysis of language. Frege distinguishes between names, in his broad sense of name on which this includes for instance definite descriptions, and predicates or incomplete expressions. For Frege, singular terms and sentences are basic and the various orders of predicates, and functional expressions, are derived given these. A first level predicate will be a sentence with some name or names removed, so it is incomplete. In this way, the logical analysis of language allows for the delineation of categories of expressions. The idea of the linguistic approach to categories is that the ontological categories correspond to these linguistic categories. And not just that they happen to correspond, but that it is through the categories of linguistic expressions that we grasp ontological categories.

what I am calling the Fregean approach to ontological questions – basically the priority of the analysis of language over the categorization of the types of entity (Hale, 2013, 17)

Hale writes about ontological categories being the ontological correlates of the linguistic categories (Hale, 2013, 11-3). The idea is that objects are what singular terms stand for and properties are what predicates stand for (Hale, 2013, 11-40)

Hale’s argument in favour of this linguistic approach to categories is that only it is appropriately neutral (Hale, 2013, 18-19); he contends that other ways of explicating the notions of object and property involve an inappropriate and premature ruling on certain

questions which he claims should be left open such as whether there are objects which do not exist in space and time as well as objects which exist in space and time. He considers various other ways of explaining the notions of object and property and generally finds fault with them because they rule out even the question of abstract objects and properties thereof. He considers and rejects the idea that the notion of object could be explicated as things appropriately similar to some ostended concrete object on the basis a) that it is not clear what would count as relevantly or appropriately similar and b) that it is not clear how this explanation would allow one to grasp a notion of object which would allow for objects which could not be objects of ostension either because they were too large or too small for that or because they were not in space or time. He rejects explications of the notion of object as something occupying a region of space because this prematurely rules out abstract objects, and similarly rejects characterizing properties as things which can be in two places at the one time on the basis that it prematurely rules out many properties of abstract objects.

Other putative explanations of the notions are held not to amount to anything; for example, it is no good to explain objects as instances of universals unless we can give an independent characterization of the notion of universal. Combined with an understanding of universals as something which have objects as instances it says nothing. Hale considers an explication offered by Russell:

We speak of anything which is given in sensation, or is of the same nature as things given in sensation, as a particular; by opposition to this, a universal will be anything which may be shared by many particulars (Russell, 1912/1998, 93)

and argues that without the phrase ‘or is of the same nature’ this explication again prematurely rules out even the question of abstract objects but that with it the explication doesn’t say anything so much as note where something needs to be said.

On the basis of all of the above, Hale contends that it is only the explication of the notions of object and property which is given by the linguistic approach which avoids prematurely ruling out what should be open and legitimate questions, such as whether there are abstract objects. Only the linguistic approach provides explications of the category notions of object and property which are appropriately neutral and for this reason, Hale argues, the linguistic approach’s explanation of the categories of object and property should be accepted.

Having argued in this way in favour of an essentially Fregean approach to ontological categories, Hale develops that position in order to defend it against two pressing objections. These two objections are: 1. That the linguistic approach makes ontology implausibly language and mind dependent, and 2. That the problem of the concept horse undermines the basic claims of the linguistic approach.

Hale has a two part response to the first objection, that the linguistic approach makes ontology implausibly language and mind dependent (Hale, 2013, 20). The first thing he notes is that this approach seems to ignore the non-mind or language dependent contribution of truth in the Fregean picture (Hale, 2013, 19). The second part of Hale's response to the objection that the linguistic approach makes ontology implausibly mind and language dependent addresses what Hale thinks is an important point which this objection can press. This point is that the linguistic approach as so far stated doesn't allow for nameless objects or properties which have not been associated with predicates in a language. The move he makes here is to say that the position as so far stated provides sufficient but not necessary conditions for being an object or being a property. He says that taking the conditions so far provided to be necessary as well as sufficient would commit the linguistic approach to taking ontology to be implausibly language and mind dependent because being an object would require having been named, being a property, having been associated with a predicate. In order to provide a condition which is both necessary and sufficient and which does not commit the approach to this result Hale modalises the characteristic conditions of the linguistic approach.

To be an object is to be the referent of a *possible* singular term, to be a (first-level) property is to be what a *possible* (first-level) predicate stands for, and similarly for other cases. (Hale, 2013, 20)

The second objection which Hale considers is the objection that the problem of the concept horse undermines the basic claims of the linguistic approach (Hale, 2013, 21-36). Hale's solution to the problem of the concept horse is to reject the reference principle:

expressions can stand for the same thing only if they are of the same syntactic type, which will be the case only if they can be interchanged in all context *salva congruitate* (Hale, 2013, 25)

This rejection is another way in which he develops the Fregean approach to categories in response to objections. On the basis of the consideration that although we can use singular terms to refer to what seem to properties when we do so the terms we use are clearly

nominalizations of predicates (e.g. *the concept horse* from *is a horse*) Hale introduces the idea of basic and less basic ways of referring to an entity. This involves rejection of the reference principle because it allows that the same entity can be referred to by expressions of different linguistic categories, but Hale doesn't think this should be considered a cost of his solution because he thinks the reference principle is a principle which should be rejected. He argues that it was holding on to this principle that led Frege into difficulty.

Hale argues that subscribing to the reference principle undermines the basic insight of Frege's analysis of language – that there is a single semantic relation holding between expressions of different types and entities of different categories, i.e. that expressions of different types all stand for something but for different kinds of things (Hale, 2013, 31-4). According to Hale, it is this insight which underlies the linguistic approach to categories - the different categories of things just are what the different types of expressions stand for (or could stand for). Hale argues that if you hold onto the reference principle this cannot be the case. The reference principle demands interchangeability *salva congruitate* and so it will always conflict with any claim that it is the same relation which holds between singular terms and entities of one category and between predicates and entities of some different category. Instead given the reference principle some or other of these claims will simply be ill-formed.

Hale rejects the reference principle to offer his own resolution of the problem of the concept horse and further develop his version of the linguistic approach to categories by modifying his contention that “objects are what actual or possible non-empty singular terms stand for” (Hale, 2013, 22) In place of this is the following:

objects are what are or could be primary semantic values of singular terms

properties are what are or could be primary semantic values of predicates

(Hale, 2013, 32)

§3

In the last section, I explained the central claim of the linguistic approach to categories, the position that the ontological categories are the ontological correlates of the linguistic categories, and I outlined how Hale develops the central claim of the approach to give his version of the linguistic approach to categories.

Hale develops the position as part of the task set by the first of the methodological questions he took to be raised by the connection of categories with the question ‘what is there?’. This first question was “How are the various ontological categories to be understood?” (Hale, 2013, 10).

The second important methodological question he noted was “How are questions about what kinds of things there are best tackled?” (Hale, 2013, 10). The main thrust of the answer Hale gives to this question can be understood from the above. Given the connection of categories with the question, and the linguistic approach to categories, for Hale:

questions about what kinds of things there are are inseparable from, and in one way posterior to, questions about the logical analysis of language (Hale, 2013, 9)

I outlined his developments of the Fregean position on the connection between the products of the logical analysis of language and the kinds of entities there are above, so I shall conclude the exposition by providing the specific answers he gives to his second question in light of the answers he has given to the first question.

The second question is:

How are questions about what kinds of things there are best tackled? (Hale, 2013, 10).

For Hale, singular terms and predicates are the linguistic categories, so objects and properties are what there is. How do we determine that there exists some object or property? Earlier, he noted occurrence in a certain kind of true sentence as what is required but in his final position this requirement is modified somewhat as follows.

Concerning objects, he writes:

there exist objects of a specified kind if and only if (i) there are or could be singular terms which would if non-empty refer to objects of that kind and (ii) if there were such terms there would be true atomic statements containing them (Hale, 2013, 37)

Part of the motivation for this condition is provided by the consideration that the contingent facts about what terms we have introduced should not make a decisive difference to the truth of an existence claim concerning an object. (Hale, 2013, 37)

For the case of existence statements concerning properties, Hale considers a parallel formulation which would require that there be true statements configuring predicates in question or that there would be such true statements but for lack of predicates, but, ultimately, he doesn't require this on the basis of a contention that the possible existence of a meaningful predicate is both a necessary and sufficient condition for the existence of a property. He argues that such properties could be understood as satisfaction conditions associated with predicates. This claim is that if we understand properties as satisfaction conditions then if a predicate is meaningful, there will a property for which that predicate stands.

Part of what Hale takes to recommend this construal of properties as satisfaction conditions is that it accommodates and explains the fact that we can differentiate between the properties for which different necessarily empty predicates stand. An example which Hale later provides of two such properties which are, intuitively, different properties despite the fact that they are both necessarily empty is:

the property of being an even prime greater than two and the property of being both odd and even (Hale, 2013, 188)

On the basis of the considerations mentioned above, Hale concludes that, concerning perfectly general properties⁶²:

We should take the existence of a significant predicate simpliciter as a sufficient condition for the existence of a corresponding property, and the possibility of such a predicate as necessary and sufficient (Hale, 2013, 37).

§4

In the last two sections I focused on explaining what Hale's linguistic approach to the notion of an ontological category involves. In this section I shall consider Hale's defence of his linguistic approach. The aim of the section is to draw out how closely tied the

⁶² In addition to perfectly general properties, Hale also recognises what he calls object dependent properties. He gives the example of the property of being a brother of Aristotle as a plausible case of an object-dependent property (Hale, 2013, 223). The idea is that, if the existence of Aristotle is a contingent matter, and the property of being a brother of Aristotle only exists if Aristotle does, then the existence of the property is contingent.

linguistic approach to categories is to the construal of answers to the question of ontology as staggered which I argued we should reject in chapter one, §11.

According to Hale's version of the linguistic approach, ontological categories are the ontological correlates of the linguistic categories⁶³ so we should understand the notion of an ontological category as the notion of an ontological correlate of a linguistic category.

How does Hale argue in favour of understanding the notion of a category in the way recommended by his version of the linguistic approach to categories?

The first thing to note is that Hale accepts the connection which I noted at the beginning of this piece between ontological categories and the kind notions which are used to give answers to the question 'what is there?':

The central question of ontology, then, is: what kinds of things are there? I am using 'thing' here as Russell once used 'term' – as the widest word in the philosophical vocabulary, with no implication of membership in any particular ontological category. Accordingly, one way of taking our general question is as asking what basic or fundamental categories or types of entity we should recognize – where candidates include objects, individuals, particulars, substances, properties, relations, universals, events, processes, states of affairs, facts etc. (Hale, 2013, 9)

On the basis of his acceptance of this connection I think that the disagreement which I'm going to develop with his position won't be a merely verbal one about how we are to use the term 'category'. The occurrence of category notions in common answers to the question '*what is there?*' was the way I characterized the target notion and it is also the way Hale introduces and characterizes the notion.

In addition to connecting ontological category notions with answers to the question 'what is there?', Hale argues for his position as a general one concerning how we should understand ontological category notions. So, for example, he writes:

As anticipated, I shall recommend a broadly Fregean answer – that is, an answer according to which ontological categorization (save in special cases, categorization of non-linguistic entities) is dependent upon and derivative from prior logical categorization of expressions. (Hale, 2013, 10)

⁶³ Hale takes the linguistic categories to be those of singular terms and predicates

Hale's defence of his position as a general position concerning ontological category notions is based on the presumed status of the notions of 'object', 'property' and 'relation' as paradigmatic category notions. The general question of how we should understand ontological category notions is approached through the specific question of how we should understand these notions (Hale, 2013, 10, 18-9).

It is worth noting that Hale does not claim that the notions he is assuming to be category notions constitute the complete list of category notions, he nevertheless does take the defence of the claim that the notions he assumes to be category notions should be understood on the linguistic approach to support the entirely general claim noted above, that category notions should be understood as on the linguistic approach. Thus, it seems, as I suggested above, that it is assumed, not only that certain notions are category notions, but that they are in some sense paradigmatic category notions. This might be taken to be implicit in the use of the word 'central' in the statement of the assumption:

I shall assume that central among the categories to which things belong are those of object, property, and relation (Hale, 2013, 10)

This assumption is not intended to be a controversial one. As shall become clearer later in this section, that fact supports my claim that the linguistic construal is closely tied to the Fregean/neo-Fregean construal of existence claims. For the assumption to be uncontroversial the field of rivals has to be fairly limited. That this would be so is due to the connection of the linguistic approach to categories to Hale's staggered approach to existence claims.

Given that this is the way the linguistic approach as a general approach is defended, what is the form of the argument? The way to understand the approach seems to be to take it to be similar to the way in which one might approach a question like the following; how should we understand the notion of a person? You might think that one legitimate way to approach this question is to approach it knowing broadly what we count as a person and working from there to give an account of how we should understand the notion of a person, of what it is to be a person. Obviously, there will be borderline cases whose status is up in the air and will be decided by the answer given so one wouldn't start with a complete set of the things which were to count as persons, but it does seem like an important aspect of one seemingly legitimate way of approaching this question that we

could approach it knowing broadly what we want to count as persons, or paradigm cases of what we want to count as persons, and working from there.

