The Analysis of Unities

A Thesis in the History of Early Analytic Philosophy

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Contents

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Abstract

In the late nineteenth century, the leading British philosophical figure had been Francis Herbert Bradley. Bradley, for reasons which shall be examined, took the view that the world consists of not more than *one* thing. Both Bertrand Russell and George Edward Moore came to reject this view, arguing that the world in fact consists of a variety of things, and that these things stand in relations to one another. It is this change of view which constitutes the subject matter of chapters one through three of this thesis. I show both why Bradley adopted the position he did, and how Russell and Moore defended their contrary approach. I conclude that both Russell and Moore sought to defend their rejection of Bradley's position through their adoption of novel methodological commitments to which Bradley's thought was alien.

A central philosophical problem upon which the foregoing issue turns is that of how relations effect relatedness; or: how is the *unity* of a complex item for which a relation is putatively responsible capable of being effected by that relation? Having discussed both Bradley's, Russell's, and Moore's interactions, I turn to Ludwig Wittgenstein's treatment of this problem. Wittgenstein was concerned to address certain philosophical problems he had been exposed to during his pupillage with Russell. I provide an understanding of precisely what Wittgenstein's attitude was to the question of unity just mentioned. Wittgenstein, I show, held that attempts to both formulate and answer the relevant question necessarily lead to the production of *nonsense*. I show why, in Wittgenstein's view, the question of how unity arises is a question which dissolves upon inspection.

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Preface and Acknowledgements

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Introduction

My aim in the following thesis is to examine the ways in which three early twentieth century figures working in Britain sought to reject the view that one must, if one is to avoid the conclusion that monism is true, offer a reductive explanation of what the unity of a complex item consists in. I discuss Russell's, Moore's, and Wittgenstein's approaches to the difficulty just mentioned.

A theme which runs throughout this thesis is that of *dispensing* with Bradley's challenge without having answered it, so to speak, on its own terms. Neither Russell nor Moore, I argue, aimed to solve the metaphysical difficulty of explaining what the capacity for a relation to relate consists in. Rather, both Russell and Moore adverted to arguments whose target was Bradley's philosophical *method*. What Russell and Moore criticised was the very requirement that one need solve such a metaphysical difficulty as that expressed by Bradley at all, in order that one justifiably endorse a pluralist ontology. Wittgenstein, I show, also drew the conclusion that the metaphysical difficulty of explaining what the capacity for a relation to effect relatedness consists in was not a difficulty which required a solution. Indeed, and as I shall show, Wittgenstein held that the relevant difficulty was in fact a spurious one, any attempted expression of which inevitably counts as *nonsense*. In recent years interest in the first order, metaphysical difficulty of explaining what the unity of a complex item consists in has swelled enormously[1]. Critics frequently portray the difficulty as having been, somewhat embarrassingly, ignored for want of a solution[2]. If what I say in this thesis is correct, the result

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[1] See, *e.g*., Gaskin (2008), MacBride (2011*a*), Maurin (2010), Meinertsen (2008), Peacock (2012), Simons (2010: 202), and Wieland and Betti (2008).

[2] Candlish and Damnjanovic for instance write, ''The Unity of the Proposition' is a label for a problem that has intermittently intrigued philosophers but which for much of the last century lay neglected in the sad, lightless room under the stairs of philosophical progress, along with other casualties and bugaboos of early analytic philosophy such as the doctrine of internal relations, the identity theory of truth, and Harold Joachim' (2012: 64). Schneider, in a similar vein, says that 'Old English manors have their ghosts. And though I would not want to call

will be that such portrayals are unwarranted. The relevant difficulty is not a thorn in the analytic tradition's side, but is instead an example of a philosophical problem which that tradition's early practitioners viewed as unnecessary to solve. Moreover, each of the practitioners I shall discuss gave compelling reasons for their view, and it is the discussion of these reasons which forms the basis of the following thesis.

I begin, in chapter one, by offering a detailed examination of F. H. Bradley's arguments for the conclusion that the world consists of not more than one thing. Bradley's monism, I argue, emerges as a result of his commitment to a variety of distinctive methodological views. Bradley held that one must offer a reductive analysis of a given phenomenon if one is to justifiably assert the claim that the relevant phenomenon is possible. Bradley, moreover, argued that any analysis of a given phenomenon must represent those items figuring in the analysis as *independent* entities. I show how a number of Bradley's arguments in *Appearance and Reality* are made comprehensible through my interpreting them in light of Bradley's broader methodological positions. I employ my interpretative strategy in order to illuminate certain arguments of Bradley's which have not been well-understood. I argue, moreover, that it is a mistake to attempt to understand these arguments in isolation from the methodology upon which they depend. I discuss the claims of those who have accused Bradley of advancing arguments which are clearly mistaken. Commentaries such as those of Brand Blanshard and William Curtis Swabey fail to acknowledge the role played by Bradley's method in his drawing the conclusion that monism is true. Chapter one, in which I connect Bradley's method with his arguments, serves as a foundation for the following two chapters, in which I argue that

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analytic philosophy a 'manor', nor exactly 'old', it certainly is of some decent English origin, and it left adolescence a while ago. No wonder then, that it is not exempt from haunting terrors. One particular spectre has been haunting it for decades; it already gave some analytic pioneers the creeps, and we still now and then find people terrified by it: the ghost of old Bradley has not yet found its rest and keeps on threatening people with his notorious regress' (2004: 219).

Russell's and Moore's views constituted a radical methodological departure from Bradley's position.

In chapter two I chart Russell's philosophical transition from Hegelian idealism to analytical realism. I begin by outlining Russell's arrival at the view that relational statements are irreducible to subject-predicate ones. I then examine Russell's identification of the requirement that he provide an explanation of what the capacity of a relation to effect relatedness consists in. Russell, I show, was ambivalent with respect to this explanatory requirement, and vacillated between acute concern and dismissiveness with respect to it. I argue that Russell, from 1903 onwards, adopted the view that his commitment to irreducibly relational truths is justified on the grounds that mathematical truths may be deduced from logical ones of an irreducibly relational character. Russell, I show, did not view it as necessary, in order that he be justified in his commitment to irreducibly relational truths, that he offer an analysis of the capacity for a relation to effect relatedness. I argue that Russell rejected the claim that he must provide a reductive analysis of what the capacity of a relation to effect relatedness consists in. Where Bradley held that one must provide such an explanation if one is to justifiably assert that relatedness is possible, Russell held that the utility of his logic of relations in facilitating the derivation of mathematics sufficed to license his commitment to irreducibly relational truths. I examine Russell's and Bradley's exchanges in *Mind* and show that Russell understood that his view constituted a methodological departure from Bradley's position. Moreover, Russell argued that Bradley's method was itself insufficiently motivated. Russell, I argue, diagnosed the source of his and Bradley's disagreements as principally *methodological*, in an effort to avoid further fruitless exchanges.

In chapter three I discuss Moore's common sense response to Bradley. I argue that Moore's 'A Defence of Common Sense' was, in part, aimed at undermining the force of Bradley's conclusions. Moore, I argue, aimed to defend a methodological position according

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to which one need not *analyse* phenomena in order that one assert their possibility. This position, I show, constitutes the adoption of a philosophical method to which Bradley's own was opposed. I note that Moore's view, that we need not offer an analysis of statements in order to justifiably assert them, is reminiscent of that which I attribute to Russell in chapter two. Both Moore and Russell exchange Bradley's conception of what it is for a view to be well-justified for their own, alternative, conception. Where Russell endorsed the criterion that a commitment which facilitates the deduction of mathematical truths is a justified one, Moore evidently held that a view's concordance with common sense constitutes strong justification for our holding to it.

Chapters four and five both examine Wittgenstein's approach to the difficulty of explaining how it is that complex items come to be unified. I begin, in chapter four, by examining an influential interpretation of Wittgenstein's treatment of the relevant difficulty expressed by Linksy, Palmer, Zalabardo, and myself. According to this interpretation, Wittgenstein held that propositions, as well as facts generally, are *not* composite, and consequently are not unities. I argue that this interpretation is mistaken, and that it results from a failure to recognise the distinction between two distinct notions of Dummettian origin, namely 'analysis' and 'decomposition'. I argue that Wittgenstein employs both of these notions in the *Tractatus*, to separate effect. Furthermore, I show that interpretations on which Wittgenstein holds that propositions and facts are not composite illegitimately depend upon passages of the *Tractatus* in which decomposition, rather than analysis, is the operative notion. I bring chapter four to a close with the conclusion that both propositions and facts are, indeed, complex, on Wittgenstein's view.

