Frege on syntax, ontology, and truth's pride of place

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1. Introduction

Frege's exclusive syntactic categories align one to one with his exclusive ontological categories. Proper names refer only to objects and what refers to an object is a proper name; predicates refer only to concepts and what refers to a concept is a predicate; and so on. Commentary on Frege standardly casts this alignment as a philosophical *thesis*. The alignment is standardly cast, that is to say, as a doctrine not carried by the core meanings of Frege's terminology, a commitment he could drop without radically changing what he means by such terms as 'concept' and 'proper name'. The first task of this paper, that of section 2, will be to argue that this is a mistake. There is no thesis that proper names refer only to objects; rather, to be an object is to be something to which a proper name may refer. Equally, there is no thesis that what refers to an object is a proper name; rather, to be a proper name is to be something suited to refer to an object.

So much is I think straightforward enough to see. Rather less obvious is how substantially to understand the result. The conclusion of section 2 will not be that Frege's alignment is a matter of *mere* terminology, a matter of word choice without theoretical significance. That would be obviously false. The claim will rather be that instead of representing a theory of how syntax and ontology relate, Frege's alignment is internal to his conception of what syntax and ontology are. Frege, that is to say, uses the terms 'concept', 'object', 'predicate', 'proper name' etc. in service of a joint conception of syntax and ontology under which being of a certain syntactic type is equated with – is the same thing as – referring to an entity of a corresponding ontological type. But it is not obvious how this conception should be set out. It is not obvious how to elaborate what, for Frege, the syntactic and ontological categories are such that they are so tied together. The second and harder task of this paper, that of section 3, will be to provide the needed elaboration. Key here, I shall argue, is the pride of place Frege assigns to the notion of truth. Frege's ontological categories are nothing other than the categories of the determination of truth. His linguistic categories are nothing other than the categories of the expression of truth. And given how these are *together* to be understood it is *incoherent* to suppose that they might not align.

2. A terminological divergence

2.1

In *On Concept and Object*, Frege responds to Benno Kerry's rejection of his position that, as Kerry puts it, 'the properties of being a concept and of being an object are mutually exclusive' (CP 183). Where Frege holds the distinction between concept and object to be 'absolute' (CP 183), Kerry presses that concepts can also be objects. The concept *horse*, for example, is an object; 'in fact, one of the objects which fall under the concept *concept easily attained*' (CP 184). Frege's response to this example is surprising: 'Quite so,' he writes, 'the three words 'the concept ''horse''' do designate an object, but on that very account they do not designate a concept' (CP 184). Instead of rejecting Kerry's contention that the concept *horse* is an object, Frege rejects his unspoken assumption that the concept *horse* is a concept.

The essential background to this response is an alignment by Frege of his absolute distinction between concepts and objects with a second distinction, again absolute, between proper names and predicates. Proper names refer only to objects and what refers to an object is a proper name; predicates refer only to concepts and what refers to a concept is a predicate. Given this alignment, and also Frege's position that definite descriptions such as 'the concept *horse*' are proper names, it follows that the concept *horse* is not a concept. This background is made more or less explicit by Frege, and it is something to which commentary on his paper invariably draws attention. Something which commentators have highlighted rather less, however, is that in drawing on this background, Frege repeatedly insists that Kerry's opposition issues for the most part form terminological confusion, failing therewith to be a disagreement of substance. So the paper opens with the following line:

> [Kerry's] opposition is at least partly based on a misunderstanding. … The word 'concept' is used in various ways. … It seems to me that Kerry's misunderstanding results from his unintentionally confusing his own usage of the word 'concept' with mine. This readily gives rise to contradictions, for which my usage is not to blame. (CP 182)

And as it progresses we find:

> [Kerry] is not taking the word 'concept' in my sense, and it is not in what I have laid down that the contradiction lies. But nobody can require that my mode of expression shall agree with Kerry's. (CP 185)

> If we keep it in mind that in my way of speaking expressions like 'the concept *F*' designate not concepts but objects, most of Kerry's objections already collapse. (CP 187-8)

> I do not at all dispute Kerry's right to use the words 'concept' and 'object' in his own way, if only he would respect my equal right. (CP 193)

2

Indeed, a majority of commentators on Frege's paper not only ignore this dominating feature of Frege's response but threaten to render it mysterious.

Crispin Wright explains Frege's response to Kerry's concept *horse* example as founded on his commitment to a 'Reference Principle' that 'co-referential expressions should be ... inter-substitutable *salva congruitate*' (Wright 1998: 240). More specifically, Frege is taken to respond to the suggestion that:

> if "is a horse" is to stand for the property of being a horse, well, so surely does "the property of being a horse" (Wright 1998: 240)

with:

> the crucial insistence, driven by the Reference Principle, that no abstract singular term can … co-refer with any predicate. Thus "is a horse" and "the property of being a horse" do *not* co-refer. (Wright 1998: 240)

If '… is a horse' and 'the property of being a horse' were to co-refer, then by the Reference Principle they would be inter-substitutable *salva congruitate*. But these expressions are not so inter-substitutable, and so they do not co-refer.

Tyler Burge discusses the matter with a focus on a notion of grammatical role:

> A difficulty in Frege's position did emerge when he committed himself to asserting the German analog of the sentence "The concept (or function) horse is not a concept (or function)". Since the subject term "The concept horse" has the grammatical role of a name, Frege thought that it could not stand for a concept (or function). This is deeply counterintuitive. I believe that this constitutes one of Frege's most serious mistakes. (Burge 2005: 20-1)

Frege holds that what has the grammatical role of a name cannot stand for a concept (we can call this the 'Grammatical Role Principle'). 'The concept *horse*' has the grammatical role of a name, and so it cannot stand for a concept.