Hale's defence of the claim that category notions generally should be understood in accordance with the linguistic approach is supported by his defence of the claim that the notions of object and property should be understood in accordance with the linguistic approach. The argument he offers in defence of that claim is that only the linguistic approach offers a sufficiently neutral characterization of these notions. He argues that other characterizations prematurely and unfairly rule on what should be an open question, this question being the question of whether there are abstract objects (Hale, 2013, 18-9)

Where does the force of this consideration come from? The argument isn't that there are abstract objects and so they shouldn't be ruled out by definition, the argument is that the question of whether there are abstract objects should be left open. And, so for this reason it is claimed that we need a characterization of our category notions, of object, and of property, which leaves as a legitimate question the question of whether there are objects which are not in space and time as well as objects which are in space and time.

The force of this consideration relies on the assumption that the more specific kind notions, here, abstract object and concrete object, have to be understood in terms of, and indeed understood as building on, the more general category notions. This assumption is not just that the notions of abstract object and concrete object are both, or should both, be able to be subsumed under the more general notion of object. Given the context, wherein a neutral linguistic conception of categories generally is being called for on the basis of its being required by the notions of object and property, the assumption that object and property are categories and the accepted characterization of categories as those notions which feature in answers to the question 'what is there?', the assumption is not that the more specific kind notions are subsumed under the more general category notions, it is a different more specific assumption.

The assumption is that what these more specific kind notions are are further specifications of the category notions and that existence questions first address the more general category notions and can somehow only address the more specific kind after this. Answering the question of ontology requires completing both parts of this task.

Hale's defence of the claim that his paradigmatic category notions should be understood in the manner recommended by the linguistic approach seems to rely on the further assumptions that (a) sortal kind notions have to be, or should be, understood in terms of

the paradigmatic category notions, understood as further specifications of them⁶⁴ and (b) existence claims should be made in this way. The task of making such a claim has two parts, first, introducing the acceptable category notions, and second making existence claims using claims of the form ‘ $\exists xFx$ ’.

§5

In the last section, I showed how Hale’s argument in favour of his linguistic approach to ontological categories is tied to, and relies on, the correctness of his position on how we provide answers to the question of what there is. In this section I shall argue on the basis of this connection that we should not accept the linguistic approach to the notion of an ontological category. I shall offer some considerations against accepting that this version of the linguistic approach gives a satisfactory account of the notion of an ontological category as that notion is relevant to satisfactory answers to the question ‘what is there?’

It is important to note, in connection with this point, that the notion of ontological category which Hale is targeting with his construal is not a notion of that which can be used to answer the question of what there is without a further specification. It is, as I showed in the last section, the notion of that which would figure in his proposed Fregean approach to existence claims.

The main reason why Hale’s version of the linguistic approach to categories does not provide a satisfactory elucidation of the target notion of an ontological category relates back to the accepted connection between categories and specifications of an ontology, answers to the question ‘what is there?’. The force of the neutrality constraint invoked to defend the linguistic approach depends precisely on the fact that the notions of object and property in themselves fail to provide a satisfactory answer to the question ‘what is there?’. But the notion of category in which we were interested was precisely the notion of the categories which can be used to answer this question. I argued in chapter one that we should not accept Hale’s construal of our answers to the question of ontology. However, if we reject it, then we undermine the basis for a construal of ontological category notions which would figure in it.

According to the linguistic approach to ontological categories, ontological categories are the ontological correlates of the linguistic categories. In the view I developed in the last

⁶⁴ They do, after all, work together to say *what* there is. The first (the category notion) is not enough by itself (it has been required that it be limited in this way), and the second (the kind) can only be added to the first, it cannot be given by itself.

chapter, I claimed that the ontological categories are closely tied to kinds of referring terms. The important way in which my view differs from the linguistic approach is that on my view the status of some range of expressions as a kind of referring term is dependent on their all referring to things of one ontological kind, but the former *is not* something we can know independent of knowing something about the things in the world. The connection allows us to make claims about what kinds of things there are by making claims about which expressions are referring terms but, given the way that I have drawn it, there is no room for ontologically innocent theorizing about the kinds of terms there are. This is the opposite of the Fregean and neo-Fregean position. According to that position, we start with the analysis of language. We discern its categories. Non-ontologically loaded linguistic analysis is held to reveal these to be the categories of singular terms and predicates. This result allows us to make certain claims about the world (Hale, 2013, 13-5), and *helps* us to provide answers to the question of what there is.

This is why it is so important for Hale that we be able to recognise an expression as a singular term without knowing whether it had an object serving as its semantic value (Hale, 2013, 15). This is also why the linguistic approach to ontological categories generally can be seen, I contend, to be the linguistic approach to certain putative category notions, along with the view that they are *the* category notions.

I claim that we should not adopt the linguistic approach as a general approach to the notion of an ontological category because the question of what *the* ontological categories are should be an open question, not one determined by our construal of the notion of a category. I take the question of what the ontological categories are to be the question of ontology⁶⁵.

The final claim I want to make is the claim that we can accept that, as an answer to the question ‘what is there?’, the answer ‘objects and properties’ could be correct as it stands. The linguistic approach could be used to make these intelligible and still we would not be committed to the general version of the view which I have argued we should reject. It could also be correct such that the answer was correct but unsatisfactory after the manner of the answer ‘Everything’. In keeping with this we could accept the linguistic approach

⁶⁵ Obviously, Fregeans might not accept this. With his neutrality constraint, Hale specifically restrains ontological categories from being such that they could answer the question.

to understanding the notions of object and property (which is what it was primarily offered as) while rejecting the assumption that these notions are ‘central among the categories’, or that they were categories at all, when the categories are understood as that with which we can provide an answer to the question ‘what is there?’. It could be that they are best understood as abstractions from the level the semantic values are given on.

§6

For the remainder of this chapter I shall discuss some other accounts of the notion of ontological category defended in the literature. I have argued that the intersubstitutability approaches to the notion of ontological category have a presupposition problem; the notion of ontological category defined is given using an apparatus which presupposes a notion of ontological category which cannot be accommodated as such under the definition given, which looks to be both the more fundamental notion and that which is relevant to the task of giving an answer to the question of what there is. I have also suggested that it is as to render the defined notion otiose. Over the course of the rest of this chapter I shall argue that most other accounts of the notion of an ontological category in the literature have the same problem. Two notable exceptions are the linguistic approach to ontological categories and the approach of E.J. Lowe (2006), both of which I shall discuss in the next chapter.

§6.1

The first alternative account of the notion of ontological category from the literature which I shall consider is that given by Jan Westerhoff in his 2005 book, *Ontological Categories: Their Nature and Significance*. As noted above, the point I want to make is that in various accounts from the literature a more fundamental notion of ontological category is used to provide a definition of a less fundamental notion of ontological category. One reason why Westerhoff’s account is interesting is that the manner in which it does this is quite explicit. Westerhoff’s account might seem to be a variation on the intersubstitutability approach discussed in the introduction but it is importantly different. The accounts discussed previously were based on intersubstitution of terms in sentences. The fact that some such substitutions resulted in category mistakes provided the basis for

the clarification of categories. Westerhoff is concerned with intersubstitution of constituents in states of affairs and, though I shall not spend much time discussing it, one problem for his account is that he doesn't have a basis such as 'lack of significance' for claiming that some substitutions are acceptable while others are not.

Westerhoff asks how we should understand the notion of an ontological category. He approaches the question by considering construals of the notion from the literature and extracting features common to different construals. One of these features is the understanding of categories as sets or collections, another is the understanding of them as hierarchically organised.

Westerhoff rejects the construals from the literature on the basis of problems he calls 'the problem of too-specific categories' and 'the cut-off point problem'. He claims these problems show that the construals fail to provide a definition of ontological category which would distinguish ontological categories from other sets or collections in a hierarchy. He then attempts to develop a definition which would.

Westerhoff argues that he needs a primitive to provide a definition. He adopts states-of-affairs as the unanalysed primitive of his theory and gives a number of arguments defending this choice. Although his states of affairs are to be understood as unanalysed, Westerhoff does take them to have constituents. Two different states of affairs can both have a constituent. In that case they will share constituents. It is this sharing of constituents that Westerhoff claims allow us to talk about the constituents of states of affairs. We can talk about them using what Westerhoff introduces as Carnapian 'similarity circles'.

Westerhoff does not just give a construal of the notion of an ontological category. He gives a definition of it. To do so he uses two notions he introduces; that of form-sets; and that of base-sets. Form-sets are sets of constituents of existing states of affairs which are intersubstitutable in all the same existing states of affairs (Westerhoff, 2005, 91). Westerhoff is explicit about the fact that he does not take these form sets to be based on essential properties (Westerhoff, 2005, 208). Instead the states of affairs that the world contains as a matter of contingent fact determines what form-sets there are.

Westerhoff's notion of a base-set is to be understood in terms of that of a form-set. For Westerhoff, base-sets are form-sets from which all the other form-sets there happen to be

can be constructed (Westerhoff, 2005, 96). Westerhoff provides his definition of the notion of an ontological category by identifying ontological categories with base-sets.

§6.2

One problem which could be raised for Westerhoff concerns the specifics of his account. The problem is that his claim that we can know, concerning constituents, whether they can intersubstitute in various states of affairs, is in tension with his claim that those constituents either only exist, or else can only be known about, by abstraction from the states of affairs in which they occur. In the context of his account these two claims are incompatible. However, this is not the objection in which I am interested. The objection in which I am interested concerns the framework of his definition.

Westerhoff approaches his project by trying to develop upon an understanding common to various construals of the notion of ontological category in the literature. In numerous different accounts, he notes, ontological categories are construed as sets, or collections of some kind, which are hierarchically organised. Westerhoff's approach to his definitional project is to adopt this construal and try to build on it to provide a definition which will distinguish ontological categories from other sets or collections which feature in the relevant hierarchies.

On the basis of the definition he develops Westerhoff argues that we should reject claims that ontological categories play the important role in ontological theories which they have been taken to play. Specifically, he rejects (1) Absolutism - there is a unique set of categories under which everything is subsumed; and (2) Essentialism - the entities which belong to a category do so essentially (Westerhoff, 2005, 3) (Westerhoff, 2005, 7) (Westerhoff, 2005, 237). On Westerhoff's account, being an ontological category is a status a set has as a result of systematization; there isn't one right answer to the question of what the ontological categories are, and the entities which belong to categories do not do so essentially.

The problem is that *in providing his account* Westerhoff commits to the sort of ontological categories which he rejects *with* his account. In his account, Westerhoff's primitive, state-of-affairs, is functioning as this sort of ontological category.

Westerhoff spends the first part of his book arguing for the position that the world should be considered a world of states of affairs. He explains what he takes the nature of states of affairs to be (Westerhoff, 2005, 90). There is no question of states of affairs only being states of affairs contingently. Having done all of this, Westerhoff defines everything else in terms of states of affairs, using the notion of a state-of-affairs as his primitive notion. Regarding states-of-affairs, Westerhoff is both absolutist and essentialist.

However, state-of-affairs is at least a putative ontological category. Westerhoff even admits himself this in passing: “states of affairs cannot form parts of an ontological category other than themselves” (Westerhoff, 2005, 72) But the fact that state of affairs is an ontological category cannot be accommodated by Westerhoff’s account of ontological categories. There are two notions of ‘ontological category’ at work in the account: a fundamental one, providing the terms in which the account is given, and a derivative one, defined using the terms provided by the fundamental one.

The notion of ontological category Westerhoff defines is in keeping with aspects of various theories of ontological categories from the literature. These ontological categories are, as Westerhoff contends, unsuited to the work ontological categories have been taken to perform in ontological theorising. However, in his adoption and defence of an ontological category notion, state-of-affairs, as a primitive, Westerhoff takes there to be a need for something which does the work he claims ontological categories don’t do.

Westerhoff’s problem is that he defines a notion of ontological category on top of entities given by his primitive, but assuming there to be such entities as would-be values of his primitive is an ontological position expressible in terms of acceptance of some specific ontological category, in his case states of affairs. His contention that his primitive successfully refers presupposes acceptance of an ontological category, but his definition can’t accommodate this role for ontological categories. There is a conflicting and more fundamental notion of ontological category at work in his account and it is this notion which is relevant to questions of what there is.

§6.3

It is common in the literature to construe ontological categories as classes or sets. As discussed above, both Russell and Westerhoff made this identification. Another common construal is the construal of categories as properties. The following are some examples

from the literature of these two construals. I shall begin by presenting them and I shall then explain why these construals run into the problem with which I am concerned; they define a defensible notion of category by making use of a more fundamental notion of ontological category which their definition cannot accommodate as such.