In the final chapter I offer my own interpretation of Wittgenstein's response to the issue of how the phenomenon of unity is possible. I begin by identifying the notion of a unity's possibility with that of the *form* of the relevant entity. I then provide a detailed examination of

Wittgenstein's reasons for holding that the form of a proposition or fact is not itself an item which may be sensibly discussed. I interpret the form of a proposition or a fact as a 'place in logical space' reducible to the combinatorial potential of the constituents of that proposition or fact. The totality of places in logical space is, therefore, determined by the objects which exist. Logical space is, on this view, a notion parasitic on that of potential objectual combination. I argue that according to Wittgenstein, we may not sensibly discuss forms, for to do would require the existence of places in logical space not reducible to the potential for objectual combination. There are no places not so reducible; consequently, the forms of propositions are not capable of being sensibly discussed. I draw the conclusion that in Wittgenstein's view questions purporting to ask after the possibility of a unified structure are not themselves sensible. On Wittgenstein's position, therefore, expressions of the difficulty which had exercised Bradley are to be considered specimens of nonsense. I claim that observation of this fact helps us understand why Wittgenstein explicitly raised the relevant difficulty on two occasions, without attempting to answer it. In Wittgenstein's view, there is no such genuine difficulty as that of the unity of complex items, and consequently no sensible challenge capable of being answered.

The narrative I present ends with the *Tractatus*. Subsequent developments in analytic philosophy are well-known for a hostility to metaphysics of the kind Bradley pursued[3]. The character of this hostility and its effects on the development analytic philosophy are subjects which lie beyond the scope of the present work.

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[3] See Ayer (1936: 17, no. 4).

Chapter One

F. H. Bradley

Introduction

In this chapter I offer an interpretation of Bradley's arguments against the possibility of relatedness which aims at both accuracy and completeness. I begin by describing Bradley's methodological commitments. Bradley, I argue, held that philosophical theories must satisfy both our 'intellect' and 'understanding' if they are to be justifiably endorsed. Bradley's numerous arguments against the possibility of relatedness, I show, cannot be correctly understood without appreciating these broader methodological commitments. Three constraints on philosophical theory in particular are shown to drive the argumentation found in chapters two and three of *Appearance and Reality* (1893). Firstly, Bradley holds that adequate philosophical theories must not involve contradictions. Secondly, it is, in Bradley's view, an adequacy constraint on any theory that it delivers a reductive analysis of those phenomena which it concerns. This requirement, I show, constitutes Bradley's commitment to a sceptical approach, where phenomena are not assumed possible in advance of our having given a reductive analysis of that possibility. Thirdly, it is a requirement of any philosophical theory that the items the theory postulates be conceived of as *independent* of one another. This, in Bradley's view, is the requirement that the theory operates at the level of discursive thought. Bradley contrasts discursive thought with a form of non-conceptual experience he calls 'feeling'. I describe the relationship between feeling and thought, and, following Levine (2014), identify Bradley's concern to criticise approaches which make illicit appeal to non-

discursive experience. Having outlined these methodological requirements, I go on to show how the various arguments Bradley gives against the possibility of relatedness depend upon on them. Failure to recognise the relationship between Bradley's arguments and his methodological commitments, I show, has resulted in the misunderstanding and premature dismissal of those arguments by a number of commentators. My focus on the relationship between Bradley's method and his arguments will serve as a foundation for the remainder of the thesis. I return to Bradley's method in my discussions of both Moore and Russell, and argue that their reactions to Bradley's monism are best represented as consisting in a radical change of methodological perspective.

1.1

Substantive and Adjective

1.1.1

In chapter two of *Appearance and Reality* Bradley aims to demonstrate that the notion of predication is inexplicable because not reducible to other notions. Predication, Bradley argues, is reducible neither to identity nor relatedness. The view that there are facts which are best understood as exhibiting the form of 'substantive and adjective', Bradley claims, is mistaken. This view fails 'if regarded as a serious attempt at theory' (1893: 19). Two questions immediately present themselves; what is the substantive and adjective form, and what standards must a theory meet if it is to be considered successful? While an answer to the former of these two questions is attempted in the sections that follow, a preliminary answer to the second will help guide that effort.

For a theory to be considered successful, on Bradley's view, it must appease two distinct faculties; proposals must 'satisfy the intellect', and they must deliver 'understanding'. The

former of these constraints consists in avoiding contradiction; the latter is the demand for explanatory progress. Bradley's demand for explanatory progress involves the further requirements that explanations be *reductive*, and that items falling under the concepts employed in any explanation be conceived of as independent of one another. Bradley is, therefore, committed to at least *three* methodological principles relevant to an understanding of his arguments. One of these principles may be described as concerning the 'intellect', while two concern the faculty of 'understanding'. I shall describe each of these methodological commitments and the relationship between them. Here I should emphasise that in identifying three distinct commitments I am not thereby claiming that Bradley was at all times supremely aware of their separate characters. In other words, Bradley himself did not always acknowledge the fact that these three commitments are in fact distinct from one another. Bradley's use of terminology is not always consistent, and he does not attempt to provide definitions of operative notions in the manner to which contemporary analytic philosophers are accustomed. Nonetheless, these principles are in fact distinct, and each principle can be identified as performing a distinct role in Bradley's arguments.

That Bradley conceives of satisfaction of the intellect as consisting in avoiding contradiction can be seen here[4]:

> Take, for example, the law of avoiding contradiction. When two elements will not remain quietly together but collide and struggle, we cannot rest satisfied with that state… And this inability to rest otherwise, and this tendency to alter in a certain way and direction, is, when reflected on and made explicit, our axiom and intellectual standard. (1893: 152)

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[4] (1893: 150).

Bradley's conception of contradiction, though, is broader and more metaphysically loaded than that employed in contemporary logic[5]:

> The contradictory idea, if we take it in a merely negative form, must be banished from logic. If Not-A were solely the negation of A, it would be an assertion without a quality, and would be a denial without anything positive to serve as its ground. A something that is only not something else, is a relation that terminates in an impalpable void, a reflection thrown upon empty space. It is a mere nonentity which can not be real. (1883: 97)

Bradley denies the intelligibility of 'mere' negation. Consequently, every negation has 'as its ground' some assertion. Taking $p \,\&\, {\sim}p$ as an example, Bradley construes '${\sim}p$' as corresponding to some assertion whose truth is incompatible with that of p. In the final analysis, it is more appropriate to analyse $p \,\&\, {\sim}p$ as $p \,\&\, q$, where 'q' stands for some assertion whose truth is mutually exclusive with the truth of p. Bradley's official position regarding the notion of contradiction is that it ought to be replaced by that of contrariety[6]. In Bradley's view it is a constraint on the statement of any theory that it does not entail contrary judgements[7].

Bradley emphasises the requirement that a theory satisfy the intellect; he also repeatedly claims that we must achieve 'understanding'. In Bradley's view, positions may only be accepted if they illuminate the nature of those phenomena with which they deal to a sufficient standard. The standard of explanation to which Bradley holds philosophy is high; even the most fundamental concepts in the philosophical catalogue are not invulnerable to being jettisoned as 'unreal' if the possibility of their being truly applied is not explicable in simpler terms. In the absence of a non-circular explanation of a phenomenon, Bradley concludes that the phenomenon in question is not possible. Bradley does not construe philosophical accounts as constrained by the requirement that they capture pre-theoretical data. On the contrary, the

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[5] See Stock (1985).
[6] See Bradley (1883: 97).
[7] See Bradley (1893: 139).

conclusion that a pre-theoretically held to datum is possible depends, in Bradley's view, on both the consistency and the explanatory power of the theory solicited to provide an account of it. Bradley writes:

> But I think it quite necessary, even on the view that this study can produce no positive results, that it should still be pursued. There is, so far as I can see, no other certain way of protecting ourselves against dogmatic superstition. Our orthodox theology on the one side, and our commonplace materialism on the other side (it is natural to take these as prominent instances), vanish like ghosts before the daylight of free sceptical inquiry […] That is one reason why I think that metaphysics, even if it end in total scepticism, should be studied by a certain number of persons. (1893: 5)

Metaphysics ought, in Bradley's view, be pursued from a sceptical perspective[8], on which no claim may be accepted as true in advance of philosophical investigation. Elsewhere Bradley similarly emphasises the role scepticism performs in purging philosophy of dogmatically held commitments[9]:

> What we want at present is to clear the ground, so that English Philosophy, if it rises, may not be choked by prejudice. The ground can not be cleared without a critical, or, if you prefer it, a sceptical study of first principles. (1883: 4)

Further evidence that Bradley, wherever possible, does not take for granted any substantial assumptions is found in the following description of his methodology[10,11]:

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[8] There are two different senses in which Bradley might be considered a sceptic, and it is important to distinguish between them. Here I emphasise the sceptical *method* Bradley employs, exemplified in his not taking any phenomenon's possibility for granted. This is a separate claim from the charge that Bradley, having carried out his inquiry, settles on sceptical conclusions. For an expression of the latter objection see Schiller (1925). The question of how far Bradley's constructive metaphysics collapses into scepticism lies outside of the scope of the present chapter, suffice it to say that this question was of great importance to Bradley himself.