It is uncontroversial that Wright's Reference Principle and Burge's Grammatical Role Principle are both correctly attributed to Frege. Indeed, each may seen as arising from Frege's insistence upon a one-to-one correspondence in reference between exclusive grammatical types and exclusive ontological types, what I am calling the Fregean alignment. What I want to query, rather, is the apparent casting by Wright and Burge of their operative principles as substantial philosophical *theses* – as proposals, that is, whose truth is not a product simply of how Frege is using his terms.[i] To a first reading, at least, the principles given as driving Frege's response to Kerry are presented not as belonging to what Frege means by such words as 'object' and 'concept expression', but as theoretical commitments he could reject

without repudiating the core content of his terminology. And in this, Burge and Wright are far from alone. According to Fraser MacBride, for example, 'Frege … argued that names can't pick out what predicates stand for … because names and predicates can't be grammatically substituted' (MacBride 2011: 307). But this stance, MacBride holds, is straightforwardly false: 'a lack of grammatical substitutability needn't betoken an absence of co-reference' (MacBride 2011: 307). Similarly, Mark Textor writes: 'The fact that Frege sticks to his thesis that functions (concepts) cannot be referred to by singular terms has counter-intuitive consequences, which have been labeled 'the concept paradox'' (Textor 2010: 128).

The idea that Frege's response to Kerry has its source in some such substantial thesis is in significant tension, however, with Frege's text. For once Frege's response is so understood, then Kerry may be interpreted – indeed naturally *is* interpreted – as rejecting the operative Fregean thesis. Kerry will hold against Frege, for example, that a grammatical proper name *can* stand for an ontological concept, and so *can* co-refer with a grammatical predicate. And as we have seen in passages cited above, this is precisely not how Frege himself presents Kerry, whose opposition he repeatedly casts as issuing from terminological confusion. Are we to read Frege, one therefore wonders, as ducking the issue? Should we take his talk of terminological confusion as cover for a desire not to engage the substantially opposed interlocutor, preferring instead to cast Kerry in less threatening light? This interpretative option is on its face unattractive. More than that, however, it is inadequate to the text in which Frege repeatedly insinuates that his reaction to Kerry is not so narrowly directed. As Frege presents to his reader, it is not merely that Kerry's particular attempt to oppose him involves a failure to share in his use of the words 'concept' and 'object'. Rather, Frege implies that *any* suggestion that a first-order concept might fall under another such concept, *any* suggestion that a proper name might co-refer with a predicate, *could only* issue from such a failure. Are we to suppose, one therefore wonders, that is Frege is blind to the nature of his own theorizing? Or might his reaction be simply disingenuous?[ii]

2.2

Let's reapproach Frege's paper asking not what doctrine is driving his rebuttal of Kerry but after the topography, as it were, of his terminology. How does Frege use the words 'concept', 'object', 'proper name' etc. such that Kerry's attempted opposition shows him not to share in that usage?

Most straightforwardly, Frege takes Kerry's suggestion that an entity may be at once a concept and an object to mark a terminological divergence. 'Concept' and 'object' are not used by Frege to indicate characters which could be had by one and the same entity; they indicate, rather, distinct basic ontological categories. 'Objects and concepts,' he writes, 'are fundamentally different' (PW 120), and this insistence finds expression in the second half of his immediate response to Kerry's concept *horse* example:

> Quite so; the three words 'the concept 'horse'' do designate an object, *but on that very account they do not designate a concept, as I am using the word.* (CP 184, italics added)

4

A Fregean object could no more be at once a Fregean concept than a Russellian particular could be at once a Russellian universal.

This insistence will of course not silence a Kerrian opponent who can readily take exclusivity on board by calling something an object only if it is not something they would earlier also have called a concept. Such a move would not affect Kerry's stance that certain first order concepts (e.g. the concept *horse*) may fall under certain other such concepts (e.g. the concept *concept easily attained*). Or viewing matters in a linguistic context, the move does not touch Kerry's implicit contention that certain proper names (e.g. 'the concept *horse*') refer to concepts. There will of course be shifts elsewhere. In particular the claim that some expressions which are not proper names (e.g. '… is a horse') refer to objects will be replaced by a claim that some proper names (e.g. 'the concept *horse*') refer to entities which are not objects. But – and this may seem the central point – Kerry can continue to press his opposition to Frege as a claim that Frege's strict alignment between the ontological and linguistic categories is mistaken.

So let's consider that alignment. A preliminary insight is available into Frege's attitude here by examining his first reaction to Kerry. Kerry is cited at the start of Frege's paper as asserting that 'the properties of being a concept and of being an object' are not 'mutually exclusive' (CP 183), and given that concepts can be named by predicates, this implies that certain predicates (e.g. '… is a horse') name objects. Against this implication, Frege immediately counters that 'a name of an object, a proper name, is quite incapable of being used as a grammatical predicate' (CP 183) – a position which is then backed up by an argument that the proper name 'Alexander the Great' is not a predicate in the sentence 'NN is Alexander the Great'. At first glance this reaction by Frege can feel misplaced. For in committing to a claim that certain predicates name objects, Kerry was surely not intending to commit himself to a claim that an expression could be at once a predicate and a proper name. (Kerry's anti-Fregean position, one naturally takes it, is entirely unaffected by Frege's lengthy insistence that in the sentence 'NN is Alexander the Great' what is predicated of NN is not Alexander the Great but *none other than Alexander the Great*.) That consequence would follow only if naming an object is a sufficient condition for being a proper name, something Kerry would surely reject. Frege's reaction can thus appear to show a surprising blindness to the possibility of rejecting this condition, and with that a blindness to the kind of opposition Kerry is naturally taken to be pressing. On second look, however, this appearance falls away. For in writing 'a name of an object, a proper name, is quite incapable …' Frege would seem to *equate* naming an object with being a proper name. And if such an equation is in operation a commitment that certain predicates name objects is indeed, as Frege unblinkingly assumes, a commitment that certain predicates are proper names.