An example of categories being construed as collections or classes can be found in van Inwagen's paper 'What is an ontological category?'. van Inwagen gives his definition of the notion of an ontological category in terms of natural classes. He defines ontological categories as follows: "a natural class x is a primary ontological category just in the case that - there are large natural classes, - x is a high class" (van Inwagen, 2014, 6) For van Inwagen a natural class is large if its membership includes "a really significant proportion of the things there are" and a natural class is high if "it is not a sub-class of any natural class" (van Inwagen, 2014, 6). The way in which he seems to equivocate on his construal of categories as classes is in his explanation of his use of the term natural class. He writes:

I do not necessarily mean that there are objects in the world called 'natural classes', for an ontologist (why is there no such word?) may well deny that there are classes of any description. Indeed, anyone who did deny the existence of classes would ipso facto be engaged in ontology. What I mean by saying that there are natural classes is a consequence of the thesis that there are natural, non-conventional lines of division among things. (van Inwagen, 2014, 2).

Another example of categories being construed as collections or classes can be found in Alex Oliver's 1996 discussion of the metaphysics of properties. Oliver writes:

A metaphysical theory has two parts: the ontology and the ideology. The ontology consists of the entities which the theory says exist ("entity" is my catch-all for any kind of thing). The ideology consists of the ideas which are expressed within the theory using predicates. The sorting of the entities into ontological categories is a matter of ideology; predicates such as "...is a set", are used to say to which category an entity belongs. (Oliver, 1996, 2).

Although the above leaves open the possibility that we sort entities into categories because those are the categories of which they are members that suggestion would run counter to what is actually expressed which is that categories are something into which we sort entities on the basis of their satisfaction of other predicates. Although it is stated that this sorting is a matter of ideology, the example is included as a construal of categories as collections or classes because we don't sort things into predicates or

properties though we may sort things into collections or classes on the basis of their properties or the predicates which apply to them. So, insofar as Oliver's description clarifies the notion, I would contend that it does so by construing categories as collections or classes.

Ontological categories are also construed as properties in the literature. An explicit example of such a construal can be found in Javier Cumpa's 2011 paper 'Categoriality: Three Disputes Over the Structure of the World'. Cumpa construes categories as categorial universals. He writes:

While *individuals*, because of the defined range of its bearer, can only exemplify properties; constituents, however, according to its undefined range can exemplify any categorial property (category). The range of the substrates is in one case restricted, and in the other transcendental...It should be emphasised that what are bare properly speaking are not particulars, but being a constituent of a state of affairs...For if a constituent exemplifies a categorial property, the constituent remains bare because the relation between it and the categorial property is not necessary. (Cumpa, 2011, 19-21)

Another example of categories being construed as properties can be found in Erwin Tegtmeier's (2011) paper from the same volume. For Tegtmeier, categories are the intensions of classes and being a category is being a property of such a property:

In section 1, systems of categories were introduced as classifications. Furthermore, I frequently talked of category membership. That suggested that categories are classes. The role of the categorial entities with respect to these classes would be that of the intensions. The category and class of particulars is, e.g. the class of all those entities which are connected with the categorial entity of particularity...To consider systems of categories as classifications implies also that there has to be a foundation of a system of categories (a fundamentum divisionis). The question about the foundation of a classification is always the question: "which determinable is the foundation of the classification?". The easy answer is in our case: "the determinable category". What this answer means, more precisely speaking, depends on one's ontology. I would claim that determinables are properties of properties and that the determinable category is the property of being a categorial entity. (Tegtmeier, 2011, 177-8)

§6.4

These construals run into the problem of presupposition and attendant limitation. The notion of ontological category in which I am interested is a notion of ontological category with which we can say what there is. The accounts presented in the previous section use a specific ontological category to say what an ontological category is. This presupposes an ontology which includes things of the ontological category in question, in these cases classes or properties, and takes ontological categories to be specific versions of things of this kind. This yields a notion of ontological category which cannot be that which is used to claim that there are e.g. classes and/or properties, because on the definition given the notion of category presupposes that very thing.

Insofar as one is interested in the notion of ontological category as the notion of that with which we answer the question ‘what is there?’ and provide the terms used to define all other entities, the construals of category in question can be seen simply to miss this target notion and define a derivative one. So long as one uses a presupposed ontology to define a notion of ontological category, the notion of ontological category in which I am interested will never be what one has defined, instead the role of category in which I am interested will be played in the theory in question by the whatever entity-notions were used for the definition of the term ‘ontological category’. Using a notion of ontological category to define the notion of ontological category just moves the question.

Another way of approaching the problem is to observe that these construals of the notion of ontological category, like those of Westerhoff, build the notion of ontological category on top of entities which there are taken to be. On account of this, there is, and we can see, a more basic notion of ontological category at work in the accounts. It is the notion of that which we implicitly accept in taking ourselves to be able to refer to the entities in question. So, we accept the categories of class, and/or property, but we also accept the categories of whatever entities we take those classes to collect, or those properties to be true of. In taking there to be these entities, in taking ourselves to be able to refer to them, we endorse an ontological position which can be expressed in terms of acceptance of an ontological category or categories. But the notion of ontological category at work here cannot be that defined above because the notion of category defined is built on top of the very entities in question, it is a notion of a class which collects them or a property which is true of them. Another way to put this point would be as follows; on these construals, ontological categories are properties or classes which have a particular status on the basis of their relation to other things there are. The truth of the claim that something is an

ontological category will depend (a) on there being properties or classes, and (b) on the other entities there are (because some property or class being an ontological property will depend on its being true of, or collecting, a 'large proportion' of things there are). Thus, what ontological categories you commit to will be something which is determined by your ontology and reflects it. This is a derivative notion of category but there is more fundamental notion at work even in the accounts providing the definitions. I argued in the first three chapters of this thesis that to take there to be an entity, and adopt an appropriate semantics for some range of sentences, is to adopt an ontological position which can be expressed in terms of accepting an ontological category and taking it to allow for expressions used in certain ways to succeed in referring to things in the world. If this is accepted, it can be seen that the accounts in question are also utilising this more fundamental notion of ontological category, in taking there to be properties and/or classes, and taking there to be whatever entities are available to be described or classified by these properties or classes. This more fundamental notion of ontological category is that with which a claim may be made about what there is. The derivative notion will simply reflect a position, or assumption, about what there is.

In making use of the more fundamental notion but providing a construal of a derivative one, these accounts show the need for a construal of the more basic notion but cannot be taken to provide it. Insofar as one is interested in the notion of an ontological category which is relevant to the categorial existence claims we use to answer the question of what there is, these construals of the notion should not be adopted.

Chapter 5

§0

In this chapter, I shall introduce and try to motivate the proposal that we should incorporate the notion of an ontological category into accounts of how de re modal truths are grounded. In the next chapter, I shall go into more detail about how I think this should be done. I shall begin this chapter by pointing out some overlap in the work that ontological categories and essences are called upon to do. I shall contend that, largely, where there is overlap, categories should be taken to do this work, rather than essences, and we should modify our account of essence accordingly.

§1

The claim that ontological category notions, or terms putatively corresponding to them, are used to give answers to the question of what there is is not particularly odd. However, taking these categories to play a role in grounding de re modal truths might be seen as odd. Taking essence to play such a role is not, indeed it is a fairly popular position. My first claim is that consideration of the work taken to be characteristic of ontological categories and of essences should lead one to reject that initial disinclination to take categories to be relevant to the grounding of de re modal claims. In this chapter, I shall focus on construals of the notion of essence presented by Kit Fine, and by E.J. Lowe.

Three main features common to the construals of the notions of an ontological category and of an essence are: (1) Both notions are taken to, in some sense, allow one to say what something is; (2) Both notions are presented as resolving problems of relevance which might arise in answering this question. (3) Both notions are connected with existence claims. In the case of essence, this connection leads both Lowe and Fine (at times) to contend that essence is prior to existence.

§1.1

(1) Both notions are taken to, in some sense, allow one to say what something is

It is a contested but plausible position that ontological category notions can be used to give answers to the question of what there is. The ontological question requires one to say what there is and we seem to do this, or try to do this, using what are plausibly, if only roughly, characterised as ontological category notions. But the task of saying *what* there is does not seem to be one which could be satisfactorily completed in such a way that it was nevertheless left mysterious what those things (that there are) are. Instead it seems that if one manages to say what there is, one will have managed to what the things (that there are) are.

The task of saying what something is might seem to be a different task from the task of saying what there is because the former task, but not the latter task, seems to allow one to presuppose the object of enquiry. I shall suggest that this is not always the case. There is a sense in which approaching the question of what something is with the thing in question as an available referent or object of perception can be thought to involve approaching the question with one important answer to the question of what it is already in hand. On this line of thought, for something to be an available referent or object of perception it has to be understood as a thing of some kind. One version of the ‘what is it?’ question could be understood to be looking for this kind to be made explicit. That version of the question of what something is would be badly answered if one presupposed the object of enquiry and tried to give an answer explaining some further facts about what that thing is. I shall suggest in (3) below that essence is, at least sometimes, connected to the version of the question for which it is not appropriate to presuppose the object of enquiry.

To sum up: ontological category notions are connected to the work of answering the question of what there is but if they can do this work, it seems that they will also provide the answer to (at least one version of) the question of what those things (that there are) are.

The notion of essence is explicitly connected to this latter question. Fine introduces the real definition construal of essence which he goes on to defend as follows:

Just as we may define a word, or say what it means, so we may define an object, or say what it is. The concept of essence has then been taken to reside in the “real” or objectual cases of definition, as opposed to the “nominal” or verbal cases. (Fine, 1994, 2)

He argues against the sufficiency of the modal construal of essence in part by appeal to the intelligibility of a position which takes containing Socrates to be essential to singleton Socrates but denies that belonging to singleton Socrates is essential to Socrates. Once again, the notion of essence at issue is explicitly connected to the answer to the question of what something is.

For can we not recognise a sense of nature, or of “what an object is”, according to which it lies in the nature of the singleton to have Socrates as a member even though it does not lie in the nature of Socrates to belong to the singleton? (Fine, 1994, 5)

Although Lowe’s construal of essence differs in some important ways from Fine’s, he too explicitly connects his construal of the notion of essence to the question of what something is.

In short, the essence of something, X, is *what X is*, or *what it is to be X*. In another locution, X’s essence is the very identity of X. (Lowe, 2013, 144-5)

To know something’s essence is not to be acquainted with some *further thing* of a special kind, but simply to understand *what exactly that thing is*. ((Lowe, 2013, 147)

§1.2

(2) Both notions are presented as resolving problems of relevance which might arise in saying what something is.

One challenge presented by the ontological question is that of the appropriate level of generality. As has been well noted in the literature, one’s answer to the question of what there is can fail to be satisfactory if the notions with which it is given are either too general (e.g. everything), or too specific (e.g. pharmacies, school uniforms, symphonies). Since

they seem to be able to be used to give satisfactory answer to the question, ontological categories seem to be those kind notions at the desired level. Indeed, in the first four chapters of this thesis I have argued that we should reject the common hierarchy approach to ontological categories according to which kind notions of all levels of generality above some point are accepted as ontological categories. I defended a construal of the notion of ontological category according to which to be an ontological category is to be a notion appropriate for giving an answer to the ontological question.

The point here is that the ontological question challenges us to say what there is and we often do this using what seem to be ontological category notions at least in part because these are the notions that seem to be at an appropriate level of generality, in some sense, to provide a satisfactory answer to the question.

A problem of determining which information should be included and which information should be excluded also arises for those who try to provide real definitions of things and thereby say what they are. The notion of essence is held to resolve that problem. Fine notes that:

one of the central concerns of metaphysics is with the identity of things, with what they are. But the metaphysician is not interested in every property of the objects under consideration. In asking ‘What is a person?’, for example, he does not want to be told that every person has a deep desire to be loved, even if this is in fact the case...What is it about a property which makes it bear, in the metaphysically significant sense of the phrase, on what an object is?...what appears to distinguish the intended properties is that they are essential to their bearers. (Fine, 1994, 1)

§1.3

(3) Both notions are connected with existence claims.

This is obvious with the notion of an ontological category, and it is explicit in the construal of that notion which I have defended. Central debates in ontology address existence claims which are made using what seem to be, and are often taken to be,

ontological category notions. Examples include debates over whether properties exist, whether propositions exist, whether numbers exist, whether composite material objects exist. These are notions of different levels of generality and so if one connected the notion of an ontological category with a certain level of generality, not all of these debates would be included. In the construal of ontological categories which I have defended in the first four chapters of this thesis the notion is connected not to any predetermined level of generality but instead to its connection to existence claims. The ontological category notions are those with which we give answers to the ontological question. Although the connection of ontological category notions with answers to the question of what there is is especially firm in my construal, it is not at all peculiar to it. What seem to be, or are taken to be, ontological category notions are frequently used in providing answers to the question.

The connection of the notion of essence with existence claims is less well-established but it is defended by both Fine and Lowe. The existence claims in question here are individual existence claims but the essences in question are general essences, not individual essences.

Both Fine and Lowe (at times) defend the claim that essence precedes existence to try and capture the fact that it is not the case that we say that something exists and then ask what kind of thing it is. Instead, in saying that something exists, we are saying that something of a specific kind/category exists. There is in some sense a fact about what it is that we are saying exists which does not depend on the truth of that claim.