[9] See Ward (1894: 111).

[10] See Candlish's (1984), as well as his (2007: 33-37, 40-41) for a discussion of Bradley's sceptical method.

[11] Bradley's remarks here, to the effect that he eschews axioms in order to pursue unprejudiced enquiry, may plausibly be read as responding to Ward, who had claimed that those carrying out investigations in a Hegelian fashion illegitimately inferred from dogmatic axioms substantial metaphysical conclusions. See Ward (1904: 4; 1919: 5; 1925: 15; 25), and Levine (2019: 26).

> I will however begin by noticing some misunderstandings as to the method employed in ultimate enquiry by writers like myself. There is an idea that we start, consciously or unconsciously, with certain axioms, and from these reason downwards. This idea is to my mind baseless. The method actually followed may be called in the main the procedure used by Hegel, that of direct ideal experiment made on reality. What is assumed is that I have to satisfy my theoretical want, or, in other words, that I resolve to think. And it is assumed that, if my thought is satisfied with itself, I have, with this, truth and reality. But as to what will satisfy I have of course no knowledge in advance. My object is to get before me what will content a certain felt need, but the way and the means are to be discovered only by trial and rejection. The method is clearly experimental. (1914: 311)

Bradley feels himself at liberty merely to assume that what is real must 'satisfy' his 'theoretical want'. He expressly denies that he assumes as possible that which will afford him satisfaction, in advance of having demonstrated that possibility; his method is 'experimental'.

That Bradley's approach is sceptical explains why he rejects circular accounts of phenomena; the assumption that a given phenomenon is possible may not be taken for granted but must be established. Bradley emphasises the connection between circularity and unreality:

> But where we move in circles like these, and where, pushing home our enquiries, we can find nothing but the relation of unknown to unknown – the conclusion is certain. We are in the realm of appearance, of phenomena made by disruption of content from being, arrangements which may represent, but which are not, reality. (1893: 307)

From Bradley's sceptical point of view, the lack of non-circular explanation of a thing's being possible tells decidedly against its being so. It is a consequence of Bradley's sceptical methodology, then, that he demands phenomena be *reductively* analysed if they are to be accepted as possible. This characteristic of Bradley's methodology will feature prominently chapters two and three, below. In a similar vein, Bradley rejects brute accounts as incapable of delivering understanding. Bradley emphatically asserts the inadequacy of brute accounts in a letter to G. F. Stout[12]: 'When the question is of understanding you can't appeal to brute fact.'

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[12] See Levine (2014: 247) for a discussion addressing the context of this letter.

(1999*a*: 220). Where what is in question is the possibility of a given phenomenon, brute accounts do not justify that possibility[13].

Bradley, we have just seen, describes his method as 'experimental'. We must not, though, conclude from Bradley's description of his view that this approach is in any significant sense reminiscent of the scientific method. Candlish disagrees: '[…] Bradley's methodological requirements grow naturally out of those which common sense and scientific practice take for granted' (2007: 162)[14], and

> [O]ur practice of intellectual enquiry does reflect Bradley's suggestion. A typical empirical explanation of some particular phenomenon works by conferring on it a kind of necessity, one relative to the truth of a general proposition under which the phenomenon is subsumed. If an explanation of the truth of the general proposition is then sought, a natural response is to render it in turn relatively non-contingent by subsuming it under a higher-order proposition – and so on until we come to rest at the limits of our empirical knowledge on some law which is not similarly explicable. But, and this is Bradley's point, when we reach this position and 'conjoin aliens inexplicably' [1897: p. 502] we are still not satisfied, but rather struggle to find a way of rendering intelligible our presently fundamental laws by finding something more embracing yet. Our intellect is genuinely not content to rest in mere contingency, as is illustrated by, for instance, the ontological argument, and some recent efforts in cosmology. (2007: 26-27)

Candlish claims that Bradley's methodological approach is relevantly similar to that adopted in the empirical sciences. In scientific investigations we offer an explanation such that the phenomenon under investigation is conceived of as an instance of a general law. Given the law in question, the instance is held to exhibit a kind of necessity, recognition of the possession of which delivers intellectual satisfaction. Laws are themselves subject to the same treatment, and consequently we may progress from sciences of comparatively lesser degree of abstraction to those of greater degree. Bradley does indeed demand that we ascend a hierarchy of abstraction

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[13] See also (1893: 22; 25; 247) for mention of the requirement that phenomena be 'justified'.
[14] This remark appears to be in tension with a claim Candlish later makes, that '[F]or Bradley, science provided neither a model nor an inspiration for metaphysics.' (2007: 178). Candlish, it seems, attributes to Bradley both a method which is 'grown out of' requirements shared with common sense and science, as well as an approach conceived of as deliberately separable from the intellectual standards of empirical inquiry and every-day discourse.

wherever we seek to arrive at 'absolute' truth, and that this hierarchy inevitably terminates in metaphysics. Bradley's approach differs from that employed in the empirical sciences, though, in at least one crucial respect. We may, in the natural sciences, climb higher and higher into abstraction in pursuit of explanatory satisfaction. We may, moreover, find that we eventually, and potentially only temporarily, reach a stage at which no explanation of our most general laws is forthcoming. Undoubtedly, this circumstance issues in the desire to break through the relevant explanatory ceiling. What does not occur, though, when scientists are faced with a law of such fundamentality that it resists explanation in further terms, is the subsequent condemnation of *all* results downstream of it. By contrast, this is precisely Bradley's approach. We shall see, below, that Bradley requires reduction 'all the way up' so to speak, such that if a fundamental statement, such as 'there are items which stand in relation to each other', does not admit of further explanation, it is denied that instances of that law are possible at all.

It is a further methodological tenet of Bradley's that he rejects the appeal to *non-conceptual awareness* as evidence for something's being 'real'. To take one example, Bradley criticises a strategy for justifying the reality of the self which relies on 'intuition' of a non-conceptual kind:

> But self-consciousness, we may be told, is a special way of intuition, or perception, or what you will […] But to my mind such an answer brings no satisfaction. For it seems liable to the objections which proved fatal to mere feeling. Suppose, for argument's sake, that the intuition… actually exists […] This is one thing, but it is quite another thing to possess a principle which can serve for the understanding of reality […] The world is surely not understood if understanding is left out. And in what manner can your intuition satisfy the claims of understanding? This, to my mind, forms a wholly insuperable obstacle […] I am, in short, compelled to this conclusion: even if your intuition is a fact, it is not an understanding of the self or of the world. (1893: 108)

The usage of 'intuition' here is broadly Kantian. It is no surprise, therefore, that Bradley denies that mere intuition suffices to satisfy 'understanding'. Kant expressly distinguished intuition

from understanding[15]; understanding is responsible for experience's *conceptual* character. The quoted passage is instructive because it demonstrates Bradley's requirement that any justification for a given phenomenon's being possible be conceptual, or discursive, in nature. In his unfinished essay 'Relations' Bradley echoes this aspect of the faculty of understanding:

> As soon as you analyse the felt, you so far destroy it as such. And in any attempt to describe it in words, we tend perforce to adopt the attitude of analysis and to surrender ourselves to *the necessary form of the discursive understanding* and apply in some form the category of Whole and parts. (1935: 662, emphasis added)

The hallmark of discursive thought is, in Bradley's view, its representing the constituents of the world as *independent* of one another[16]:

> Dismissing now for a time any doubts or difficulties with regard to feeling, as the immediate experience of many in one, I will go on to show the main difference when we pass to an experience which is relational. Both are alike in being ways that hold a diversity in unity, but in feeling the whole and the parts […] qualify […] one another throughout. But such qualification, where you have relations, ceases in part to be possible. *The diversity here, while still forming a whole, has hardened itself into a plurality of terms, each so far independent as to have become and individual with a being and a character of its own.* (1935: 634, emphasis added)

Bradley, as well as holding the constituents of thought to be independent, also argues that those constituents are *universal[17]*: 'A fact taken as a symbol ceases so far to be fact. It no longer can be said to exist for its own sake, its individuality is lost in its universal meaning.' (1883: 8). Bradley ultimately denies that discursive thought can ever attain 'Absolute' truth. Nonetheless, it remains a constraint on the justification of any phenomenon's being possible that it not appeal to non-conceptual 'intuition' or experience. The import of this constraint will become clearer

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[15] See (*B*76/*A*52).