The same equation is more explicit elsewhere. A few pages on in *On Concept and Object* Frege gives the following short footnote:

> I call anything a proper name if it is a sign for an object. (CP 186)

And he is offering here, I take it, a species of definition. The sentence does not express a claim that it is sufficient for a sign's being a proper name, *on a prior understanding of that*, that it refer to an object. It is, rather, an explanation by Frege of his use of the term 'proper name': he is using this term to mean, more or less, 'sign for an object'. 'By a proper name,' he later writes, 'I understand the sign of an object' (PW 178). And again in the first substantial paragraph under the title 'Definitions' in *Grundgesetze* we find:

> I ... call a *proper name*, or *name of an object*, a sign, whether simple or complex, that is intended to refer to an object, but not a sign that merely indicates an object. (BL §26)

And then:

> Names of functions I call for short *function names*. (BL §26)

It seems that by 'proper name' Frege means, more or less, 'sign referring to an object'. By 'predicate' or 'concept expression', he means 'sign referring to a concept'.

Just as a rejection of the exclusivity of the categories of concept and object would involve a rejection of Fregean terminology, so too, it thus seems, would a rejection of Frege's alignment between the linguistic and ontological categories. The notion of a Fregean proper name is that of a name of a Fregean object. Once again, though, such terminological moves will not put Kerry out of business. For accepting that 'object' and 'concept' speak of disjoint ontological categories, and running also with Frege's terminological ties between 'proper name' and 'object' and between 'predicate' and 'concept', Kerry's position against Frege will become that the expression 'the concept *horse*' refers not to an object but to a concept, and so is not a proper name but a predicate. Frege maintains that 'the concept horse' is a proper name, a name of an object; against this, the newly formulated position will be that this expression is a predicate, a name of a concept. Now this stance may sound decidedly odd. But if so this is not, one might think, Kerry's fault. The reason for the oddness is that following Frege's stipulations, our imagined Kerry has been drawn into using the word 'predicate' in a manner divorced from considerations of grammar. The word 'predicate' standardly indicates an essentially grammatical type to which 'the concept *horse*' does not belong. But if Kerry is to run with Frege's terminological connections – and no doubt he would prefer not to – then his ontological stance that certain first order concepts can fall under certain other such concepts implies that the word 'predicate' does not speak of a grammatical type.

Frege would of course find Kerry's newly reformulated opposition no more acceptable than the previous versions. What is crucial for our interests, though, is that he would find the suggestion that 'the concept *horse*' is a predicate unacceptable *on much the same grounds that we do*: on the grounds, that is, that the term 'predicate' speaks of a grammatical type and the expression 'the concept *horse*' is not of that type. Transparently, and throughout his work, Frege uses his terms 'proper name' and 'concept expression' to

speak of essentially grammatical types, of types such that two expressions are of the same type if, and only if, they are intersubstitutable everywhere *salva congruitate*. And grammatically the expression 'the concept *horse*' is not a Fregean predicate but a Fregean proper name; these words are intersubstitutable not with '… is a horse' but with 'Alexander the Great'. So what is going on? How can it be that this new formulation of Kerry's opposed stance, arrived at following Frege's own terminological rulings, is again ruled out on terminological grounds?

Well, the broad answer to this question is not hard to see. If Frege's category of proper name is an essentially syntactic category, and if Frege is prepared to define that category as the category of signs referring to objects, then he must hold that to be intersubstitutable *salva congruitate* with such expressions as 'Alexander the Great' – to be a syntactic proper name – *is* to refer to an object. These two are one and the same. More generally, Frege must be deploying a conception of syntax and ontology such that to be of a certain syntactic type *is* to refer to an entity of a corresponding ontological type. And so indeed we find, again in *On Concept and Object*:

> The words 'the concept *square root of 4*' have an essentially different behaviour, as regards possible substitutions, from the words 'square root of 4' in our original sentence [– the sentence 'There is at least one square root of 4' –]; *i.e. the referents of the two phrases are essentially different.* (CP 189, italics added)

These two expressions – one proper name, one concept expression – have essentially different possibilities of substitution in propositions. *That is – das heißt –* their referents are different in essential ontological kind.

We have, then, a first-pass answer to our question above of what Frege's terminology is such that Kerry's complaints show him not to share in it. Unlike Kerry, and indeed unlike anyone who would formulate a Kerrian opposition, Frege uses the terms 'concept', 'object', 'concept expression' and 'proper name' in service of a conception of syntax and ontology within which being of a certain syntactic type is equated with referring to an entity of a corresponding ontological type.[iii]

2.3

Let's be clear what this result is, and what it is not.

Kerry's complaint, as Frege sees it, involves a failure to share in his use of the word 'concept'. There is a divergence, or confusion, of terminology. There is no suggestion in Frege's paper, however, that his disagreement with Kerry is *merely* terminological. The case is not one of two philosophers having the same material in view, but making different choices for its description. So much, I take it, is completely obvious. There is nothing trivial, or 'merely stipulative', about Frege's alignment. The divergence of terminology reflects, rather, a divergence in *topic*: Kerry does not have Frege's topic in (proper) view. This failure on Kerry's part is explicitly noted in the paper's second paragraph, where

Frege contrasts his own 'purely logical' use of the word 'concept' with Kerry's at least partially 'psychological' use (CP 182). And Frege's charge here against Kerry, we may note, is not founded on an examination of the details of his text. Frege doesn't conclude that Kerry's use of the word 'concept' is at least partially psychological on the basis of noting, say, that Kerry talks of a concept as something 'attained' (CP 184). Rather, Frege takes it to be sufficient for Kerry not to share in his logical use, for Kerry not to have in view his logical categories, that he questions a category alignment. It is shown by Kerry's wanting there to be 'concepts occurring as objects', or 'proper names referring to concepts', that he has departed from Frege's field.

To repeat, then, it is not a thesis within Frege's logical field that what a proper name refers to is an object, or that what refers to an object is a proper name, something one might query and reject without changing the topic. And nor, or course, is it a matter of mere terminological decision within the representation of that field. Rather, the alignment belongs to the field's essential content. This is our result so far. It should be clear, however, that this result represents only the beginning of serious investigation. Our 'first-pass answer' to the question of Frege's terminology is nothing more than the setting of a frame. How, we need to know, does the alignment belong to the field's essential content? What is Frege's conception of syntax and ontology such that being of a certain syntactic type is the same thing as referring to a certain ontological type? The task of the next section, and the paper's main task, will be to begin, at least, to develop an answer to this question. Let's close the current section with a very brief indication of how the answer will proceed.