In his (2005) Fine introduces a distinction between worldly and unworldly predicates and realms to facilitate this.

it will be suggested that the identity of an object – what it is – is not, at bottom, a worldly matter; essence will precede existence in the sense that the identity of an object may be fixed by its unworldly features even before any question of its existence or other worldly features is considered. (Fine, 2005, 321)

all that the possibility of his being a man and not existing comes down to is the genuine possibility of his not existing and the unworldly, or circumstance indifferent, fact that he is a man. (Fine, 2005, 339)

Lowe also defends the claim that essence precedes existence. In his discussion of this point he emphasises the role he takes a priori knowledge of essence to play in facilitating empirical discovery of existence.

Another crucial point about essence is this: in general, essence precedes existence. That is to say, we can in general know the essence of something X prior to knowing whether or not X exists. Otherwise we could never find out *that* something exists. For how could we find out that something, X, exists before knowing what X is...? (Lowe, 2013, 148)

§1.4

What I hope to have shown in the paragraphs above is that there is an overlap in the work which ontological categories are taken to do, and the work which essences are taken to do. It is not my claim that the way categories and essences are held to do this work is the same. Indeed, since the notions of categories and of essences are different, it would be odd if that were the case, and if the notions were not different all that would be at issue in my discussion would be a terminological point. The claim made in this section has simply been that there is overlap in the work categories and essences are held to do. Next, I shall argue that where there is this overlap, we should take ontological categories to do the work at issue and modify our notion of essence accordingly.

§2

Although, as noted in (1) above, both the notion of an ontological category and the notion of an essence are explained in part through their potential to provide answers to the question of what something is, that question itself can be answered in many different ways, and can be thought of as looking for many different kinds of answers. For this reason, connecting the notions with the question is not enough to fully clarify them.

That the question of what something is can be answered in many different ways is generally acknowledged in attempts to clarify notions of category or essence by appeal to it. This is mentioned in (2) above. (2) notes that it is accepted that the question of what something is can be answered in many different ways and that it is then claimed by

various ontologists that the notions of category and/or essence allow us to pick out the/a kind of answer to this question that is in some way relevant to, or important for, ontology.

The claim I shall defend in this section is that there isn't just one kind of answer that is relevant to, or important for, ontology. I shall claim that there are at least two, one corresponding to answers given in terms of categories, and another given in terms of something which may line up in some respects with Fine's notion of essence. I shall argue that essences are simply unsuited to providing the answers to the question of what something is that categories provide. Properly understood, I shall contend, answers to the question of what something is which are given in terms of essence build, explicitly or implicitly, upon answers to that question given in terms of categories. Answers given in terms of categories should thus be understood as basic but not exhaustive.

One way to object to this suggestion would be to claim that, although there are at least two ways to provide an ontologically interesting answer to the question of what something is, both such answers can be accommodated within the notion of essence.

For instance, one could follow Fine (1994b, 56-8) in distinguishing between constitutive and consequential essence. Constitutive essence consists of those essential properties which are not possessed in virtue of more basic essential properties. Consequential essence consists of both the properties of the constitutive essence and the properties which are possessed in virtue of the possession of the properties of the constitutive essence. Adopting this distinction, one could claim that we can, with essences, provide both a comprehensive and a sparse answer to the ontologically interesting question of what something is.

My answer to this objection is that the constitutive notion of essence cannot provide the same answer to the question of what something is that the notion of category can be used to provide.

Both the constitutive and the consequential notions of essence are notions of classes of either properties (corresponding to the predicate modifier account of essence) or propositions (corresponding to the sentential modifier account)⁶⁶.

⁶⁶ Fine acknowledges the possibility of another "algebraic" construal, according to which the essence of an object is a single entity to which that object is mapped by an appropriate function. I am not going to focus on this construal, mainly because, although Fine mentions it, it is not the construal with which he works. Later distinctions in the paper are made in terms of the construal of essences as classes of properties or propositions. Also, since the essence here is still an entity, many of my objections to the claim that essences could play the role of categories still apply to this construal of essence.

In the spirit of the predicational or sentential approaches, one might regard the essence of an object as the class of its essential properties or as the class of propositions that are true in virtue of what the object is. (Fine, 1994b, 55)

The fact that both the constitutive and the consequential notion of essence are such classes is clear from the reason Fine provides for his choice to work mainly with the consequential notion.

A related problem is to know *how* to draw the line. Given the whole essence of an object on what basis do we break it down into its component properties? And given one such component, on what basis do we choose between its logically equivalent forms? Perhaps these questions can be answered. But until they are it seems advisable to work as far as possible with the consequentialist notion. (Fine, 1994b, 58)

In the next subsection I shall defend the claim that a notion of essence according to which essences are classes of properties or propositions is not suited to doing the work that ontological category notions do in answering the question of what something is. Basically, I shall argue that answers given using ontological category notions articulate a thing's fundamental nature, the nature which is presupposed in any attempts to refer to it. By contrast, answers given in terms of properties of the entity build on that nature without articulating it. Unlike Fine, Lowe defends a no-entity view of essences, so the argument of this subsection will not address his view. I shall raise objections to Lowe's view in a subsequent subsection.

§2.1

In (1) above, I noted that ontological category notions can be used to say what something is. However, ontological categories notions, as I have construed them are not primarily understood by their connection to this question. Instead ontological category questions are primarily understood by their use in attempts to answer the question of what there is. Nevertheless, as I noted above, if a notion can tell you what there is it must be able to give you some metaphysically interesting answer to the question of what those things (which you've just said there are) are. So, if ontological category notions can be used to

provide answers to the question of what there is, then they also provide answers to the question of what those things (that there are) are.

Since we connect ontological category notions primarily to the question of what there is rather than the question of what things are, our construal of ontological category notions is constrained by desiderata arising from the peculiar problems of providing construals of existence statements, notably the problem of presupposition (the meaningfulness of your existence statement shouldn't presuppose the existence of what it is being used to claim exists) and the problem of generality (ideally, your construal of an existence claim 'There are Fs' should be adequate regardless of what is substituted for F.⁶⁷) The construal of ontological category notions which I have defended in this thesis is designed to meet the challenges posed by these problems connected with existence statements. Ontological categories are to be ways of being an entity in virtue of which a certain way of attempting to refer to entities would succeed. Existence claims are to be understood as claims that the world is such that a certain way of referring to entities would succeed.

I argued previously that the presupposition problem arises, for referring terms of any kind, because it turns out that those terms having the content we want them to have depends on the world being as we say, or presume, that it is. My construal of ontological category notions, and the existence claims we make using them, attempts to avoid this problem by embracing the fact that the availability of content for our terms seems to depend on how the world is. It embraces this by talking about the availability of content in order to make claims about how the world is. Any attempt to use a putative referring term to refer will be an instance of some way of trying to refer. It will be successful only if the world is such that the way of referring of which it is an instance is one by which you can secure content.

To *use* a term of that kind involves the presumption that it does have this content. My construal of category notions and existence statements makes the provision of content that which is at issue and so it avoids presupposing that content, and thereby an ontology, and allows for the failure as well as success of attempts to provide content. As the above makes clear, my construal of ontological category notions is designed to allow those notions to be adequate for use in providing satisfactory answers to the question of what there is.

⁶⁷ Suggested by Fine in his 'The Question of Ontology' (2009)

§2.1.1

What kind of answer will such category notions provide to the question of what those things (which we said there are) are? With ontological category notions we will make explicit the answer to the question of what something is which is implicit in the way we try to refer to it, rather than any answer to that question which we might go on to give with sentences which *use* terms for the entity in order to say something about it. So, with category notions we will provide answers to the question of what something is which articulate a sense of what it is which is implicit in the way it is referred to.

In the next subsection I shall argue that answers to the question of what something is which begin with the entity in hand and aim to say something further about it build on, and assume, the category answer to what that entity is, without articulating it. My claim is that this is how answers to what something is which are provided with essences should be understood. They build on, and assume the answer provided by the category without articulating that answer. If this is the case, the essences would not be correctly thought of as the source of any necessities or possibilities which held in virtue of the aspect of what the thing was which was to be found in the answer provided using the category.

§2.2

In §2.1 I contended that, given the fact that ontological categories are such as to feature in existence claims, the answers which can be provided with them to questions of what the things (which we have said exist) are will be more basic than any answers to those questions which simply refer to the entity(ies) in question and aim to say something further about them. I suggested at the end of the section that essences, construed as classes of properties or propositions should be understood as providing answers of the latter sort.

One way of objecting to this conclusion would be to argue that it is terms for essences, not categories that feature in existence claims and so it is essences not categories which possesses the relevant basicness. Indeed, I noted in (3) in §1, that both Fine and Lowe at some point make the suggestion that essences feature in existence claims. Fine's defence of the position concerns singular existence claims (e.g. Socrates exists) and individual, rather than general essences (what it is to be Socrates rather than what it is to be a person (or an animal) (or an object)).

My position on existence claims does take singular existence claims to build on general ones, but in this chapter, I am not concerned with individual essences but rather with the general essences discussed in (Fine, 1994) and (Fine, 1994b). For this reason, in this subsection I am not going to focus on the specific account Fine defends. Instead I just want to note that one motivation for both Fine and Lowe's defence of the claim that essence precedes existence seems to be the intuition that there is a sense of what something is which is not established by the fact that it exists. They both contend that the claim that something exists is a claim that a thing of some general kind exists. The kind of the putative entity is not determined by its existence. One way to try to allow for this is to claim that essence precedes existence and try to construe existence claims in terms of essences.

The basic intuition here is one with which I agree. I take the intuition to be something like the following: for something to exist is for a thing of a kind to exist; a thing's kind is not a further fact about it which is dependent upon its existence.

My position is that this intuition is correct but that it should be accommodated by appeal to the notion of an ontological category rather than an essence. It is ontological category notions not essences which allow us to articulate this fundamental aspect of what something is.

Construing existence claims in terms of ontological categories will accommodate the intuition. It will deliver the result that for something to exist is for a thing of a certain kind (category) to exist, and that a thing being of a certain kind (category) is not a further fact about it dependent on its existence (because the fact of its existence will already include its being of that kind). In this section I shall argue that, by contrast, the notion of essence, as construed by Fine and Lowe, simply does not allow for satisfactory accommodation of the intuition and so is not able to articulate this fundamental aspect of what something is.

§2.2.1

As noted above, I am not going to focus on the specific position Fine takes in defending the claim that essence precedes existence because that position mainly concerns individual essences and that is not the topic with which I am concerned at this point. Instead I am going to focus on whether general essences could plausibly be taken to be that in terms of which general existence claims are made. The reason for considering this

question is as follows. I argued above that different answers could be given to the question of what something is, and that one such answer is provided by the notions with which we say what there is. Drawing on arguments from previous chapters I suggested that the notions with which we say what there is are category notions. I contended that on my construal of them these category notions provide an answer to the question of what something is which explicates the nature which is implicit in a term with which one refers to an entity and so presupposed by any claim about what that thing is which is specified using a term for it. I claimed further that if that is correct, there is a sense of what something is which is due to its category. Any further facts about what it is, such as those which might be included in its essence, build on this aspect of its nature but are not the source of it.

Against this conclusion, I noted the potential objection that the general notion of essence with which I am dealing in this chapter could be taken to play the role that categories have been accorded. If that were the case, then that notion of essence could be taken to be the source of facts about what the thing is which I have taken categories to be the source of. It is with this suggestion that I am now concerned. I shall argue for the rejection of the suggestion by arguing that general essences cannot plausibly be taken to be that in terms of which general existence claims are made. In defending the basicness of categories as compared to essences in this way, I am taking the notion in terms of which general existence claims are made to be that which can provide a sense of *what something is* on which what it is is not a further fact building on the thing's existence and which allows for the truth of the claim that what it is for something to exist is for something of a kind to exist.

§2.2.2

Some of the reasons why essences as Fine construes them are not plausibly that in terms of which general existence claims are made are familiar from earlier chapters of this thesis. However, at least one is particular to Fine's notion of essence. I shall discuss two reasons to think Finean essences are not plausibly that in terms of which general existence claims are made. In the second objection, I am going to focus on the construal of essences as classes of properties because that is the one on which Fine focuses in his (1994b), however the objection will carry over to the construal in terms of propositions.

1. Wilson (forthcoming) argues persuasively that given Fine's construal of ontological dependence and the role that dependence plays in his construal of essence, at least some putative fundamental entities will be such that their essences will not be able to be accommodated within Fine's construal.

She notes that since Fine chooses to work with his notion of consequential essence rather than his notion of constitutive essence, he is rightly concerned to avoid irrelevant objects becoming part of the essence of something simply because of the reach of logical consequence.