[16] See (1883: 95), as well as (1893: 267).

[17] See also (1883: 9; 11; 13-15; 18; 28; 31; 37-40; 44) for emphasis on the universal character of the content of thought. Bradley equates the rejection of psychologism with the conclusion that meanings are universal.

in the discussion below. It is worth noticing, though, that the requirements, that the justification

for a phenomenon's being possible be both reductive and conceptual, work in tandem with the

requirement that the intellect be satisfied. One may not simply avoid contradiction by appeal

to resources which are not conceptual, on pain of failing to satisfy the faculty of understanding.

In other words, Bradley holds that philosophical theories must not, if they are to count as

successful, avoid contradiction at the expense of discursiveness, where a theory counts as

discursive if its postulates are conceived of as independent items.

Bradley emphasises the separate demands of the intellect and understanding where he

discusses the ability of the Absolute to satisfy the former but not the latter:

> The universe as a whole may be called intelligible. It may be known to come together in
> such a way as to realize, throughout and thoroughly, the complete demands of a perfect
> intellect. And, every single element, again, in the world is intelligible, because it is taken
> up into and absorbed in a whole of this character. *But the universe is not intelligible in the
> sense that it can throughout be understood*; nor, starting from the mere intellect, could you
> anticipate its features in detail. For, in answering the demands of the intellect, the Whole
> supplements and makes good its characteristic defects, so that the perfected intellect, with
> these, has lost its own special nature. (1893: 482; emphasis added)

Bradley describes the Absolute as capable of satisfying the demands of the intellect, at the

expense of its capacity to be *understood*. In Bradley's view the abstraction effected by our

mental faculties of features from their residence *in situ*, and the treatment of those features as

capable of independent reality, is definitive of discursive thought. Bradley argues that the

process of abstraction transforms items such that we cannot truly say, for any given object of

thought, that *it* is also to be found in the Absolute; objects of thought are not, 'as such', found

in the Absolute. Just as thought transforms its objects *via* the process of abstraction, the return

of abstracted items to their proper place in the Absolute likewise transforms *abstracta* into

concreta. The movement from ordinary thought to grasp of the Absolute necessarily involves

abandoning our discursive faculties[18], and therefore the abandonment of the pursuit of conceptual understanding[19]:

> Thought desires for its content the character which makes reality. These features, if realised, would destroy mere thought; and hence they are an Other beyond thought… There is nothing foreign that thought wants in desiring to be a whole, to comprehend everything, and yet to include and be superior to discord. But, on the other hand, such a completion, as we have seen, would prove destructive; such an end would emphatically make an end of mere thought. (1893: 181)

Thought *qua* thought cannot 'comprehend everything', on pain of 'destroying' itself in the process, for to comprehend everything thought transforms into the Absolute, and thereby cease to count any longer as thought. Because non-contradictory, the Absolute, Bradley claims, satisfies the intellect[20]. The Absolute's being non-contradictory, however, is a consequence of its being non-conceptual in nature. The Absolute is non-contradictory because its character cannot be captured by discursive judgements such that two contrary judgements are entailed by an account of it. The Absolute's being necessarily ineffable, however, leaves it incapable of being 'understood' in the relevant sense.

So far, I have mentioned, among the species of non-conceptual experience guilty of failing to deliver understanding, both 'intuition' conceived as a Kantian notion, as well as experience of the Absolute. It will be helpful in what follows to complete Bradley's triadic taxonomy of non-conceptual experience by discussing his notion of 'feeling', placing it in its relation both to the Absolute and discursive thought. Bradley mentions intuition only to discard it as inadequate, and consequently I will not attempt to interpret precisely what he understood

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[18] See (1893: 168).
[19] Where this phrase, in Bradley's view, constitutes a pleonasm.
[20] See (1893: 147).

by that notion. It is worth noticing, though, that Bradley felt that intuition and feeling both fail on the same score where understanding is concerned[21].

Bradley's metaphysical outlook includes three distinct 'levels'[22]. The first is that of 'feeling', the second that of 'thought', and the third the Absolute. Bradley describes 'feeling' as follows:

> The primary form of experience may, I think, be best called 'immediate experience' or 'feeling' […] I mean here by 'feeling' such a mode of experience of sameness and difference in one as is an awareness direct and non-relational of that which is at once one and many. If we may permit ourselves to speak prematurely of a whole and parts, then in immediate experience the whole qualifies every part while the parts qualify all and each both one another and the whole. Thus extension and colour as they come first are not given as related. They are both in one […] And if we mean by 'given' here to imply a relation of object to subject, then we must certainly avoid the word 'given'. For immediate experience, taken strictly, is free from every kind of relation. (1935: 632)

Bradley, in a passage reminiscent of that in which we saw him discuss the capacity of the Absolute to satisfy the intellect while resisting attempts to be understood, characterises feeling as intelligible though 'nonreflective':

> Feeling, on my view (where not simple if it ever is so) combines the two aspects of One and Many so as not to contradict itself nor to be rejected as unintelligible – but this holds only so long and so far as it remains pure and non-relational and nonreflective [...] I mean that while it is merely itself it makes no claim to be understood. (1893: 362)

Feeling, like the Absolute, fails to deliver 'understanding'[23]. Feeling, because non-conceptual, avoids *contradiction*; it is therefore a notion which may not be 'rejected as unintelligible'. For

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[21] See (1893: 108).
[22] The terminology of 'levels' is ubiquitous in Bradley; see, for instance, (1893: 107; 108; 112; 142; 242; 305; 306; 372; 449; 487). See also Mander (1995).
[23] See (1935: 282; 1893: 115).

precisely the same reasons, though, feeling is not a form of experience which is capable of representing the world discursively. Levine elaborates:

> [F]or Bradley, the "defect" in "Feeling" is not that it is inherently "self-contradictory", but rather that it fails to satisfy a "demand of the intelligence" – namely, the demand to "understand". (2014: 239)

Positions according to which the metaphysical character of the world is conceived of as relevantly similar to the experience of feeling fail, therefore, to satisfy the adequacy constraint we have seen Bradley endorse, namely that philosophical positions deliver conceptual or discursive understanding. Levine writes:

> It is in the context of arguing that the "relational way of thought" is incoherent that Bradley presents what he often characterizes as a dilemma. On the one hand, if we "analyze" a "felt" unity as composed of distinct, independent entities, we are unable to reconstitute the unity that we originally experienced in "Feeling". On the other, if in the attempt to avoid that problem, we appeal to the sort of unity that was experienced in "Feeling", we have "fallen back" to what is "pre-relational" and so we have not only failed to show how the "relational way of thought" is coherent but have also failed to attain any "understanding". (2014: 240)

Levine here shows that according to Bradley, we must explain the possibility of independent items' being related to one another if we are to achieve an 'understanding' of the possibility of relational thought. For reasons which shall be explored in detail, below, Bradley holds that it is not possible to provide such an explanation. We may not, though, appeal to the relatedness of *dependent* items in our explanation, for to do so is not, in Bradley's view, to represent the world discursively.