If Frege's alignment is not to be a philosophical thesis then there must for Frege be a certain *unity* to syntax and ontology. If syntax and ontology were each understood in separation from the other, if syntax is *this*, and ontology *that*, then that the two should align in a certain way would not be a matter internal to their basic natures. Seeking then to avoid two separate understandings, a natural idea would be to take one side as prior and understand the other only subsequently and in terms of the first. So, it might be suggested that as Frege understands ontology, this is a mere projection from autonomous syntax. Where the notion of proper name is understood without appeal to that of object, the idea of an object has no substance separate from that of a proper name.[iv] Alternatively, one might think that as Frege conceives of syntax, this is constituted simply as a reflection of autonomous ontology. The notion of object is given without appeal to syntax, and to use a sign as a proper name means to use it to refer to an object. A longer version of this paper would spend time setting out and then evaluating – indeed rejecting – such *prima facie* possibilities.[v] But there is not space here for such discussion. Rather, we shall have to pass directly to our preferred alternative. This alternative will reject any prioritizing move of ontology over syntax, or *vice versa*. Instead, the Fregean alignment will be seen as a product of the pride of place Frege assigns to the notion of *truth*. What unifies the two sides of Fregean syntax and ontology is the notion of truth, a notion whose unpacking will involve a simultaneous setting out of both syntax and ontology. Neither side of the syntax-ontology pair has substance independent of truth, and so neither

side has substance independent of the other – substance on the basis of which the alignment of their categories might become a philosophical thesis.

3. The expression of a truth condition

3.1
Let's begin with the relation between thought and judgment. Frege writes:

> What is distinctive about my conception of logic is that I begin by giving pride of place to the content of the word 'true', and then immediately go on to introduce a thought as that to which the question 'Is it true?' is in principle applicable. (PW 253)

Thoughts, for Frege, are the kind of things to be true or false. One might read this introduction simply as a singling out by Frege of a class of items in which he is interested: he is interested in thoughts, and one way to identify a thought is as something which is either true or false. This obviously mistaken reading ignores, however, the role signaled for truth in the first half of the sentence. Keeping the first half of the sentence in view, it is clear that Frege is introducing his *notion* of a thought as the *notion of something true or false*, as the notion of a truth or falsehood. And the notion of a truth or falsehood, I want to urge, is the notion of a *judgeable*.

One way to take a grip on the idea that the Fregean notion of a thought is that of a judgeable is to understand thoughts as truth conditions, for a truth condition is precisely a truth condition of a possible judgement, precisely something to be judged. And for *this* – for thoughts as truth conditions – we may consider the following key passage of *Grundgesetze*:

> Every such name of a truth-value expresses a sense, a thought. For owing to our stipulations, it is determined under which conditions it refers to the True. The sense of this name, the thought, is: that these conditions are fulfilled. (BL §32)

First here note Frege's commitment to an equation between the thought that p and the thought that the condition that p obtains. 'Jack loves Jill' is true if, and only if, Jack loves Jill; it has as its truth condition that Jack loves Jill. The sense of 'Jack loves Jill', Frege thus commits, is that the condition that Jack loves Jill obtains. But the sense of 'Jack loves Jill' is equally, of course, that Jack loves Jill. So these two are one and the same. (In general, the thought that p = the thought that the truth condition that p obtains.) This equation can be made sense of, however, only by seeing Frege as asserting the notion of a thought to be that of a truth condition. One could try to read the equation as dominated by its right hand side, suggesting that talk of the thought that p is to be elaborated as talk of the thought that the condition that

p obtains. But this gives an obvious regress. Alternatively, with the left hand side dominant, the equation presses that there is no substance to talk of truth conditions and their obtaining. In the sentence '*S* expresses that the condition that *p* obtains', the words 'the condition that ... obtains' is empty, with the content *S* is said to express – simply that *p* – of a kind to be understood without such vacuous twiddles. Such a suggestion makes no sense, however, as an interpretation of this passage in Frege. The third and only remaining option is to read someone offering this equation as pressing that the content that *p* on its left hand side is precisely the content of a truth condition, and maintaining with this that to say that such a content obtains just is to say that content. On this reading, Frege's assertion that what a sentence of his script expresses is that its truth conditions are fulfilled is the assertion that what such a sentence expresses is the condition of its truth.

The identification in play here between saying that a condition obtains and giving voice to (saying) that condition recalls, of course, Frege's famous claim that '[i]f I assert 'It is true that sea-water is salt', I assert the same thing as if I assert 'Sea-water is salt'' (PW 251). And the explanation is the same in both cases, which are indeed one and the same. Truth, or obtaining, can disappear inside the content only because that content itself already contains these notions: it is already a truth or falsity, a truth condition. Frege's famous claim thus provides by itself a second consolidation of the understanding of the notion of a Fregean thought as a notion of a judgeable: it is because it is internal to a Fregean thought that it may be judged that one adds nothing to it by ascribing truth, or being a fact, or obtaining etc.

3.2

What can be judged can also be communicated: one can say what one judges. Indeed, a truth condition is as much of a possible saying as it is of a possible judgment; sentences as much as beliefs are true and false. Amongst sayings, however, Frege is concerned to focus on a particular kind, namely those in which the content is *expressed*. So the early Frege writes in explanation of his concept script:

> Right from the start I had in mind the *expression of a content*. What I am striving after is a *lingua characterica* in the first instance for mathematics, not a calculus restricted to pure logic. But the content is to be rendered more exactly than is done by verbal language. For that leaves a great deal to guesswork, even if only of the most elementary kind. There is only an imperfect correspondence between the way words are concatenated and the structure of the concepts. The words 'lifeboat' and 'deathbed' are similarly constructed though the logical relations of the constituents are different. So the latter isn't expressed at all, but is left to guesswork. Speech often only indicates by inessential marks or by imagery what a concept-script should spell out in full. (PW 12-13)

In his script, Frege holds, contents are laid out in such a way that understanding the symbol's parts and seeing how they combine is sufficient for understanding the whole; no additional guesswork, however

trivial, is needed to arrive at the symbol's content. This very often does not happen in natural language. Natural language sentences very often, perhaps even normally, do not express their contents.