Consider the proposition that $2=2$. It is a logical truth and hence a logical consequence of any proposition whatever. So, under the consequentialist conception it is true in virtue of the nature of any objects whatever that $2=2$. (Fine, 1994b, 59)

Fine appeals to a notion of pertinence in order to avoid the inclusion in the essences of things of objects irrelevant to their nature. Initially, this is explained in terms of the possibility of generalising away reference to an object.

not only is it true in virtue of the identity of Socrates that $2=2$, but also that for any object x , $x=x$. (Fine, 1994b, 59)

However, almost from its introduction the notion of pertinence is connected to the notion of ontological dependence. An object a pertains to the essence of an object b iff b ontologically depends on a (Fine, 1994b, 59). It is this connection that Wilson focuses on. She argues that this construal of essence cannot allow for real definitions of putative fundamental entities which do not depend on any other entities and which are such that the propositions which are true in virtue of their natures include propositions which refer to objects which are dependent on the defined entity.

Wilson gives two examples of such putative entities. One of these is based on an atomic physicalist position which takes a nominalist view that predicates refer to disjunctions of physical objects. A person with this position, Wilson argues, might claim that "it is in the nature of a given atom – say, an atom a of type A – that... If a were to exist in certain circumstances C , a would enter into composing a molecule of type M " (Wilson, forthcoming, 11). The problem, Wilson says, is that

given Fine's construal of essence, this makes atom ontologically dependent on a molecule it composes but this is a misconstrual of the nature of atom and of the atomist's position.

Wilson argues that her two cases constitute counterexamples to Fine's construal of essence by arguing that it is crucial to Fine's position concerning the notion of essence, and to his arguments for that position, that his construal of essence accommodate all intelligible ontological positions. Wilson contends that the cases she presents are not only intelligible but defended in the scientific community and thus she concludes that if their essences cannot be accommodated within Fine's construal then that construal fails on its own terms because it fails to accommodate all intelligible positions.

If we accept that Wilson is correct that her cases cannot be accommodated by Fine's construal of essence, that seems to leave two options concerning the suggestion (that we can use essences to make existence claims) with which I am concerned in this section. One option is to accept Wilson's cases as counterexamples. On this option, one accepts that Fine aims to accommodate all intelligible positions with his construal and that Wilson's cases show that he does not. One rejects Finean essences on this basis. If Finean essences are rejected, then they clearly cannot be that in terms of which we make existence claims, and so the suggestion that they can compete with categories for this role can be dismissed.

A second option is to accept that Wilson's cases show that Fine's construal of the notion of essence cannot accommodate all intelligible positions but to deny that they are counterexamples to the construal by placing much less weight than Fine does on the importance of accommodating all intelligible positions⁶⁸. However, even this second option is not promising for the suggestion with which I am concerned because even if Wilson's cases are not counterexamples to the whole construal they will be cases which the construal cannot accommodate, cases without Finean essences. The reason why they lack these essences is important for the topic at issue. They lack appropriate essences because they are fundamental

⁶⁸ On this option, it would become important for Fine's case for his account of essence that the modal account does miss something about the nature of Socrates and singleton Socrates, it would not be enough that it is intelligible to claim that it does.

entities which are such that their essential properties, or the propositions true in virtue of their nature, do not include objects upon which they depend but only objects that are dependent on them. That entities such as these are the ones which cannot be accommodated presents an insuperable problem for any suggestion that Finean essences are that in terms of which general existence claims are made because it is exactly entities such as these that we would be interested in claiming, or denying the existence of in ontology.

One final way one might try to preserve the claim that entities such as these have Finean essences which can be used to make existence claims might be to try to separate the notion of pertinence from the notion of ontological dependence. Wilson doesn't consider this an option because she claims that the connection is built into the foundation of the Finean approach.

his preferred understanding of essence as a form of real definition associated with “the idea of definitional priority, the priority of the defining terms to those defined”. It is this understanding, set out in ‘Essence and Modality’, that is, I speculate, the deeper source of Fine’s assumption that the essence of an object adverts only to that upon which it depends (Wilson, forthcoming, 19)

Even if one denied this ‘deeper connection’ and tried to separate the notion of pertinence from that of ontological dependence, one could not get essences with which one could make existence claims. The reasons for this will be dealt with in my next objection to the suggestion under consideration.

2. The second problem with the suggestion that we could use essences in the role of categories in existence statements is a problem concerning the provision of content for the predicates which are used in the real definitions of objects. This is the problem of presupposition which is especially intractable for construals of existence questions. My claim is that the predicates which occur in a real definition would either fail to have content or would presuppose the existence of the things they were being used to specify the essence of. This is the problem

which I claim would arise if one tried to avoid the problems presented by Wilson's cases by separating the notions of pertinence and dependence.

I going to focus on the construal of essence as a class of essential properties. For an entity like Socrates the real definition of the general essence might include predicates for sortal properties like 'is a person' or 'is an animal' and predicates for characterising properties like 'is warm-blooded' or 'is in some mental state'.

With predicates for each type of properties, we have to ask what content they have and how they have it. Regarding the predicates for either sort of properties, we should ask whether the relevant notion of properties is one according to which they are dependent on their instances or one according to which they are independent of them. For example, on the popular understanding of properties as sets of their instances, properties are dependent on those instances. Similarly, on the nominalist approach mentioned in Wilson's case above, a property is a disjunction of individuals, and will thus depend for its identity and existence on its instances. On any account of properties which takes these properties to be ontologically dependent on their instances, the essence or class of properties which they help to compose will not be a plausible candidate for featuring in existence claims. This is because the properties will depend for their existence on their instances (or at least one of them, in the case of non-rigid dependence of the sort found in Lowe's conception) and an essence partially composed of such a dependent property cannot plausibly be used to say that there the things it is true of. It is being presupposed that there are those things insofar as there is taken to be the property in question which depends on them.

Alternatively, the property for which a predicate stands might be taken to be independent of its instances. In this case the problem becomes one of securing the content for the predicate. My contention is that where the content can be secured you have a problem of presupposition and where the content cannot be secured you cannot provide a real definition and so cannot specify the essence you might want to use in making the existence claim.

The basic problem is that even if the existence of the property is independent of the existence of its instances, its instances will often be used in one way or another

to secure reference to it. For instance, if we secure reference to the property by abstraction from a statement in which it is correctly attributed to an object, there needs to be an object to which it is correctly attributed. It is not clear how we will secure reference to the property and thereby content for the predicate without making use of any instances. The problem becomes even more difficult if we do not even have the ability to specify that it is a property that we are trying to refer to. Nevertheless, it seems that this is a problem we will run into if 'property' itself has an essence, perhaps a class of the essential properties of (first-order?) properties. This seems like it would lead us to run into the same problems at the higher level before we can even get to the lower level.

It seems that without making use of the instances we won't be able to secure the essential properties as content for the predicates in the real definition, but if we do make use of the instances the essence provided by the real definition will presuppose the instances and won't be suitable for use in existence claims.

I noted at the beginning of this section that the problem of presupposition or lack of content would arise for anyone who tried to deal with the problem with real definitions which was presented by Wilson (forthcoming) by separating the notion of pertaining from the notion of ontological dependence to allow for real definitions to refer to entities which ontologically depend on the entity being defined. If real definitions could do this, then the class of properties/propositions which compose the essence of fundamental things would include properties/propositions which were ontologically dependent on the entities in question (because those properties/propositions themselves referred to and thus depended on objects which were dependent on the entities in question). If properties of the essence, and thus the essence itself⁶⁹, are ontologically dependent on the objects defined by the essence, then that essence presupposes the existence of those objects and cannot plausibly feature in an existence claim for those very objects. Separating the notions of pertaining and dependence do not provide a way out of the problem Wilson poses.

⁶⁹ Given that the essence is a class

In conclusion, it seems that Fine's construal of essence cannot accommodate essences for (at least some) fundamental things and further it seems that predicates which occur in a real definition will either fail to have content or will presuppose the existence of the things they are being used to specify the essence of. In light of these two reasons, it is not plausible to suggest that Finean essences are that in terms of which existence claims are made.

§2.2.3

Before moving on, I shall briefly discuss the possibility of using Loweian essences in existence claims. The problem with using Loweian essences to make existence claims is their apparent comprehensiveness and multiplicity. Lowe's view of essence is a no-entity view. He does not take essences to be entities of any kind. Along with Fine, he connects the notion of essence to the answer to the question of what something is (Lowe, 2013, 145). Unlike Fine he explicitly connects general essences to answers to the question of what there is (Lowe, 2013, 148). Lowe also connects essences to identity conditions.

It is only because Hesperus and Phosphorus are taken to be planets and thereby material objects of the same kind that their spatiotemporal coincidence can be taken to imply their identity...But the principle that distinct material objects of the same kind cannot coincide spatially is not an empirical one: it is an a priori one implied by what it is to be a material object of any kind – in other words it is a truth grounded in essence. (Lowe, 2013, 150)

There are a number of problems with using Lowe's notion of essence in existence claims. I shall focus on two. Much, though not all, of the material to be discussed was already discussed in detail in chapter two, so I shall be brief in my treatment of them here.

1. The first problem with using Lowe's essences in general existence claims is that there is a lack of distinction between notions of differing levels of specificity. With his notion of essence, Lowe covers much of the same ground as he covers with his notions of ontological category and of kind in his (2013). He uses the same examples. He connects all three notions to identity conditions⁷⁰ even though

⁷⁰ Though the connection of categories with identity conditions is repeated in many works by Lowe e.g. (2006) (2009), it is not mentioned in his (2013). Nevertheless, in his (2013) both substantial kinds and essences are connected with identity conditions.

he takes kinds to be entities but ontological categories and essences not to be. He takes both categories and kinds to come in hierarchies and accepts everything on the hierarchy as a category or kind.

I objected to that inclusive approach in chapter two. However, in his discussion of the hierarchies of ontological categories, and of substantial kinds, Lowe defends the claim that there are distinctively important levels. For categories, this is the level of his four fundamental categories which he says is the level at which the work is done. For kinds, it is the most general sortal associated with a particular identity condition. However, in his (2013) discussion of essence, no level(s) of specificity is(are) identified as distinctively important. This works to facilitate his reduction of metaphysical necessity and possibility to essence, but it makes the use of such essences in saying what there is implausible. They are too specific and include too many details about what things are.

Lowe claims that “essences are the ground of all metaphysical necessity and possibility” (Lowe, 2013, 152) and his approach to explaining how this is so makes use of the locution ‘it is part of the essence of X that’.

One reason, thus why it can be the case that X is necessarily F is that it is part of the essence of X that X is F...But this is not the only possible reason why something may be necessarily F. X may be necessarily F on account of the essence of something else to which X is suitably related...Socrates is necessarily the subject of the following event: the death of Socrates...because it is part of the essence of that event that Socrates is its subject. (Lowe, 2013, 152)

Lowe’s inclusion in his discussion of both individual essences and importantly general essences of varying levels of specificity allows him to find, for any modal consequence, an essence with respect to which he can plausibly say that it is part of the essence in question that the consequence holds. But not all of these notions can plausibly be taken to feature in claims about what there is.

For example, he writes about the essences of bronze statues and lumps of bronze. In the course of making the point that our knowledge of essences is not knowledge of separate entities but just knowledge of what things are, he writes:

we know *what a bronze statue is* and *what a lump of bronze is*. We thereby know that these are different things and that a thing of the first sort must, at any given time, be composed by a thing of the second sort since it is part of the essence of a bronze statue to be composed of bronze. (Lowe, 2013, 153)

Bronze statue is clearly not a highest sortal. The highest sortal in the vicinity might be artefact, or it might be composite material object. Statue is even a more plausible candidate than bronze statue. Two reasons to try and look for a highest sortal are: (a) an answer given to the ontological question using terms of this level of specificity fails to provide what we are looking for in such an answer; (b) the avoidance of double-counting. For Lowe, knowledge of essences allows inferences of existence claims on the basis of empirical evidence (Lowe, 2013, 114, 148) but if this is the case then we can't allow for essences corresponding to 'bronze statue', 'statue', 'artwork', 'artefact', 'composite material object' etc. each of which licenses inferences of existence claims. The identity conditions with which Lowe might try to avoid double counting are conditions for identity of things of the same kind and so to apply them in order to avoid double counting we would need to recognise things which have different (relatively general) essences as things which nevertheless are of the same kind. This pushes us back to the notion of the highest sortal and that move connects identity conditions primarily with highest kinds, rather than essences. Since this move connects the identity conditions which are supposed to prevent our licensing too many existence claims with highest sortals rather than essences, this move also connects existence claims with kinds rather than essences.

The move back to kinds presents a problem for Lowe's reduction of modal discourse to discourse about essences and what is part of them. If the notion with which we say that the bronze statue exists is the notion of artefact, or of composite material object, it is no longer straightforwardly part of this understanding of what it is that it has to be made of a lump of bronze. Lowe's use of the notion of essence in his reduction of modal discourse produces a notion that is too specific to be that which features in general existence claims. The problems with this may push us back to his notion of kinds but I would contend that this is no help since, as I argued in chapter two, there are other problem with the use of Lowean kinds in existence claims.