Brand Blanshard elaborates on the notion of feeling where he writes

> First is the level of immediacy. This is the earliest form of consciousness in the history of either the individual man or the race, and it consists of what James called a 'buzzing, blooming confusion'. The child confronting the world in his first days has, or rather is, a field of consciousness. We may be sure that he has pleasures and pains, hears sounds, sees colours, and feels pressures and even fears. But as yet he picks none of these things out of the continuum, and takes none of them for what they are. There are no spoons or bottles, dog or cat, father or mother, recognised as such, in his world. What exactly the world is like we do not know and shall never know, for if by an impossible feat we should put ourselves back into it with our mature minds, that act would itself destroy its character. (1984: 212)

Blanshard's description, however, is not thoroughly accurate. Blanchard incorrectly portrays feeling as permanently extinguished once a sufficient degree of psychological development has been attained. Blanshard's taking the experience of early childhood as paradigmatic demonstrates that his conception of feeling is one of an experiential mode which is inevitably cast off in the course of our psychological and sociological development. Bradley, though, is clear that feeling is ever present. Feeling is the background from which we source the objects of our attention[24]. As Bradley says[25], 'In the mental background specially such a fused unity remains a constant factor, and can never be dissipated' (1893: 225). Feeling is pervasive, though often not 'pure'. Much of our experience consists of both feeling as well as isolates formed by exercising our discursive faculties:

> If we may so express ourselves, we here have clots, present and contained in and belonging to a liquid whole, the general nature of which fails to rule within the limits of each. Within a state of feeling you thus often, if not usually, may have details which, though felt, are internally far beyond being merely felt. And hence to treat them as exhibiting throughout the general nature of feeling would be certainly wrong. Our one feeling taken therefore as mere feeling, we may say, is not pure, since its general nature fails to dominate pervasively. (1935: 633)

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[24] See also (1893: 467).

[25] For a historical treatment of Bradley's account of feeling see James Bradley's (1984). See also Stern (1993: 198 – 199) for details of Bradley's Hegelian inheritance. Bradley describes his debt to Hegel in (1935: 695). Schiller, though, doubted the accuracy of Bradley's self-proclaimed debt (1915: 347). Quinton accurately describes Schiller's treatment of British idealism as the expression of 'polemical energies' (1971: 304).

Blanshard is wrong to claim that it is 'impossible' to experience feeling with 'our mature minds'. It is because Bradley did not conceive of the level of feeling as that of a distant original position that he feels justified in appealing to introspection for evidence of its character[26]; it is the empiricist strand[27] in Bradley's thought which is responsible for his postulation of feeling. Blanshard contrasts the level of relational and discursive thought with that of feeling:

> If immediate experience is the first level in Bradley's account of the mind, this plateau of things in relation is the second. It is not merely the plane on which we live; it is the plane to which the great succession of common-sense philosophers have devoted their attention […] (213)

We do not, though, according to Bradley, live exclusively on the plane of 'things in relation'. We live, in fact, among both feeling and relational thought. Bradley would not have denigrated the level of feeling to that of a 'primitive swamp' (Blanshard: 213); on the contrary, immediate experience, or feeling, is *closer* in character to the Absolute than is relational thought:

> This whole [the Absolute] must be immediate like feeling, but not, like feeling, immediate at a level below distinction and relation. The Absolute is immediate as holding and transcending these differences. (1893: 242)

Discursive thought is merely a necessary evil in our pursuit of reality, useful precisely because infected with contradiction and mistake. Feeling, though closer in character to the Absolute than is relational thought, falls short of perfect reality:

> [Feeling's] elements are but conjoined, and are not connected. And its content, hence, is unstable, and essentially tends to disruption, and by its own nature must pass beyond the being of the "this". (1893: 225)

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[26] See (1914: 304; 1935: 633).

[27] A strand emphasised by Mander throughout his (1994). See McHenry (1996) for objections to Mander's conception of Bradley as influenced by empiricism.

Feeling is 'unstable' because its continuous nature is liable to 'disruption' by discursive faculties which erroneously partition that continuum into discrete elements, thereby transforming them. Discursive thought's segmentation of feeling is held by Bradley to be a necessary 'makeshift'[28]. The language of natural science, of discrete cause and effect, is inapplicable to the level of feeling. According to Bradley, nature itself is an abstraction not found in immediate experience but isolated from feeling in the service of scientific theory[29]. Feeling's vulnerability to being 'mutilated'[30] is a consequence of the pragmatic advantages of employing concepts; such advantages are paradigmatically exhibited by the achievements of natural science[31]. Bradley frequently describes the contents of discursive thought as 'fictions'[32]; useful but unreal. We will see, in the following sections, precisely how Bradley concludes that discursive thought is unreal. For the moment it is vital to appreciate the following stratification: feeling is liable to be conceptualised and thereby transformed into thought, while thought in turn gives way to ineffable Absolute experience by revealing itself to be inherently contradictory; as Mander says,

> A useful way to understand his system is to observe that for Bradley there are three distinct levels or orders of experience: immediate experience (which he also terms "feeling"), relational experience, and absolute experience. It is his position that these three together form a developmental sequence in which immediate experience gives birth to relational experience which in turn gives birth to absolute experience. (2009: 171)

Given that Bradley evidently conceives of the Absolute, like feeling, as non-conceptual experience, it is a good question why Bradley holds the postulation of substantive adjective

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[28] See (1893: 21; 23; 33; 55; 56; 298; 304; 358).
[29] See (1893: 490; 298).
[30] See (1883: 11; 40: no. 3; 46; 93; 96; 382; 383; 462; 465; 495; 496), for reference to the 'mutilation' of 'the given' by discursive faculties. See also Wollheim (1969: 45).
[31] See (1914: 445).
[32] See (1893: 16; 51; 61; 89; 118; 263; 266; 267).

facts to a higher standard of explanation than that to which he holds the Absolute. Bradley notices the charge himself:

> And if I am told that in any case Monism, if it is to stand, must be able to explain, and to exhibit more or less in detail, the positive 'how' of the universe – that again is what I deny. On no conceivable view can, I should say, the world become explicable throughout […] (1935: 650)

A full defence of Bradley's conception of the Absolute as both 'perfect truth' and necessarily incapable of being 'understood', in the relevant sense, lies beyond the scope of this chapter[33]. Suffice it to say that Bradley may plausibly be taken not to be advancing a *theory*. Insofar as one does advance the substantive adjective form of facts as a theory, one is held to the constraints on a successful theory here discussed, namely the satisfaction of both intellect and understanding. *Theories* must be framed at the level of discursive thought in order that they deliver understanding. An important consequence of this requirement is that according to Bradley we may not, either surreptitiously or unwittingly, smuggle in appeal to non-discursive experience in our attempts to explain phenomena. It is because feeling is not conceived by Bradley as permanently exchanged for discursive thought upon maturation that we must guard against appeal to it in our theorising. Were feeling the merely historical postulate described by Blanshard, the requirement that theory be kept free of appeal to feeling would not present cause for concern; on Blanshard's line such an error is impossible. We will see that Bradley did think that the relevant error was possible, and that he cautions us, repeatedly, against this mistake.

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[33] See Stern (1993: 200 – 204).

1.1.2

We are now in a position to understand Bradley's critical arguments without caricaturing them as obviously confused. Though Bradley describes the substantive adjective form of facts as that of 'things and qualities' (1893: 19), he does not clearly define those two notions, but instead relies on the reader's familiarity with that 'time-honoured distinction' (1893: 19). Bradley begins with the following statement: 'We may take the familiar instance of a lump of sugar. This is a thing, and it has properties, adjectives which qualify it. It is, for example, white, and hard, and sweet' (1893: 19). Once Bradley's background views have been taken into account, one is inclined to notice that a natural interpretation of the distinction Bradley describes would be ruled out by him straightaway as not suitable for the satisfaction of understanding. Recall, Bradley holds that meanings are universal. On Bradley's view particulars just cannot be represented in thought. A familiar interpretation of the substantive adjective form has substantives as particulars, and adjectives as universals. Any view which holds that the expression of a substantive adjective fact purports to represent the predication of a particular by a universal would be discarded by Bradley as incapable of delivering understanding. The realm of discursive thought does not, and cannot, operate with particulars as the semantic values of expressions. Bradley does not in fact level this specific objection against the substantive adjective form. The fact, though, that Bradley's background commitments license this charge explains, in my view, just why Bradley gives the proposal in question such short shrift, before moving on to candidate justifications of predication which are not vulnerable to the same criticisms.