The notion of expression continues, with modification of course, into the later Frege. Indeed, if we look again at the above passage from *Grundgesetze* 32, we can see that it is concerned in the first instance with just this, echoing the early passage just cited. Due to the stipulations Frege has made in setting up his script, stipulations which mean it is sufficient for understanding its sentences that one understand their parts and construction, every sentence thereof not only *has* a truth condition, the condition for the sentence to refer to the True, it furthermore *expresses* its truth condition. Now Frege implicitly holds that, even though we very often do not in natural language express the propositional contents we judge and communicate, all such contents can be expressed. Any content could be formulated in a concept script. Indeed, I want now to claim that Frege holds a judgeable content to be *as such* an expressible, that it belongs to Frege's idea of a truth condition that it may be expressed.

Approaching this claim in the context of the later Frege, we need briefly to consider the general idea of sense in relation to reference. So: a symbol's sense, Frege offers, is the mode of determination of, or arriving at, its referent (PW 85, c.f. CN §8); it is the way in which its referent is fixed, the means or process by which its referent is fixed, the condition for something to be its referent. For simple proper names this is straightforward: the sense of 'NN' is the condition of being NN. The condition something must meet to be the referent of 'Hesperus' is that of being Hesperus – 'Hesperus' refers to Hesperus *as Hesperus* – a condition one might look to distinguish from other related conditions by mentioning a certain time of day. The same goes, of course, for complex proper names: the condition something must meet to be the referent of 'the capital of Norway' is that it be the capital of Norway. Importantly, though, simplicity and complexity belong here not just to the names but also to their senses. The condition that something be Hesperus is not constructed in any way out of other conditions; the determination of the referent of 'Hesperus' is not a complex matter involving other such determinations. For 'the capital of Norway', however, the situation is different. The phrase 'the capital of Norway' divides into 'Norway' and 'the capital of …', and for Frege this means that its referent is determined via the determination of an entity as being Norway and an entity as being that which, given an entity, renders its capital. The referent of 'the capital of Norway' is determined as the entity delivered by what is fixed by the sense of 'the capital of …' for the argument fixed by the sense of 'Norway'. In this way, the sense of 'the capital of Norway' is a complex condition involving as sub-conditions the senses of the symbol's parts. And the same goes, of course, for complex symbols more generally, including sentences. Complexity in a sentence corresponds to complexity in the determination of its referent, complexity in the condition for something to be its referent, and this is complexity in the condition for its referent to be the True. So Frege writes, again in *Grundgesetze* 32 that 'if a name is part of the name of a truth-value, then the sense of the former name is part of the thought expressed by the latter'.

We can see in this the essential expressibility of thoughts, and indeed of complex sense more generally. The basic idea of expression, to be clear, is not that of its being sufficient for grasping a

symbol's sense that one grasp that of its parts and their syntactic construction. For a start, this represents only a necessary condition of expression: if a simple sign 'J' has the sense of 'Jack's father', then whilst 'J' does not express its sense, understanding 'J's parts and construction is trivially sufficient for grasping that sense. The core notion – for now – of expression which entails but is not entailed by this sufficiency condition for understanding is rather that of a full, or perfect, 'correspondence between the way words are concatenated and the structure of the concepts' (PW 12-13). And it is a view on *this* that is available through the idea that structure in a symbol means structure in the determination of its referent, with this being, precisely, structure in its sense. This idea gives us both that if a symbol is structured then its sense is correspondingly structured, and also, crucially, a view of what simplicity and complexity in sense is such that sense complexity is the kind of thing to be set out language. If an entity is referred to as Jack's father, or as the mother of Jill's housemate, or as the thing between Jack and Jill, then a symbol is possible, e.g. 'Father(Jack)' or 'Mother(Housemate(Jill))' or 'Between(Jack, Jill)', which not only has that sense but further lays it out such that there is a perfect 'correspondence between the way words are concatenated and the structure of the concepts' (PW 12-13). Indeed, we can see here the force of the early Frege's speaking of his script as one in which a content is 'not just indicated but constructed out of its constituents' (PW 35), as one 'that compounds a concept out of its constituents' (PW 9), and so of contents as the kinds of things to be *built*.[vi] In putting together the expression of a sense from basic linguistic elements one puts together a route to a referent; in constructing 'Father(Jack)' from 'Father(…)' and 'Jack' one constructs, from a route to a certain object and a route to a certain function, a complex route to an object, namely that of being Jack's father. A complex sense is precisely the kind of thing so to be constructed.

Two reminders may be in order in digesting this essential expressibility of content, both of which press that Frege's theorising here does not draw on, and is not responsible to, anything external. First, the position that senses are expressible is not a thesis to be justified against some theoretically prior (perhaps even pre-theoretical) notion of reference. There is no given notion of reference such that Frege needs to verify that if a term so refers then the way it refers, the way in which its referent is fixed, can be set out. Rather, the expressibility of sense is internal to what Frege means by reference: if it were not then it would not be internal to the modes of such reference, to sense.[vii] Second, and crucially, we need to be clear that there is no prior notion of symbol structure being spoken of in the idea that structure in a symbol implies structure in its sense. Rather, it is 'sense-expressing-structure' in a symbol that means structure in its sense. (Again: by a *symbol* here we mean the expression of a sense, and so by a symbol's structure we mean the structure in which its sense is expressed.) It is as the expression of a sense that the division of 'The capital of Norway' into 'Norway' and 'The capital of…' is a division in the determination of its referent and so a division in its sense. To say that the symbol so divides *is to say that* it is by that division that its referent is determined.