2. The second serious problem for Lowe's essences which prevents their being plausible candidates for use in existence claims is that they run into the presupposition problem. I argued for this conclusion at length in chapter two and I will not repeat the argument here. One way of drawing out the problem is to note that Lowe takes essences to determine that certain empirical evidence licenses existence claims (Lowe, 2013, 114, 148) however he also takes elucidation, knowledge, and statements of essence to be ontologically innocent. They are not supposed to presuppose the existence of the things in question. But different ontological positions would lead to different views about whether certain empirical evidence did license a given existence claim. For example, the circumstances which Lowe would take to license the inference of the claim that there exists a bronze statue would not be circumstances that van Inwagen would take to license the inference of the claim there exists a bronze statue. So, the elucidation of, or claims of knowledge of, an essence of bronze statues which would license this inference in the specified circumstances is not innocent of all ontological claims. That essence embeds precisely what would be at issue between Lowe and van Inwagen. Lowe's essences run into the presupposition problem and thus fail to be appropriate for use in existence claims.

§2.3

To summarise the argument again: I argued above that different answers could be given to the question of what something is, and that one such answer is provided by the notions with which we say what there is. Drawing on arguments from previous chapters I suggested that the notions with which we say what there is are category notions. I contended that on my construal of them these category notions provide an answer to the question of what something is which explicates the nature which is implicit in a term with which one refers to an entity and so is presupposed by any claim about what that thing is which is specified using a term for it. I claimed further that if that is correct, there is a sense of what something is which is due to its category. Any further facts about what it is, such as those which might be included in its essence, build on this aspect of its nature but are not the source of it. Against this conclusion, I noted the potential objection that a general notion of essence could be taken to play the role of categories in existence claims. If that were the case, then that notion of essence could be taken to be the source of facts about what the thing is which I have taken categories to be the source of.

On the basis of the arguments presented in the last two subsections, I conclude that we should reject the suggestion that either Finean or Loweian essences could be that in terms of which we make existence claims. We should accept that ontological categories provide an answer to the question of what something is which is more basic than the answer to that question provided by essences. It is more basic in the sense that the answers to the question provided by essences build on, and assume the answers provided by categories without articulating that answer and without being the source of it or anything which follows from it. If this is correct then, in explaining metaphysical necessity and possibility in terms of the natures of entities, or what they are, we should not treat what they are as univocal but instead recognise the ontological categories of entities as constituting an important and basic part of what they are. If we take metaphysical necessities and possibilities to hold in virtue of what things are we should recognise a role for ontological categories in grounding the truth of these claims.

§3

In §2, I concluded that ontological categories should be recognised as a source of modal truths. In this section I am going to begin to develop this suggestion. It will be developed in detail in the next chapter.

§3.1

In explaining necessity and possibility in terms of essence, Fine did not provide, or attempt to provide, a reduction of the modal to the non-modal. Vetter (2011) explains this helpfully in terms of narrow and broad understandings of the modal.

We can use the terms ‘modal’ or ‘modality’ in two ways. In a narrow sense, there are two modalities: necessity and possibility...in a broader sense, the modalities comprise a much larger package: necessity, possibility, and the counterfactual are part of that package, and so are dispositional properties and powers, essences, and anything that is expressed by modal expressions in the linguists’ sense: can, must, may, would, and so on...The new actualists reverse the order of explanation within the broader modal package and claim that it is necessity and possibility

(and perhaps the counterfactual conditional) that have to be accounted for in terms of some other part of the package. (Vetter, 2011, 743)

In suggesting that ontological categories be recognised as a source of modal truths, a source which does some of the work essences were taken to do, and some further work that they were not necessarily taken to do, I take myself to be doing something in keeping with the above; using one modal notion to account for another. I take the notion of an ontological category to be a modal notion in the sense that it is a notion of a nature which is modal. The most obvious reason to think this is the modal aspect of the use and reuse conditions with which we specify these categories.

Use conditions for entities of a kind are specified by the identification of a range of sentence types and a role or roles for terms in sentences of these types, and the claim that a putative kind of entity is such that terms which occur in these sentences in these ways are terms for entities of that kind. So that if any such sentence is true it carries a commitment to the existence of an entity of that kind. One way of thinking about this is as the explication of these sentences through the construal of them in terms of various sorted constants and variables. One immediate result of such Use conditions is a determination of which sentences are to be considered category mistakes and which are not.

There are two points to note about this. The first is that this is broadly in keeping with a long tradition in metaphysics of explicating ontological category or kind notions by explicating the ranges of significance⁷¹ of terms for entities of that kind. The second point worth noting is that there are clear modal implications when one specifies the sentence types in which terms for entities of putative kinds can legitimately feature. Even if one accepts the truth-aptness of category mistakes, I will contend that one should distinguish between degenerate and genuine truth-aptness. Those who take category mistakes to be truth-apt, generally only take them to be what could be called degenerately truth-apt. There is an intuition to the effect that these sentences should be meaningless, but this is outweighed by other considerations and instead of failing to be truth-apt all category mistakes are automatically given the truth value false just in virtue of their status as category mistakes.

⁷¹ 'Ranges of significance' is the phrase used by Russell.

One objection to the proposal under discussion is that the category notions which we fixed in part using claims about which sentences are category mistakes would not have implications for which sentences are category mistakes because nothing substantive is done when what has been built into a definition is derived from it. My response to this objection draws on the way that my construal of ontological categories avoids the presupposition problem. The category is fixed as that which *makes* the sentences in question either category mistakes or not category mistakes. If the sentences are not in fact category mistakes, then there is no ontological category which makes them so and so the attempt to secure content for the category term (and to secure reference for the constants and variables of the category) in this way will fail. To avoid the presupposition problem existence claims are construed as claims that the world is such that attempts to refer and/or secure content in a specific way are successful.

This approach will not produce definitions of ontological category notions that are given using claims that certain sentences are category mistakes. Instead, explications of ontological category notions are offered. A category notion can be explicated as that category notion which does have these implications concerning which sentences are category mistakes. Only if there is a category notion which does have these implications will such an attempt to secure content succeed and if it does do so it will only be because the category does make certain sentences category mistakes and make other sentences not be category mistakes. There are two conclusions I want to draw from this. First, ontological categories can have modal implications, these implications are not built into the category in such a way as to undermine their status as truths which hold in virtue of the category. Second, ontological category notions are themselves modal notions. This is evident from the fact that they are notions we can only explain satisfactorily through the use of modal notions (albeit less basic ones).

If ontological categories are modal notions, they are modal notions which are interestingly different from Fine's essences or the dispositional properties which Vetter uses to explain necessity and possibility. Both Fine's essences and Vetter's dispositions are understood as modal properties, or classes of such properties, and they are each connected primarily to one or other of the two less basic notions of necessity and possibility. Vetter calls Fine's essences necessity rooted in things and she calls her potentialities possibilities rooted in things. This has some counterintuitive results. In the case of essences, the possibility of a man thinking becomes less basic than the necessity of a man not being true.

\square and \diamond are interdefinable and so if both or one is going to be a primitive, simplicity dictates that only one should be a primitive and the other should be defined in terms of it. However, if both are going to be explained in terms of some other notion, a notion of nature, it is not clear why that notion should have to be more closely tied to one than the other. Both de re possibilities and de re necessities can be thought to flow from the category of a thing. If we take this position, we can avoid the counterintuitive results which follow from giving either a necessity first or a possibility first account of natures.

Categories might be thought of as both facilitating and constraining the postulation of possible worlds. Both the facilitation (possibility) and the constraint (necessity) of the postulation of worlds would flow from the categories of things and neither would flow from the other. Indeed, the only way we can get necessities from a collection of possible worlds is by appeal to totality facts about that collection and such facts come very close to the being the exclusion of possibility i.e. necessarily not. If an account of natures as ontological categories could be given on which both de re possibilities and de re necessities flow from the nature, with neither having to be derived from the complete collection of the other that would be a positive feature of the position.

One important point about categories as the source of modal truths is that if we take categories to be such a source and ask about their modal implications that seems to provide us with some modal truths but not all that we may want (e.g. probably not necessity of origin for persons or artefacts) and it leaves us with some results which diverge from what we would want (e.g. the possibility of 4 being prime). If we want to account for, or rule out, these further modal claims, we need to add a further element to the account. This could be an appeal to essential properties or dispositions. The relevant notion of essence might be something like Fine's notion of consequential essence but instead of taking this notion to build upon the constitutive essence of a thing we could take it to build upon the category.

As is clear from the above, one consequence of adopting the position that ontological categories should be recognised as a distinctive source of modal truths is that we get a less simple account of modality than we get from an account given simply in terms of essence. I think this is a consequence we should accept. It is worth lessening the simplicity to capture the difference in the impossibility of 4 being prime and of Emma being prime. This seems to be a difference which is due to the source of the impossibility and that is exactly the kind of distinction which we are supposed to be capturing in moving from the modal approach to essence to the real definition approach.

In the next chapter, I shall draw out some of the consequences of doing this and argue that they offer independent reasons for adopting the proposal.

Chapter 6

§0

In the last chapter, I argued that ontological categories should replace essences as that in virtue of which some de re modal statements are true. In this chapter, I shall develop the position into one whereby I claim that ontological categories ground or partially ground all de re modal truths. The position I defend is offered as a proposed amendment of essentialism. Essentialists, such as Kit Fine (1994) (1994b) and Bob Hale (2013) claim that propositions are true in virtue of the nature of a relevant object(s), and not in virtue of the nature of others. Fine's very well-known example is that the sentence 'Socrates is a member of singleton Socrates' is true in virtue of the nature of singleton Socrates but not in virtue of the nature of Socrates⁷². They then use this position to offer an account of metaphysical necessity generally.

Indeed, it seems to me that far from viewing essence as a special case of metaphysical necessity, we should view metaphysical necessity as a special case of essence...The metaphysically necessary truths can then be identified with the propositions which are true in virtue of the nature of all objects whatever. (Fine, 1994, 9)

The claim that it is metaphysically necessary that p iff $\exists X_1, \dots, X_n \Box_{X_1, \dots, X_n} p$ really amounts to an explanatory hypothesis – we might call this hypothesis the essentialist theory of necessity. (Hale, 2013, 150)

My discussion shall focus on the first essentialist move according to which the source of the truth of various modal statements is located in essences of particular entities. I shall not have space to discuss the broadening of the essentialist account to metaphysical necessity generally. However, since my account is offered as an amendment to essentialism, it is my intention to follow essentialists in taking metaphysical necessity generally to be explicable in terms of the notion of a proposition being true in virtue of the nature of some thing or things. The amendment I offer is one concerning how we should understand the notion of nature appealed to.

⁷² He uses this example to explain the difference between what he takes to be the target notion of essence and the notion which is captured by the modal construal of essence as de re necessity.

My proposed amendment follows from the construal of ontological categories which I have given over the course of this thesis. It is also a construal which has virtues independent of this. Over the course of this section I shall explain what the proposed amendment is, how it follows from the construal of the notion of an ontological theory for which I have argued, and what its attractions are independent of that status.

§1

In chapter one, I argued that all of our truth-apt sentences presuppose the truth of some categorial existence claims or other. I concluded that we needed to understand the content of those claims in order to understand the work that they were doing in facilitating our assertions. In chapter three, I defended a metalinguistic construal of categorial existence claims. According to that construal, we use ontological categories to make reference to things in the world, i.e. we refer to any thing, at least any thing that we can refer to, as an *f*, for some notion *f*. However, in order to use categories to do that we need to fix on them. Since ontological categories are no more than natures which allow some ways of attempting to refer to things to succeed, we fix on them by formulating rules for proposed types of expressions which will refer to things of the putative category e.g. we might formulate rules for the use and reuse of terms for sets. If there is such a nature as that which would be apt to be referred to in these ways, then our attempted introduction of a new type of term will allow us to fix on the nature of that which would be apt to be referred to by such terms e.g. the category, *set*. We can then use that category to refer to things in the world. We can only use expressions of a proposed kind ‘*f*’ to refer to things in the world if, by stipulating the rules for the use⁷³ of these expressions, we manage to fix on an ontological category *F*^{74 75} which we can use to refer to *fs*

⁷³ As I have acknowledged previously, in presenting my use and reuse conditions as establishing rules of use when their introduction is successful, I follow Thomasson to some degree while also greatly modifying her position on what rules of use are.

⁷⁴ Although I used an upper-case letter, I do not suggest that ontological categories are properties. For the reasons established in chapters 1 and 2 this category notion cannot be understood as a property. Although, I have claimed, we do need a kind notion to refer to things in the world, this kind notion cannot be a property; first, because there would be no way to give content to the predicate for that property while allowing the property to serve the role proposed, second, we are immediately involved in a regress, we will then need to refer to that property to refer to anything else, but we need the notion of a property to do so, if that is again a property, then, etc. The regress is vicious because it is running in a context wherein it is accepted that we need to fix on a kind notion and use it to refer to things of that kind. The regress puts off our ever getting hold of such a notion.

⁷⁵ The category *F* will be a nature in virtue of which any *fs* will be apt to be referred to by expressions used in the way we have proposed.