Bradley continues:

> The sugar, we say, *is* all that; but what the *is* can really mean seems doubtful. A thing is
> not any one of its qualities, if you take that quality by itself; if 'sweet' were the same as
> 'simply sweet', the thing would clearly be not sweet. (1893: 19)

The sugar, according to Bradley, is 'clearly' not any one of its putative properties taken in isolation. At least two interpretations of Bradley are possible here. By taking a property 'by itself', or 'simply', Bradley may mean to take the property of sweetness as *exhausting* the sugar's attributes. If 'simply' is translated as 'merely' it is clearly false to say that the sugar is 'simply' sweet; presumably the sugar in fact possesses more attributes than mere sweetness. Bradley's following comment appears to support this interpretation: 'And, again, in so far as sugar is sweet it is not white or hard; for these properties are all distinct' (1893: 19). On the assumption that the description of sugar is exhausted by the ascription to it of sweetness, it is evident that further ascriptions of properties non-identical to sweetness are mutually exclusive with that original ascription. As we saw, above, Bradley's broad conception of contradiction includes mutual exclusivity. This interpretation of Bradley's proposal, however, fails to represent that proposal as attempting to satisfy a vital theoretical constraint Bradley endorses. The proposed interpretation just outlined does not offer an *explanation* of predication; it merely shows that assuming an item to have one and only one property necessarily conflicts with the view that items have multiple properties. Given the emphasis I have placed on Bradley's requirement that theories of phenomena non-circularly explain the possibility of those phenomena, the interpretation just given ought to be discarded as failing to respect that constraint from the outset. Of course, Bradley will ultimately conclude that any defence of the substantive adjective form is inadequate. We should do Bradley the charity, though, of presenting the proposals he will eventually reject as *prima facie* candidates for satisfying his demands.

An interpretation more in line with Bradley's constraints is to suggest that what is clearly false in the sentence 'the lump of sugar is simply sweet', is the lump of sugar's being identical

with the universal *sweetness*[34,35]. This interpretation benefits from representing the proposal as an attempt to explain what predication consists in, namely identity. The strategy of defending the notion of predication by reducing it to identity promises an explanation which avoids both circularity and appeal to brute fact. This interpretation is also bolstered by a comment Bradley makes in the following paragraph: 'We certainly do not predicate one of the other; for, if we attempt to identify them, they at once resist.' (1893: 19). This comment is made in the context of a separate proposal to that currently under consideration. Nonetheless, it is evidence that Bradley conceives of the reduction of predication to identity as a natural manoeuvre.

Bradley's first pass at a defence of predication, then, consists in identifying the lump of sugar with one of its putative properties. Such an identity claim is obviously false. Moreover, if we grant for the sake of argument that the sugar is identical to sweetness, and the sugar is also both white and hard, by parity of reasoning we ought to say that the lump of sugar is identical to both whiteness and hardness. The combination of this result, combined with the transitivity of identity, results in sweetness' being identical with both whiteness and hardness, and *vice versa* for each of the universals mentioned. This result is absurd. Consequently, Bradley rejects the proposal. On the view that predication is explained by reducing that notion to identity, it is clear why the possession of multiple properties is problematic. By contrast, the first interpretation canvassed, above, takes the possession of a single property by a thing to be problematic without demonstrating the relevance of that consideration to the exercise of justifying the intelligibility of the substantive adjective form.

The foregoing *reductio* has led a variety of critics to accuse Bradley of illicitly conflating the notions of predication and identity. Russell, for instance, said that 'The confusion of these two meanings of 'is' is essential to the Hegelian conception of identity in difference' (1956:

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[34] All mention of identity in what follows is to *numerical* identity.
[35] See Baxter (1996: 5).

245). Blanshard voices a similar complaint: 'Bradley is assuming that the 'is' here used must be the 'is' of identity, and he sets aside the 'is' of predication as not taken seriously' (1984: 218). William Curtis Swabey (1919) likewise accuses Bradley of confusion[36]:

> Now before proceeding I may remark that this ancient Antisthenean paradox seems to be a purely verbal sophistry. It rests solely on confusion between the "is" of identity […] and the "is" of predication […] (407)

The objection[37] lodged against Bradley by these three authors comes to the complaint that Bradley is simply disregarding one use of the word 'is' in favour of another. Bradley, they claim, selectively employs the 'is' of identity in order to derive absurd results, and in doing so flagrantly omits a further use of the word from which those results would not follow. Blanshard, for instance, hopes to draw our attention to the appropriate sense of 'is' with the following synonymous formulations:

> And we must grant to him that such assertions are absurd if they assert identity. A shape is not a colour or smoothness, nor is sugar identical with sweetness. But surely we are saying nothing so absurd. We are saying that white *belongs* to the cube, that the surface of the apple *possesses* smoothness, that sweetness may be *attributed* to the sugar. (1984: 218)

Bradley, though, freely admits that we are liable to paraphrase the 'is' of predication in the ways that Blanshard suggests:

> No, we should reply, the relation is not identical with the thing. It is only a sort of attribute which inheres or belongs. The word to use, when we are pressed, should not be *is*, but *has*. But this reply comes to very little. The whole question is evidently as to the meaning of *has*; and, apart from metaphors not taken seriously, there appears really to be no answer. (1893: 20)

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[36] We will return to the charge that Bradley's approach is 'Antisthenean' below.
[37] See Church (1942: 28) for a more sophisticated treatment of Bradley's arguments.

As I have been attempting to make clear, Bradley wants to explain what predication *consists in*, non-circularly and without appeal to brute fact. It will not do, in Bradley's view, to simply assume the notion of predication under dispute. Indeed, the subject matter of chapter two is entirely given over to the question of how one must *analyse* the notion of predication such that both the intellect and understanding are satisfied. Bradley is not confused with respect to the separate notions of 'is' outlined by his critics. On the contrary, Bradley does not equivocate between them, but proposes, by way of defence, that the 'is' of predication be explained by appeal to that of identity. Bradley declares the attempted reduction a failure. While it is reasonable to argue that Bradley's explanatory standard is both too high and applied too uniformly, the accusation of confusion is uncharitable in the extreme[38].

Having concluded that the lump of sugar is not identical to any one of its properties, Bradley dismisses the following suggestion:

> Nor, again, can the thing be all its properties, if you take them each severally. Sugar is obviously not mere whiteness, mere hardness, and mere sweetness; for its reality lies somehow in its unity. (1893: 19)

Bradley concludes that the lump of sugar is not identical to the mere aggregate of its putative properties. A mere aggregate of universals is not an entity over and above those universals[39]. The lump of sugar, then, being one thing rather than many, cannot be identical to the relevant enumeration. Bradley suggests the following corrective:

> Sugar is, of course, not the mere plurality of its adjectives; but why should it be more than its properties in relation? When 'white', 'hard', 'sweet', and the rest coexist in a certain way, that is surely the secret of the thing. The qualities are, and are in relation. (1893: 20)

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[38] See Candlish (1984: 255) and Mander (1994: Ch. 3).

[39] Bradley denies the intelligibility of mere aggregates, see (1935: 289); though he shelves these concerns for present purposes.

Bradley suggests that one might reduce the sugar's being predicated of its properties to the unity of those properties. In effect what Bradley proposes is a universal bundle theory: 'Sweet', 'white', and 'hard' seem now the subjects about which we are saying something' (1893: 20). The claim that sugar possesses certain properties is to be cashed out in terms of an assertion concerning those properties, namely the assertion that they are related to one another. Mention of the lump of sugar disappears in favour of our treating the sugar's putative properties as the subjects of our enquiry.

Universal bundle theories arguably suffer from a variety of difficulties which trope bundle theories, for instance, do not. Universal bundle theories suffer the accusation that they fail to individuate qualitatively indiscernible objects; universal bundle theories struggle to capture the logical possibility of non-identical indiscernibles[40]. If objects just are bundles of universals in relation, two objects exhibiting all and only the same properties ought to reduce to the same bundle of universals. It is difficult to see how such a reduction could capture the numerical distinctness of the two items[41]. Trope bundle theories enjoy the advantage of being able to capture the relevant possibility by reducing indiscernible items to bundles of particular tropes. On a trope bundle theory, the bundle to which each indiscernible is reduced is constituted by a set of tropes which are numerically distinct from those constituting its match. In order to avoid the accusation that I am unnecessarily saddling Bradley with a problematic proposal where an alternative is available, it is necessary to justify the interpretation I offer. In doing so I will elaborate on some further idiosyncrasies of Bradley's negative method of argument.