3.3

Let's consider now what might look like an anomaly in Frege's account. A symbol's sense, we have in general, is the condition for something to be its referent. But in the case of sentences this alters to the idea that a sentence's sense, the thought it expresses (or merely indicates), is the condition for its referent to be a particular entity, namely the True. This would indeed be an obvious and obviously intolerable anomaly if the position at the level of sentences were a mere instance of the more general view. But it is not. Rather, the general view is to be understood only in relation to this instance, the case of thought. Thus Frege's description of what is distinctive about his conception of logic runs in full:

> What is distinctive about my conception of logic is that I begin by giving pride of place to the content of the word 'true', and then immediately go on to introduce a thought as that to which the question 'Is it true?' is in principle applicable. So I do not begin with concepts and put them together to form a thought or judgement; I come by the parts of a thought by analyzing the thought. (PW 253)

I want to focus on the word 'So'. It is a consequence, Frege asserts, of his beginning with truth and introducing a thought as that to which the question 'Is it true?' has application, that the parts of a thought are not arrived at other that through the analysis of thought.

This consequence, or rather that it is a consequence, reveals the deep or thoroughgoing way in which Frege understands thoughts as truths or falsehoods. The early Russell took truth to be indefinable (Russell 1904b: 524) and understood truth bearers, what he called propositions, to be essentially such: they are, as truths or falsehoods, to have a 'special and apparently indefinable kind of unity' (Russell 1904a: 210). But no conclusion was drawn that a proposition's parts are not arrived at other than through the analysis of propositions. So whence Frege's conclusion? Well, Frege's idea here is that a thought would have an understanding other than as a truth condition if its parts were understood other than as possible parts of truth conditions. Even if a thought's mode of combination connects essentially with truth, if the parts arrive from elsewhere, then there will be substance to the whole other than that of a truth condition. And just this is what Frege is set against. What is distinctive of Frege's conception of logic is that no substance arrives into his theorising separately from the notion of truth; his theorising is in this sense nothing other than an *unpacking* of the notion of truth. So in particular no elaboration of his notion of a thought can be in view other than its unpacking as the notion of a truth or falsehood. And this means that the parts of a thought cannot be understood other than as such. What a thought part is, essentially and from the start, is a possible part of thoughts.

This stance obviously excludes that thought parts fall into types given independently of the parthood roles they play in thoughts. It is perhaps less obvious, however, that Frege is also committed here with his priority of truth to the position that a thought parthood role – the way in which a particular sense element appears in a particular thought – is not internally understood other than as a role of a unique, particular sense type. Why? Well, because if such a role had such an understanding, an

understanding independent of any particular sense type, then the sense types would equally be given independently of the parthood roles. To think of something playing a role in a Fregean thought is to think of something of a particular kind playing that role. And so if having the role in view does not mean having in view also that particular kind, then the kind must arrive from elsewhere, from the role player itself in separation from the role it is there playing. But this is precisely what Frege is set against: a thought part has no nature other than that of a role player in thoughts. Now one might complain that this reasoning is a little quick. Specifically, one might suggest that when making sense of the idea of a thought element playing some role, an appeal to the element's type in separation from the role in view does not (immediately) amount to an appeal to its type in separation from its role playing profile, for that profile may involve a variety of different roles. But this complaint is readily deflected, for if, as is being supposed, roles are given independently of types, then the idea of a single element playing different roles itself depends upon an idea of the element in separation from its nature as a role player. If roles are independent of types, then identifying the same entity across different roles – this entity here is the same as that entity there – means deploying an idea of the entity in itself, an idea distinct from that simply of a role player. If there is no nature and so no entity to hold on to independently of the roles in view, then sense can be made of one and the same entity playing different roles only if it is internal to those roles that they are roles of the same type, and so only if roles are not given independently of types.

To repeat, then, the pride of place Frege accords to truth entails that the roles played by elements of his truth conditions are not understood other than as roles of unique, particular sense types. One thing to note with this is its consequence that Frege's notion of expression goes beyond that of a perfect correspondence between the structure of a sentence and that of the thought it expresses. For in the expression of a thought, we now have that the thought really is *fully given*: there is no substance to the truth condition beyond that discernible in its expression, for that expression, in giving the roles played by the thought's parts, gives us their basic nature. Where for Russell a sentence '*Fa*' does not in its syntax lay out the full ontology of the fact expressed – in particular it does not lay out whether *a* is a particular or a universal – the Fregean expression of a thought leaves nothing of the thought's character unrevealed. And to be clear, the Russellian sentence '*Fa*' would not in the going sense lay out the fact's full ontology even if Russell held – as he does in 1918 (Russell 1956: 206) – that only particulars can appear in facts as term, that universals can appear only as relating relations. For the question for Russell of whether universals can appear as term is a matter independent of his notion of combination as term and unary relation. It is not *incoherent* for Russell, even in 1918, to suppose that entities of different basic types can appear in facts as term. If only one kind of entity can play the Russellian term role, this does not belong to the role itself but is a further thesis on the part of Russell, one he sometimes holds and sometimes rejects. For Frege, by contrast, it precisely is incoherent to suppose that sense elements of different kinds might play the same role in thoughts. And so where the expression of a thought gives us, through its structure, the thought's mode of combination, it *thereby* gives us – without the need for any additional

premise – the full nature of that thought. The expression of a Fregean thought provides that thought's mode of combination, and from here there can be no further question as to its constituents' types.

A second thing to note is that the reasoning just run through, if repeated with the early Frege, would give us the alignment we are after between the ontological categories, here categories of the elements of judgeable contents, and the logical categories, categories of the expression of judgeable contents. In brief, the line will be that if, as in Russell, symbols of the same type could have contents of different types, then propositions of the same structure would be able to have contents with different component types, and given what has just been said this means contents of different structures. But such a result is incompatible with Frege's notion of a proposition under which the structure of a propositional content is given by that of its expression.