If this is right, then ontological categories play an indispensable role in allowing for the terms of all of our truth-apt sentences to have their semantic values. Appreciating this will allow us to see the work these natures, or ontological categories are doing, and how they do it. One way of doing this is by focusing on how we fix on them.

The way we do this, I have argued, is through the stipulation of use and reuse conditions. These conditions are not exhaustive, and they do not, and are not intended to specify the meaning of the new kind of term. Instead, they are intended to fix that meaning. The terms introduced are to refer to entities of the kind which would be apt to be referred to in these ways in these contexts. If there is no such kind (category), then the attempted introduction of the new kind of term is unsuccessful, and attempted uses of instances of it will suffer from reference failure. We fix on ontological categories by trying to fix on them as the ontological category or nature which would allow a way of referring to be successful.

There are two points I shall draw out here which are very important to the argument of this chapter.

1. The use and reuse conditions are modal claims. If we can only refer to things, and refer to them again, by referring to them as things of a certain kind, then claims about the linguistic contexts in which terms for things of this kind can occur and reoccur amount to modal claims about the corresponding entities.

The use conditions will specify the range of contexts in which the sort of term in question can occur, usually focusing on those which are distinctive of this sort. For example, you might introduce events as those things terms for which can occur in true sentences asserting causal claims. You might introduce sets as those things terms for which can occur in true sentences asserting membership, you might introduce propositions as those things terms for which can occur as the subject of a predication of truth or falsity, you might introduce persons as those things terms for which can occur in true sentences ascribing psychological states and also in those ascribing physical states. The idea is that you use roughly but incompletely understood contexts to explain a sort of entity you take to be able to figure in a specific way in those contexts.

The reuse condition will state a necessary and sufficient condition for the identity of things terms for which figure in the specified way in the specified contexts. So you might take events to be the same iff the referents of two event terms occur in the same space, or iff they are exemplifications of the same property at the same time by the

same entity, or iff they have the same causes and effects, you take sets to be the same iff the referents of two event terms have the same members, you might take persons to be the same iff there is a relationship of continuity between the psychological states of the referents of two person terms, or iff there is an appropriate relation of causation between the organisms that constitute the referents of the person terms, or iff the activities of the fundamental particles that compose the referents of the person terms constitute the same life.

2. The way these use and reuse conditions are supposed to work is that they fix on the category that would make such claims (concerning the terms for referring to entities of the category) true. The category is that which would *make true* these modal claims concerning the terms for entities of that category.

These two claims are built into my construal both of existence claims and of ontological categories. I contend that some such claims need to be accepted⁷⁶. It is an immediate consequence of this construal that ontological categories ground at least some de re modal claims. The main consequences I derive from my approach which are at odds with the accounts essentialists provide of natures can be drawn out by focusing on the way in which the ontological categories of my account are fixed on.

§2

Before doing that, I shall pause to emphasise one point about the construal of the ontological categories I have defended and how it is that such categories are able to ground modal statements. One reason one might take them not to be able to provide such grounding is that, insofar as we are only able to fix on them using modal claims, one might claim that they themselves are modal and so cannot be used to provide the ground of modal consequences. My objection to this is in line with that provided by essentialists and others who Barbara Vetter (2011) calls ‘new actualists’. The idea is that new actualists do not take the actual world to be a possible world among others; they take the actual world to be modally thick. My response to the objection is that my claim is not that

⁷⁶ Some details might change but my position is that we cannot refer to a thing except by referring to it as the semantic values of a term which features in certain contexts in certain ways. Doing that I have argued amounts to making modal claims about it.

the modal can be reduced to the non-modal. My claim is that some modal notions should be understood in terms of some others.

Vetter presents the point particularly clearly:

Modality comes in a package. There are, of course, the two familiar modalities of necessity and possibility. There are also such modal phenomena as (if we take them seriously as phenomena; otherwise there are such modal notions as those of): laws of nature, essences, the counterfactual conditional, causation, and dispositions. A reductive approach to modality will try to describe all of these phenomena in a language that is taken from outside the modal package...A non-reductive account of modality need not be quietist. It will not try to capture the elements of the modal package in terms of something non-modal, but it can impose a hierarchy on the package itself.

(Vetter, 2015, 4-5)

My position, based on the positions given above, is that no reference can be made to anything non-modal. Natures are modal. For that reason, I take it that the only way explanation can be given, is by providing that explanation with something modal.

§3

To return to the point of §2, focusing on the way in which we use modal claims about the contexts in which proposed kinds of terms can be used to fix on modal notions as that which would make such claims true, allows one to draw out some crucial ways in which the use of ontological categories as natures differs from the use of essences.

The way I shall draw out the first is by pointing out that the use conditions correspond to claims about de re possibilities, and reuse conditions correspond to claims about de re necessities. They work together to fix on the category notion which would make the claims of both true. In his (1995b) Kit Fine presents one understanding of his project to be that of localising necessity:

Essence, under the sentential construal becomes a localised form of necessity. (Fine, 1995b, 56).

Vetter presents her (2015) project as a localisation of possibility in the notion of potentiality.

Ontological categories, as I have presented them, differ from both as being a modal notion from which both necessity and possibility can be derived. My contention is that this is both a consequence of my account and also a virtue. As I shall detail below, this feature of ontological categories, allows for the resolution of what I shall claim are problems that come up on the other two approaches. It is also more intuitive than realised.

Saul Kripke is well-known for rejecting the claim that possible worlds are something we can find out about. Instead, he contends, “‘Possible worlds’ are stipulated, not discovered by powerful telescopes.” (Kripke, 1972/1981, 44). If we adopt a stipulation approach to possible worlds, I suggest that we can discern intuitions both about necessity and about possibility guiding our stipulations. Kripke’s example focused on Nixon. If we were stipulating different possible worlds containing Nixon, our intuitions concerning possibility would guide us in stipulating worlds where he took a different job, or made different decisions. Our intuitions concerning necessity would guide us by preventing us, or leading us to not, stipulate worlds where other features were different. We would not stipulate a world where he was a tree. Perhaps we wouldn’t stipulate a world where he had different parents. On the possible worlds approach to modality, necessity is supposed to come out at the end. What is necessary is what is invariant across the worlds. When we think of these worlds as stipulated that becomes less plausible. Thinking of them this way makes the notion of a nature that is the basis for both necessities and possibilities intuitive. Indeed, for my purposes, talking about possible worlds becomes just a way of articulating a position about the natures of some things. So, for instance, we would be expressing a view about the nature of persons by refusing to stipulate worlds in which persons have different parents in different worlds. We would also be expressing a view about the nature of persons by stipulating worlds in which they were reincarnated.

The derivative status of necessity and possibility on strong actualist views should facilitate a move away from the need to conceive of the nature which grounds modal truths as a localised version of one of these modalities.

§4

The fact that on my construal ontological categories directly ground both possibilities and necessities is I think a recommendation for my account. I shall argue that positions which take natures to directly ground only one kind of modal statements has counter-intuitive results. I shall argue that these results can be avoided on my account.

§4.1

The first counter-intuitive result which I shall consider is one which arises for essentialism. It is the question of category mistakes and how they should be explained. I opened the thesis with discussion of category mistakes. The problems they present for essentialism provided the motivation for this project. The basic problem is that we want the following to come out true. It is not possible for ‘The colour green eats breakfast every morning’ to be true because the colour green is the wrong kind of thing to eat breakfast. Whereas, it is possible for ‘Jeremy eats breakfast every morning’ to be true because Jeremy is the right kind of thing to eat breakfast. The problem is that on the essentialist account we do not get either of these claims coming out true.

In the case of categorial fit and the possibilities that that grounds, the essentialist position is particularly implausible. The essentialist has to say that it is possible for Jeremy to eat breakfast because it is not ruled out by the properties that make up his essence. In other words, it is possible for Jeremy to eat breakfast because it is not necessary for him not to. This yields the following implausible picture. The impossibility of Jeremy being the square root of 4 is more fundamental to him than the possibility that he be happy. The impossibility of Jeremy being the square root of 4 will be among the properties that make up his nature. That is objectionable in itself. It is made more so because the possibility that Jeremy be happy will not be included in his essence. It will be a possibility that holds of him by virtue of the fact that none of his essential properties, nothing that is necessarily true of him, including such scarcely coherent necessary truths about impossibility as those mentioned above, rule it out. All of this is especially counter-intuitive given the practice we have in metaphysics of explaining what things are by explaining what can be true of them, e.g. a proposition is the kind of thing that can be true or false.

The essentialist seems to get the explanation of these kinds of possibilities wrong. They also seem to get the explanation of the impossibility of the truth of category mistakes wrong. The impossibility of the truth of category mistakes becomes, implausibly, something which is directly grounded by the essence of the entity in question. That Socrates’s essence includes the impossibility of his having the atomic number 79 should be counted as a counter intuitive result of essentialism, and as one which seems to get the explanation of the source of the impossibility of the truth of that statement wrong.

§4.2

Counter-intuitive results also arise for Vetter's (2015) contrasting approach. Her account uses potentiality, which is to some degree a localised form of possibility, to ground modal claims.

The truth-condition she defends for modal claims is:

POSSIBILITY: It is possible that p =_{df} Something has an iterated potentiality for it to be the case that p

(Vetter, 2015, 197)

The problem that arises for her account concerns necessities.

NECESSITY: It is necessary that p =_{df} It is not possible that not p

(Vetter, 2015, 203)

She explains what this formulation comes to in her account as follows.

It is necessary that p just in case nothing has, or had, or will have a potentiality to be such that not- p .

(Vetter, 2015, 203)

The problem for Vetter is a parallel to the problem for essentialists. It is that it is implausible that the right explanation for the necessity of a set to have the members that it does is not plausibly explained as derived from the fact that none of a set's various potentialities include the potentiality to be such that it has different members.

Vetter recognises the problem her account has with necessities and attempts to accommodate it by building into her account of potentiality the condition of having a potentiality to the highest degree as a limiting case of potentiality (Vetter, 2015, 89). Vetter's examples of such cases "an animal's disposition to metabolize, the disposition of fire to spread heat" (Vetter, 2015, 90) are what would generally be recognised as necessities. Accepting this, she calls it 'the necessity conception of potentiality'. She explains the relevant potentialities as:

dispositions such that their bearer has no potential whatsoever not to exercise them. These according to my preferred model of potentialities' degrees, are possessed to the maximal degree. (Vetter, 2015, 90)

There is room for doubt about whether Vetter's localised notion of possibility can accommodate such potentialities. Nevertheless, even if her move to accommodate them is successful, it demonstrates the point which I am concerned to make. That point is that problems arise for accounts which try to construe the nature of a thing modally as directly grounding either necessity statements or possibility statements. On my approach both are grounded directly, and this is a virtue of the approach.

§5

The way in which they do so delivers the right result about statements demonstrating categorial fit and categorial mismatch. It is accepted that we can form sentences combining terms from mismatched categories, but the categories will determine that the entities those terms refer to are not such that those sentences can be true. The role of categories in grounding use conditions will directly ground the truth of claims like 'It is possible for Jeremy to be happy' because the rules for the terms referring to entities of Jeremy's kind will explicitly rule in such uses as ones which can result in possible truth. The reuse conditions will explicitly require that for a term for a set to be reused legitimately, the referent will have to have the same members. In this way the ontological category will directly ground statements of necessity also. Ontological categories as Fs will directly ground statements of necessity and possibility. That they do so makes them apt as they should be to be explained as the nature of that which can be F, and which must be Y. All of this is a virtue of the account.

§6

The second and final consequence of my use of ontological categories as natures is that I will have to allow for a distinction between core nature and complete nature. There are points on which this may seem to prove a counter intuitive result, but I suggest that it too is a virtue of the account. It is intuitive to suggest that the natures of things are to some degree structured. Some of a thing's essential properties can be explained in terms of others. Fine introduced the distinctions of constitutive vs consequential essence in his (1995b) to accommodate this.

In some cases, ontological categories do not fully ground, but only partially ground the modal truths of the entity in question but even in these cases they are crucial to the grounding.

We should allow for the fact that the properties an entity actually has play a role in determining what is necessary and/or possible for that entity. In other words, we should allow for a thing's nature, in the broad sense of that notion which I have called the complete sense, to play a role in determining the de re modal truths which hold concerning it. Examples of specific properties playing such a role can be found by considering the cases Kripke presents as a posteriori necessities. For instance, we might consider it a property of a specific person that they have the parents that they do and acknowledge that this property of the person plays a role in grounding the de re modal truth that it is necessary for them that they have these parents. However, although the property plays a role here, there is also a role for the category which cannot be played by the property.

First, the category determines that the thing in question is of a kind over which the relevant property is defined, i.e. a context in which it can be used with possible truth. There is a sense in which it is because the thing in question is a person/organism and not a theory or a set that the property of having a and b as parents can be true of it. The point is that the modal truths grounded by the category play a facilitating role. The fact of an entity possessing some property plays a role in determining that some de re modal statement is true of that entity, but the category plays a role in facilitating and allowing for the possession of that property by the entity in question.