That Bradley's bundle theory is a universal bundle theory, as opposed to a trope bundle theory, is supported by several considerations. Firstly, it is clear that Bradley construed

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[40] That the non-identity of indiscernibles is a logical possibility was argued for by Max Black (1952: 156).
[41] See Zhang (2018).

meanings as universal; any expression at all has for its meaning a universal. More interestingly, though, Bradley rejected appeal to tropes because he felt that their postulation constituted a return to the level of feeling unsuitable to the satisfaction of understanding[42]. Bradley's levelling this charge is plausibly traced to his familiarity with Stout's trope theory. For Stout tropes were *dependent* entities[43,44]:

> The roundness of this or that orange, as it exists in the orange, is particular. But it is not concrete. It is not concrete, for the reason that its particularity is derivative. It is particularised not only for knowledge, but in fact, by its being a partial feature of the particular orange. (1902: 1)

Above, we saw that for Bradley the level of discursive thought is that which operates upon independent entities. By contrast, the realm of feeling is that characterised by the presence of dependence relations: 'In immediate experience the whole qualifies every part while the parts qualify all and each both one another and the whole' (1935: 632). In a letter to Stout Bradley writes:

> I am very largely in agreement with you. I think the question as to how identity and diversity are connected in the end is insoluble. One is driven back here as elsewhere on to immediate qualities as given. But, if one is to think and try to understand, one is driven beyond this, & then passes (more or less) into a relational world which is full of contradictions. (1999*a*: 259–260)

Bradley describes Stout's trope theory as consisting in one's being 'driven back here as elsewhere on to immediate qualities as given'. In other words, construing tropes as dependent

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[42] See Levine (2014: 245-248) for a detailed discussion of Bradley and Stout's differences.
[43] See van der Schaar (2013: 130-131).
[44] See Stout (1921: 161).

particulars[45] relegates them to the non-conceptual level of immediate feeling and disqualifies appeal to them from counting as delivering understanding.

Secondly, Bradley would not have been concerned by the charge that his proposal fails to account for the numerical identity of indiscernibles. On the one hand, Bradley emphatically rejects the intuition at work in Black's thought experiment:

> Numerical distinction is not distinction without difference, that once more is senseless… Without difference in character there can be no distinction, and the opposite would seem to be nonsense. (1883: 531-532)

On the other hand, in Bradley's view, discursive thought, operating as it does with universal meanings, is not apt to individuate *any* particulars whatsoever, much less differentiate indiscernible items from one another. As Bradley says[46,47], 'Ideas are universal, and, no matter what it is that we try to say and dimly mean, what we really express and succeed in asserting, is nothing individual' (1883: 50). Discursive thought, according to Bradley, just does not bridge the gap between universal meaning and the particulars we erroneously take to be the subject matter of our ordinary claims[48]. It is therefore not surprising that thought is unable to individuate indiscernible items. In effect Bradley concedes the force of the charge. Bradley is content to highlight the shortcomings of discursive thought, for thought must be abandoned in pursuit of 'Absolute' truth.

Bradley elaborates on his suggestion that the substantive adjective form reduces to a universal bundle theory where he says, 'We certainly do not predicate one of the other; for, if

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[45] It is worth noticing that, contra Bradley and Stout, tropes need not be considered dependent entities; see Maurin (2018: §2.1).
[46] See MacBride (2018: 80), and Galaugher (2013: 12; 32).
[47] Such a view, Schiller argued, describes an epistemic barrier between us and reality which renders the remainder of Bradley's negative arguments gratuitous; see (1925: 219).
[48] See (1883: 66).

we attempt to identify them, they at once resist. They are in this wholly incompatible, and, so far, quite contrary.' (1893: 20). Having reduced substantive adjective to universal bundle, Bradley is concerned to analyse the possibility of such a bundle. Bradley would like to know what the relatedness of the universals consists in. Bradley attempts to cash out the relatedness of the universals in terms of predication, which, in a by now familiar turn, he attempts to reduce to identity. Evidently the universals are not identical. The relatedness of the bundle does not consist in its constituents being identical with one another; were this the case we would no longer have more than one universal, and therefore no *bundle* at all. Bradley advances the following improvement:

> Apparently, then, a relation is to be asserted of each. One quality, A, is in relation with another quality, B. But what are we to understand here by *is*? We do not mean that 'in relation with B' *is A*, and yet we assert that A *is* 'in relation with B'. In the same way C is called 'before D', and E is spoken of as *being* 'to the right of F'. We say all this, but from the interpretation, then 'before D' *is C*, and 'to the right of F' *is E*, we recoil in horror. (1893: 20, emphasis original)

The universals of the bundle are not identical with one another, instead they are supposedly 'in relation' with one another. Bradley then asks what it means to say that an item is in relation with another. Bradley treats the complex *A-is-in-relation-with-B* as dividing into a subject, namely A, and a property, namely *being-in-relation-to-B*. In effect, having reduced the substantive adjective form to that of a related bundle, Bradley now attempts to understand the notion of relatedness in terms of predication. As before, Bradley proposes the reduction of A's possessing *being-in-relation-to-B* to identity. Bradley points out that A cannot be identical to the property of *being-in-relation-to-B*. Identity is a symmetric notion; it is plainly nonsensical, though, to say that '*being-in-relation-to-B* is A'. We 'recoil in horror' from the attempt to analyse relatedness in terms of a predication itself reduced to the notion of identity. Of the attempt to understand predication in terms of identity, Bradley writes

> And we seem to be unable to clear ourselves from the old dilemma. If you predicate what is different, you ascribe to the subject what it is not; and if you predicate what is not different, you say nothing at all. (1893: 20)

It is the description of this dilemma which we saw move Swabey to accuse Bradley's position of being Antisthenean. Antisthenes' views are primarily known by their being obliquely alluded to in the works of Plato and Aristotle. In the *Sophist*, for example, we find the following:

> Visitor: We refer to an individual human being, surely, by calling him all sorts of things, applying colours to him, shapes, sizes, and different varieties of badness and goodness; in all of which cases, and tens of thousands of others, we are not only claiming him to be a human being, but also good and an unlimited number of other things. By the same account we treat everyone else similarly – positing each thing as one, then proceeding to use many names of it and thus treating it as many.
>
> Theaetetus: True.
>
> Visitor: Yes, and by so doing I think we've prepared a veritable feast for the young and for old late-learners, because it makes it all too easy for anyone to latch on to the idea that it's impossible for the many to be one or the one to be many – and then, would you believe, they delight in not allowing us to say a human is good, only that the good is good and the human is human. (251*a* – *c*5)

Swabey attributes to Bradley the view here scathingly rejected by the Visitor of Plato's dialogue. The view Plato rejects is plausibly results from construing predication as an act of naming. On this conception of predication, both predicates and subjects are names. A successful act of predication consists in the concatenation of two synonymous names[49,50].

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[49] This is the characterisation of term logic given by Geach (1962: 60 – 61). See also Corkum (2013). Hobbes, for instance, appears to have held to the conception of predication Geach describes: 'a proposition is a speech consisting of two names copulated, by which he that speaketh signifies he conceives the latter name to be the name of the same thing whereof the former is the name' (Hobbes, 1839: 30).

[50] See Gillespie (1913: 493; 500).

Swabey argues that Bradley's conflating predication with identity leads Bradley to the conclusion that correct thought consists in making true identity claims. Consequently, Bradley rejects examples of predication such as 'the lump of sugar is sweet' as false because the identity claim with which it is confused is false. It is true that Bradley rejects as false the example sentence just given. As we saw, this is because Bradley is concerned to find a reductive analysis of what predication consists in. Bradley, though, does not endorse the allegedly Antisthenean position, namely that true identity claims exclusively constitute correct thought. Indeed, this is shown by Bradley's emphasising that 'if you predicate what is *not* different, you say nothing at all'[51]:

> The principle of Identity is often stated in the form of a tautology 'A is A'. If this really means that no difference exists on the two sides of the judgement, we may dismiss it at once. It is no judgement at all. As Hegel tells us, it sins against the very form of judgement; for, while professing to say something, it really says nothing […] We never at any time wish to use tautologies. (1883: 126)

Bradley evidently rejects true identity claims as tautologous and therefore meaningless[52]. Bradley, far from counting as a term logician for whom judgement consists in identity claims, was a staunch opponent of such an approach[53].