Spelling this thought out slightly more thoroughly, we should first recall that a proposition is essentially the expression of a content, and so that propositional structure is essentially *expressing structure*, structure through which content is expressed. Second, we add the partner idea that that a thought (or more broadly a judgeable content) is essentially an *expressible*. And together, we then note, these two yield a species of *identity* between a proposition's structure and that of its content: the expressing structure provides *in itself* the structure of the content expressed. Expressing a content, Frege holds, is not a matter of latching on in a certain way to something given separately from the possibility of so latching on. If it were, then a distinction and comparison would indeed be possible between the way one is latching on and the nature of the item being latched on to, between the structure of the act of latching, as it were, and the structure of its object. With a content understood precisely as an expressible, however, no such distinction can be made, and this means no substantial contrast is possible between the structure of the expressing and that of what is expressed. Rather, the structure of a symbol and that of its content are internally related such that the one is essentially the structure of an expressing and the other essentially the structure of a content such an expressing can express. (As Wittgenstein later puts it, the picture represents that its objects are *so* combined (Wittgenstein 1922 §2.15).) From here, Frege's priority of truth then delivers a strict alignment of types between propositional elements and content elements. The priority of truth entails that a propositional content's structure both gives, and is given by, the types of its components. And in this context, the possibility of symbols of the same type having meanings of different types will imply that there is material to a propositional content's structure separate from that of a proposition representing that content. Conversely, the possibility of symbols of different types having meanings of the same type implies material to a proposition's structure separate from that of its content. But neither of these is coherent for Frege.

As said, this reasoning will deliver the alignment we are after for the early Frege. For the later Frege, however, we need to speak not only of propositional content, or sense, but also of reference. Nonetheless one can be immediately optimistic that matters will come through with both levels in play, for Frege presents them as the result of a split in his earlier notion of content (BL preface X). And there is indeed a ready thought to carry us here, an idea that Fregean thoughts can be nothing other than truth

conditions only because their parts are conditions for fixing as referent what are nothing other than elements of the determination of truth. Let's now set this thought out.

3.4

A judgment's truth turns on whether certain elements from the realm of reference combine to deliver the True or the False. In this minimal sense, referents are what determine truth, and so their categories are the categories of the determination of truth. A stronger sense for this claim is available, however, under which the categories of referent are not understood other than as the categories through which truth is determined. And in parallel to what has been argued just above, this stronger sense will entail that a combinatorial role in the determination of truth is not understood other than as a combinatorial role of a unique, particular entity type. To suppose that entities of different types might play the same role in the determination of the truth of two different judgments (e.g. that the truth of this judgment depends upon whether a certain object falls under a concept, and that the truth of that judgment depends upon whether a certain concept falls under a concept) involves committing to a notion of an entity with a basic nature separate from, and grounding, its role playing profile, and so rejecting that an entity's nature *consists in* the ways in which it serves, with other entities, to deliver truth and falsehood. Frege, I'm unsurprisingly going to press, is committed by his giving pride of place to truth to the stronger sense of categories of reference as categories of the determination of truth. If substance independent of truth is allowed in at the level of reference, this substance will show its head also at the level of sense, and so thoughts will be, as for Frege they must not be, something other than truth conditions.

To see how this is so, let's note two complementary problems arising for the opposed idea, the idea that whilst the entities by which truth is determined are in themselves ignorant of this role, nonetheless the modes of determination of such entities in thought and language are concerned essentially with truth. First, one can point out that it is an immediate consequence of this position that an entity is never presented in thought or language merely 'in itself' or 'as in its basic kind'. And this might seem mysterious. Why, one wonders, does truth always insinuate itself? Indeed one can wonder, pushing harder, how the idea that truth always insinuates itself can be understood. What are we to do with an idea that the basic nature of entities is invisible to us, that entities are never presented merely in themselves but always in guise of something grounded in that nature? Second, one can wonder how the instillation of truth is to work: if truth is no part of the intrinsic nature of what is presented in language and thought, then *how* do such presentations come to be concerned essentially with truth? To present Jack *as Jack*, or indeed in any other way one might mention, is essentially to present him as a truth determiner of a certain kind, but how does this happen if truth is external to Jack's nature? One could offer something like this: to present Jack as Jack is to present him as the entity whose falling under a concept F determines as true the thought that Jack is F. But the offering is immediately circular – the thought that Jack is F involves a presentation of Jack as Jack. And this circularity illustrates, I take it, the general problem. To understand certain presentations as presentations not simply of entities as they are in themselves but of entities as

playing certain roles, here roles in the determination of truth, we need an idea of how such presentations function. But meeting this demand would mean being able to think of the entities in themselves, telling a story about how the presentations clothe such things in a particular way, cast them in particular roles. And this is something we cannot do, for thought can bring entities into view only as already clothed in truth.

The position to which one is driven in holding that entities of reference fall into kinds theoretically separate from and grounding their determination of truth in the Fregean manners, rather than into kinds that consist in their so determining truth, is that the modes of determination of such entities in language and thought are *not* essentially concerned with truth. Rather, truth comes in, as it does for the early Russell, in the manner in which those modes, or presentations, combine. In the expression of a thought, there are two separate things going on. On the one hand, and in ignorance of concerns with truth, entities are being determined. And on the other it is being laid out, through the sentence's grammar, how those entities are to combine for the sentence to be true. But as we have argued enough above, this picture is profoundly unFregean: it involves a violation of his central theoretical tenet of the priority of truth. What that tenet entails at the level of reference, then, is that the 'ontological categories' are not understood other than as the categories of the determination of truth, that they are from the start *logical* categories. The presentation in thought and language of entities as truth determiners is a presentation of them in their basic character; there can be, for Frege, no entity in itself standing behind and grounding such determination. In the expression of a thought, then, *really* nothing is left unseen: the logical types of the referents is as fully on display as that of the senses.

3.5

We have arrived now at an understanding of the Fregean conception of syntax and ontology under which being of a certain syntactic type is equated with referring to an entity of a corresponding ontological type. A proper name (/predicate) is precisely a possible part of a certain kind of expressions of truth conditions; that is, it is a linguistic element whose sense is precisely a possible part of a correlated kind of truth conditions; that is, it is a linguistic element whose sense determines as its referent precisely a role player of a correlated kind in the determination of truth, viz. a Fregean object (/concept).