Second, the category might be taken to play a further role in determining the grounding work of properties possessed by entities if ontological categories are taken to ground reuse conditions. If we take ontological categories to ground reuse conditions as I have argued previously that we should, then, when we consider the cases presented by Kripke as a posteriori necessities, there is a natural way in which we might think that the work that a property like 'having a, b, and c as members', or 'having e and f as parents', does in grounding de re modal truths is once again facilitated by the work that a category does in grounding the reuse condition for terms for things of the relevant kind and thus determining that it is, for example, a necessary condition for the identity of persons/organisms that they have the same parents or a necessary condition for the identity of sets that they have the same members.

The ontological category as core nature will not ground all modal truths we might want to take to be true of things but even those that it does not ground by itself will be cases which it partially grounds, cases to the grounding of which it is necessary.

§7

In this chapter, I drew out some consequences of my proposal to use ontological categories in place of essences as that which grounds modal truths. As I noted at the beginning of the chapter, the proposal is offered and defended as an amendment to essentialism. My position is that Fine, Hale, and others, are correct in contending that statements of possibility and necessity are true, when they are, in virtue of the natures of relevant entities. My proposal has simply been to change the interpretation of ‘nature’ as it occurs in this formulation. In this chapter, I drew out some of the consequences of doing so and I argued that they offer further support for my proposal by facilitating resolution of some counter-intuitive consequences of alternative approaches. In particular, concerning category mistakes, I argued that the use of ontological categories, as I have construed them, in place of natures, delivers the intuitive results we should aim to accommodate.

Bibliography

Beaver, D. I. & Geurts, B. (2014): 'Presupposition', *The Stanford Encyclopedia of Philosophy* (Winter 2014 Edition), Edward N. Zalta (ed.), URL = [<https://plato.stanford.edu/archives/win2014/entries/presupposition/>](https://plato.stanford.edu/archives/win2014/entries/presupposition/).

Carey, S. (2009): *The Origin of Concepts*, Oxford University Press.

Carnap, R. (1931): 'The Elimination of Metaphysics Through Logical Analysis of the Language' (A. Pap, trans.), in A.J. Ayer (ed.) *Logical Positivism*. New York: The Free Press, 1959, pp. 60-81; originally published in *Erkenntnis* 2.1 as 'Überwindung der Metaphysik durch logische Analyse der Sprache,' pp. 219-241.

Carnap, R. (1950): 'Empiricism, Semantics, and Ontology.', *Revue Internationale de Philosophie* 4: reprinted in his *Meaning and Necessity: A Study in Semantics and Modal Logic*, University of Chicago Press, (1956).

Chalmers, D.J., Manley, D & Wasserman, R. (eds.), (2009): *Metametaphysics: New Essays on the Foundations of Ontology*, Oxford University Press.

Cooper, D.E. (1974): *Presupposition*, Mouton & co Publishers.

Cumpa, J. (2011): 'Categoriality: Three Disputes Over the Structure of the World', in Javier Cumpa and Erwin Tegtmeier (eds.), *Ontological Categories*, Lancaster: Gazelle Books Services Limited.

Cumpa & Tegtmeier (eds.), (2011): *Ontological Categories*, Lancaster: Gazelle Books Services Limited.

Dummett, M. (1973/1992): *Frege; Philosophy of Language*, Duckworth.

Dummett, M. (1993): *The Seas of Language*, Oxford University Press.

Eklund, M. (2013): 'Carnap's Metaontology', *Nous* 47 (2), 229-249.

Fine, K. (1994): 'Essence and Modality', *Philosophical Perspectives* 8, (ed. Tomberlin), 1-16.

Fine, K. (1995a): 'Ontological Dependence', *Proceedings of the Aristotelian Society* 95, 269-90.

- Fine, K. (1995b): 'Senses of Essence', In *Modality, Morality and Belief*, (ed. Sinnott-Armstrong), Cambridge University Press, 53-73.
- Fine, K. (1995c): 'The logic of essence', *Journal of Philosophical Logic* 29 (6), 543-84.
- Fine, K. (2005): *Modality and Tense: Philosophical Papers*, Oxford University Press.
- Fine, K. (2005a): 'Necessity and Non-Existence', In *Modality and Tense: Philosophical Papers*, Oxford University Press, 321-55.
- Fine, K. (2009): 'The Question of Ontology', In Chalmers, D.J., Manley, D & Wasserman, R. (eds.), *Metametaphysics: New Essays on the Foundations of Ontology*, Oxford University Press, pp 157-77.
- Frege, G. (1884/2007): *Die Grundlagen der Arithmetik*, Breslau: Wilhelm Koebner, (1884); translated by Dale Jacquette as *The Foundations of Arithmetic; A Logical-Mathematical Investigation into the Concept of Number*, Longman, (2007).
- Frege, G. (1891/1980): 'Function and Concept', trans. P.T. Geach, In Geach, P. T. & Black, M. (eds), *Translations From The Philosophical Writings Of Gottlob Frege*, 3rd edn, Oxford: Blackwell, (1980), pp 21-41.
- Frege, G. (1892/1980(a)): 'Über Begriff und Gegenstand', *Vierteljahrsschrift für wissenschaftliche Philosophie* 16, (1892), 192-205; translated by P.T. Geach as 'On Concept and Object', In Geach, P. T. & Black, M. (eds), *Translations From The Philosophical Writings Of Gottlob Frege*, 3rd edn, Oxford: Blackwell, (1980), pp. 42-55.
- Frege, G. (1892/1980(b)): 'Über Sinn und Bedeutung', *Zeitschrift für Philosophie und philosophische Kritik*, 100, (1892), 25–50; translated by M. Black as 'On Sense and Meaning', In Geach, P. T. & Black, M. (eds), *Translations From The Philosophical Writings Of Gottlob Frege*, 3rd edn, Oxford: Blackwell, (1980), pp. 56-78.
- Frege, G. (1980): Geach, P. T. & Black, M. (eds), *Translations From The Philosophical Writings Of Gottlob Frege*, 3rd edn, Oxford: Blackwell.
- Frege, G., Michael Beaney (ed), (1997): *The Frege Reader*, Blackwell UK.
- Hale, B. (2013): *Necessary beings: An essay on ontology, modality, and the relations between them*, Oxford University Press.

- Hirsch, E. (2002): 'Quantifier variance and realism', *Philosophical Issues* 12 (1), 51-73.
- Horsten, L. (2010): 'Impredicative Identity Criteria', *Philosophy and Phenomenological Research* 80 (2), 411-439.
- Horwich, P. (1997): 'Implicit Definition, Analytic Truth, and A priori Knowledge', *Nous* 31 (4), 423-440.
- Kripke, S. A. (1981): *Naming and Necessity*, Blackwell Publishing.
- Kripke, S.A. (2013): *Reference and existence: The John Locke lectures*, Oxford University Press.
- Lewis, D. (1970): 'General semantics', *Synthese*, 22 (1), 18-67.
- Lewis, D. (1983): 'New work for a theory of universals' *Australasian Journal of Philosophy*, 61(4), 343-377.
- Lowe, E.J. (1989): 'What is a Criterion of Identity?', *The Philosophical Quarterly* 39 (154), 1-21.
- Lowe, E.J. (1991): 'One-Level versus Two-Level Identity Criteria', *Analysis* 51, 192-4.
- Lowe E.J. (1997): 'Objects and Criteria of Identity', In: Bob Hale and Crispin Wright (eds), *A Companion to the Philosophy of Language*, Blackwell Publishers, pp 613-633.
- Lowe, E.J. (2006): *The Four Category Ontology, a Metaphysical Foundation for Natural Science*, Oxford University Press.
- Lowe, E.J. (2009): *More Kinds of Being; A Further Study of Individuation, Identity, and the Logic of Sortal Terms*, Wiley-Blackwell.
- Lowe, E.J. (2013): *Forms of Thought*, Cambridge University Press.
- Magidor, O. (2013): *Category Mistakes*, Oxford: Oxford University Press.
- Mulligan, K. & Simons, P. & Smith, B. (1984): 'Truthmakers', *Philosophy and Phenomenological Research* 44 (3), 287-321.
- Oliver, A. (1996): 'The Metaphysics of Properties', *Mind* 105 (419), 1-80.

Price, H. (2009): 'Metaphysics after Carnap: the ghost who walks.' In David John Chalmers, David Manley & Ryan Wasserman (eds.), *Metametaphysics: New Essays on the Foundations of Ontology*. Oxford University Press.

Putnam, H. (2004): *Ethics Without Ontology*, Harvard University Press.

Quine, W.V.O. (1948): 'On what there is', *The Review of Metaphysics*, 2(5), 21-38; reprinted in his *From a Logical Point of View*, Cambridge, MA: Harvard University Press, (1953/1980).

Quine, W.V.O. (1950): Introduction to *Methods of Logic*, Cambridge MA: Harvard University Press, (1950); Reprinted in Hughes, R.I.G (ed) (1993): *A philosophical companion to first order logic*, Hackett Publishing Company, Inc.

Quine, W.V.O (1951): 'Main trends in recent philosophy: Two dogmas of empiricism', *The Philosophical Review*, 20-43; reprinted in his *From a Logical Point of View*, (1953/1980): Cambridge, MA: Harvard University Press.

Quine, W.V.O. (1951b): 'On Carnap's views on ontology' *Philosophical Studies*, 2(5): 65-72 reprinted in *The Ways of Paradox and Other Essays*, 1966, New York: Random House, 126-34.

Quine, W. V.O. (1953/1980): *From a Logical Point of View*, Harvard University Press.

Quine, W.V.O. (1960): *Word and Object*, MIT.

Russell, B. (1903): *The Principles of Mathematics*, London: Routledge.

Russell, (1905): 'On Denoting', *Mind* 14(56), 479-93.

Russell, B. (1908): 'Mathematical Logic as Based on the Theory of Types', *American Journal of Mathematics* 30 (3), 222-262.

Russell, B. (1912/1998): *the problems of philosophy*, Oxford University Press.

Ryle, G. (1938): 'Categories', *Proceedings of the Aristotelian Society*, New Series, 38, 189-206.

Ryle, G. (1949): *The Concept of Mind*, Hutchinson.

- Schaffer, J. (2009): 'On what grounds what.' In David John Chalmers, David Manley & Ryan Wasserman (eds.), *Metametaphysics: New Essays on the Foundations of Ontology*, Oxford University Press.
- Searle, J.R. (1969): *Speech Acts*, Cambridge University Press.
- Sider, T. (2011): *Writing the Book of the World*, Oxford University Press.
- Smart, J.J.C. (1953): 'A note on categories', *British Journal for the Philosophy of Science* 4 (15), 227-228.
- Sommers, F. (1963): 'Types and Ontology', *The Philosophical Review*, 72 (3), 327-63.
- Stalnaker, R. (1973): 'Presuppositions', *Journal of Philosophical Logic*, 2, 447-457.
- Strawson, P. (1950): 'On Referring', *Mind*, 59 (235), 320-344.
- Swoyer, C. & Orilia, F. (2016): 'Properties', *The Stanford Encyclopedia of Philosophy*, E.N. Zalta(ed) URL= <http://plato.stanford.edu/entries/properties/>
- Tegtmeier, E. (2011): 'Categories and Categorical Entities', in Javier Cumpa and Erwin Tegtmeier (eds.) *Ontological Categories*, Lancaster: Gazelle Books Services Limited.
- Thomasson, A. (2007): *Ordinary Objects*, Oxford University Press.
- Thomasson, A. (2015): *Ontology Made Easy*, Oxford University Press.
- van Inwagen, Peter. (2009): 'Being, Existence and Ontological Commitment' In David Chalmers, Ryan Wasserman, and David Manley (eds) *Metametaphysics: New Essays on the Foundations of Ontology*, OUP, 472-506.
- van Inwagen, P. (2014): *Existence: Essays in Ontology*, Cambridge University Press.
- Vetter, B. (2011): 'Recent Work: Modality without Possible Worlds', *Analysis* 71 (4):742-754.
- Vetter, B. (2015): *Potentiality*, Oxford University Press.
- Walton, (2000): 'Existence as Metaphor?', In: Everett & Hofweber (ed), 2000, *Empty Names, Fiction and the Puzzles of Non-existence*, CSLI Publications.
- Westerhoff, J. (2005): *Ontological Categories*, Oxford University Press.

Williams, D.C. (1997): 'On the elements of Being: I', In D.H. Mellor and Alex Oliver (eds), *Properties*, Oxford University Press, pp. 112-24. Originally printed in *Review of Metaphysics* 7, (1953): 3-18.

Williamson, T. (1990/2013): *Identity and Discrimination*, Wiley-Blackwell.

Williamson, T. (1991): 'Fregean Directions', *Analysis*, 51 (4), 194-5.

Wilson, J. (forthcoming): 'Essence and Dependence', In *Metaphysics, modality and meaning: themes from Kit Fine*, Oxford University Press available at <http://individual.utoronto.ca/jmwilson/Wilson-Essence-and-Dependence.pdf>

Wittgenstein, L. (1961/2001): *Tractatus Logico-Philosophicus*, Routledge.