This position involves taking a stance against certain more or less familiar conceptions of language and the world. For language, we have rejected that Frege's categories belong to an account of some empirically given phenomenon. Frege's concern throughout his career is rather with 'sentences proper', that is with the expression of judgeables – 'I call any sentence a sentence proper if it expresses a thought' (CP 392) – and the sentences of natural language do not, by and large, express the conditions upon whose obtaining their truth depends. Second for language, Frege is not concerned to provide an account of something 'up to us': the expression of a thought is essentially just that, and whilst the nature of thought is not something which explains expressibility, nor is it, as Frege never tires of saying, anything dependent upon us. Logical syntax is not 'ours'. And third, he is not concerned to provide an account of

something 'autonomous' in the sense of something constitutionally independent of the things it is about, the entities of reference. A part of a certain kind of the expression of a truth condition is precisely something which determines as its referent an entity of a certain kind of the determination of truth. Turning on the other hand from language to 'the world' – to, that is, the realm of reference – we can comment that this too does not constitute an autonomous realm. Rather, the entities of reference are, from the start, entities in whose combinations propositional expressibles – truth conditions – obtain and fail to obtain.

This picture simply doesn't allow a question of whether this proper name and this predicate, say, might co-refer. The possibility of that question depends upon substance arriving to one or both of the sets of categories from outside the notion of truth, substance which would allow a contrast between the linguistic categories on the one hand and the ontological on the other. But it governs Frege's theorising that no such substance arrives. There is no contrast available between the linguistic and the ontological; rather the categories on both sides are *logical*, two aspects of a single unpacking of a single notion of truth.[viii]

References

Works by Frege

CP   *Collected Papers* 1984 Oxford: Blackwell

PW   *Posthumous Writings* 1979 Oxford: Blackwell

BL   *Basic Laws of Arithmetic* 2013 Oxford: OUP

CN   *Conceptual Notation and Related Articles* 1972 Oxford: OUP

Burge, T. (2005), *Truth, Thought, Reason.* Oxford: OUP.

Hale, B. and Wright, C. (2012), 'Horse Sense', *Journal of Philosophy*, 109: 85-131.

Klement, K. (2004), 'Putting Form before Function: Logical Grammar in Frege, Russell and Wittgenstein', *Philosophers' Imprint*, 4(2): 1-47.

MacBride, F. (2011), 'Impure Reference: A way around the Concept *Horse* Paradox', *Philosophical Perspectives*, 25: 297-312.

Ricketts, T. (1985), 'Frege, The *Tractatus*, and the Logocentric Predicament', *Nous*, 19(1): 3-15.

Ricketts, T. (1986), 'Objectivity and Objecthood: Frege's Metaphysics of Judgment', in L. Haaparanta and J. Hintikka (eds.) *Frege Synthesized.* Dordrecht: Kluwer.

Russell, B. (1904a), 'Meinong's theory of Complexes and Assumptions I' *Mind*, 13(50): 204-219.

Russell, B. (1904b), 'Meinong's theory of Complexes and Assumptions III' *Mind*, 13(52): 509-524.

Russell, B. (1956), *Logic and Knowledge.* London: Allen and Unwin.

Sullivan, P. (2004), 'Frege's Logic', in D. Gabbay and J. Woods (eds.) *Handbook of the History and Philosophy of Logic* vol. 3. Amsterdam: North Holland.

Textor, M. (2010), 'Frege's Concept Paradox and the Mirroring Principle', *Philosophical Quarterly*, 60(238): 126-148.

Wittgenstein, L. (1922), *Tractatus Logico-Philosophicus*. London: Routledge.

Wright, C. (1983), *Frege's Conception of Numbers as Objects*. Aberdeen: Aberdeen University Press.

Wright, C. (1998), 'Why Frege did not Deserve his "Granum Salis"', *Grazer Philosophische Studien*, 55: 239-263

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[i] As clarified in a later paper (Hale and Wright 2012), Wright's position is that there are two key principles concerning objects and proper names at work in Frege's response to Kerry, namely:

> Objects 1: Something is an object iff it can be referred to by a proper name.
>
> Objects 2: If something is an object, it can only be referred to by a proper name. (Hale and Wright 2012: 90)

Objects 1 is carried by Frege's terminology: 'by an object,' Wright writes, 'Frege means anything that can be referred to by a proper name' (Hale and Wright 2012: 89). Objects 2, by contrast, is not a terminological matter but a substantial thesis supported as an entailment given Objects 1 of the Reference Principle.

[ii] Some interpreters have embraced the thought that Frege ignores what is really at issue here. Kevin Klement, for example, complains of Frege's 'inattentiveness' (Klement 2004: 5) to the fact that his stance against Kerry depends upon an unargued 'bridge principle' that 'no entity can be both the referent of an expression containing an empty spot and the referent of an expression not containing an empty spot' (Klement 2004: 5).

[iii] One might prefer a slightly looser identity under which being of a certain syntactic type is equated with *being suited* to refer to, and only to, an entity of corresponding ontological type. But there is not space in this paper for a discussion of the possibility of empty symbols, a possibility which can be accommodated if needed by my position.

[iv] See Ricketts 1985 and 1986 for a reading of Frege under which 'ontological notions are wholly supervenient on logical ones' (Ricketts 1986: 66). To be clear, this is not, by contrast, the position of Wright whose 'syntactic priority thesis' (see, e.g., Wright 1983: 13) leaves it as an open and substantial question whether what can be referred to by a proper name might also be referred to by means of a predicate (see note (i) above).

[v] A longer version of the paper *does* do just this.

[vi] For further discussion of this point see Sullivan 2004 §3.2.3.

[vii] One might consider here an introduction of a term 'Coiny' stating that 'Coiny' refers to Jack if a future coin toss is heads and Jill if the toss is tails. The sense of this term cannot, one could then press, be set out by means of a co-referential symbol. But here Frege will simply reject the example. A usable term might perhaps be introduced – presumably 'Coiny is tall' is to be true if, and only if, if the toss is heads then Jack is tall and if the toss is tails then Jill is tall – but one can, and Frege would, reject the assumption that one would thereby be introducing a referring expression, and so something with a sense.

[viii] This paper is deeply indebted to discussions with Peter Sullivan, and also to his Sullivan 2004.