Having concluded that the reduction of the substantive adjective form to that of a universal bundle may not, in turn, be cashed out in terms of the identity of an item with the property of *standing-in-relation-to-y*, Bradley suggests a further proposal:

> Driven forward, we must attempt to modify our statement. We must assert the relation now, not of one term, but of both. *A* and *B* are identical in such a point, and in such a point they differ; or, again, they are so situated in space or in time. And thus we avoid is, and keep to are. But, seriously, that does not look like an explanation of the difficulty; it looks

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[51] See Bradley (1999*a*: 111).
[52] See (1883: 130).
[53] Indeed, Bradley would have endorsed the charge of redundancy Geach (1964: 60) levels at Hobbes.

more like trifling with phrases. For, if you mean that *A* and *B*, taken severally, even 'have' this relation, you are asserting what is false. But if you mean that *A* and *B* in such a relation are so related, you appear to mean nothing. For here, as before, if the predicate makes no difference, it is idle; but, if it makes the subject other than it is, it is false. (1893: 20-21)

Bradley no longer suggests analysing *A-is-related-to-B* as consisting in *A*'s possessing *being-in-relation-to-B*. The suggestion now comes to the replacement of a monadic property with a dyadic one. The analysis of *A-is-related-to-B* results now in three constituents: *A*, *B*, and the relation in which they putatively stand. Bradley now, as before, wants to know what the relatedness of these three constituents consists in. Bradley asks whether the mere aggregate of *A* and *B* can serve as *relata* to the relevant dyadic property. Bearing in mind that Bradley will not take the notion of predication for granted but must offer a reductive analysis, the suggestion is that the bare enumeration of *A* and *B* be identical with the relation they putatively stand in. Evidently such an identity claim is false; the enumeration and the relation consist of different numbers of things. If, though, an enumeration of *A* and *B* is unsuitable for serving as one flank of the identity claim, might we not take *A* and *B* together, asks Bradley. To take *A* and *B* together, though, is to conceive of them *as related*. The attempt to identify *A-in-relation-to-B* with the relation in which they putatively stand is, according to Bradley, to say nothing. Moreover, contracting the enumeration of *A* and *B* into the complex *A-in-relation-to-B* plainly assumes the possibility of the phenomenon under discussion, namely relatedness; it does not, in Bradley's words 'look like an *explanation* of the difficulty' (emphasis added).

Bradley introduces the following alternative:

But let us attempt another exit from this bewildering circle. Let us abstain from making the relation an attribute of the related, and let us make it more or less independent. 'There is a relation *C*, in which *A* and *B* stand; and it appears with both of them.' (1893: 21)

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The suggestion is that we ought not conceive of the relatedness of *A* and *B* as consisting in the possession of either monadic or dyadic properties, and therefore not as reducing to any of the identity claims previously countenanced. If the explanation of relatedness in terms of the possession of properties, and consequently identity, is disallowed, though, Bradley argues that we are bereft of resources to which we may appeal in order to carry out the analysis:

> But here again we have made no progress. The relation C has been admitted different from *A* and *B*, and no longer is predicated of them. Something, however, seems to be said of this relation C, and said again, of *A* and *B*. And this something is not to be the ascription of one to the other. If so, it would appear to be another relation D, in which C, on one side, and, on the other side, *A* and *B*, stand. But such a makeshift leads at once to the infinite process. (1893: 21)

The relational form was invoked in order to avoid alleged difficulties with the substantive adjective one. The possibility of the relational form, though, may likewise not be taken for granted on Bradley's view. We have, in the present proposal, a bare enumeration of independent entities, and we may not appeal to either predication or identity in order to explain the possibility of their being *in relation* with one another. Bradley entertains the suggestion that we may postulate a further relation to explain the possibility of the relatedness of the original enumeration. We were not, however, able to explain the relatedness of the originally postulated *relata* by appeal to the invocation of an independent relation. Invoking further relations, then, fails to promise any improvement on the explanation of the possibility of relatedness. What is required is a reductive analysis of *how* a relation conceived of as an independent item effects relatedness; in the absence of a reductive analysis, it is not advantageous to postulate further entities of precisely the same kind. Bradley's concern in mentioning the 'infinite process' is to emphasise the futility of postulating infinitely many entities in the service of an explanation. Notice that the 'regress' described here is certainly vicious. Lack of explanation is sufficient, in Bradley's view, to reject the possibility of the

explanandum. Bradley's regress is not, therefore, the description of a chain of unproblematic relatedness, vanishing into infinity. It is the lack of explanation afforded by the postulation of any relations at all which lead Bradley to conclude that such an approach fails to justify our faith in the relational form:

> The attempt to resolve the thing into properties, each a real thing, taken somehow together with independent relations, has proved an obvious failure. And we are forced to see, when we reflect, that a relation standing alongside of its terms is a delusion. (1893: 21-22)

One might claim that, by postulating a relation as a constituent, one *has* given an explanation of the relatedness of the putative constituents of the universal bundle. As Blanshard says:

> Bradley has been misled by a metaphor. He is thinking of a relation as if it were another term, as if $A - R - B$ were three beads on a string, and then the relation of R to A or B will present the same problem as that of A to B. But R is not the same sort of being as its terms. It is neither a thing not a quality. It is a relation, and the business of a relation is to relate. (215)

Relations, Blanshard argues, relate *by definition*. By postulating an entity whose defining feature is its ability to effect relatedness, one has explained the relatedness of the bundle. Bradley's sceptical impulses, though, would not have been pacified by the assertion that relations are necessarily capable of effecting relatedness. On Blanchard's line, there just is no sense in asking how relations relate; if something counts as a relation, then it relates. But of course, Bradley's question, then, is whether there *are* such things as relations. Defining an entity as necessarily capable of carrying out some role does not serve to establish that such entities exist[54]. Indeed, Bradley would like to know whether the concept 'relation' has instances of true application. Blanshard appears to conflate his account of the concept 'relation' with an

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[54] See MacBride (2016: §2) and (2011: 173 – 174).

ontological argument for the entities putatively instantiating that concept. In *lieu* of some explanation as to how the concept 'relation' is capable of being instantiated, Bradley will conclude that it is not.

1.2

Relation and Quality

1.2.1

In the previous section we saw that Bradley's argumentative strategy consists in his rejecting a variety of reductive approaches to predication. We also saw that, in Bradley's view, only a reductive explanation of what predication consists in is capable of satisfying his constraints on a successful theory; moreover, we are only justified in taking a phenomenon to be possible where we do possess a successful theory. Consequently, charging Bradley with submitting obviously inadequate proposals to criticism will not simultaneously discharge the proponent of the substantive adjective form of the obligation to replace those inadequate proposals with successful ones. In Bradley's view, the burden of proof lies with his interlocuter.

Just as the identification of an unrepresentative assumption in Bradley's *reductio* arguments does not suffice to prove pluralism true, Bradley's finding each defensive line inadequate does not show that pluralism cannot be true. Bradley's strategy, in chapter two, of enumerating inadequate explanations of the substantive adjective form does not demonstrate a principled reason to suggest that his opponent could not produce an adequate one. In 'Relation and Quality' Bradley's emphasis shifts in favour of establishing the stronger conclusion that no explanation of the relational form is possible. It will turn out as no surprise, therefore, that Bradley could not produce a more successful candidate defence in chapter two. Where 'Substantive and Adjective' challenges Bradley's opponents to satisfy the faculty of

understanding, the emphasis of 'Relation and Quality' is on the inability of the relational form to satisfy the intellect. Bradley prefaces this bolder ambition like so:

> The object of this chapter is to show that the very essence of these ideas is infected and contradicts itself. Our conclusion briefly will be this. Relation presupposes quality, and quality relation. Each can be something neither together with, nor apart from, the other; and the vicious circle in which they turn is not the truth about reality. (1893: 25-26)

Bradley aims to show that that each notion necessarily presupposes the other, but that this presupposition constitutes an intolerable relation of dependence running in both directions. We saw that Bradley's requirement that the objects of thought be represented as independent is a necessary condition on the faculty of understanding's being satisfied. In what follows Bradley will describe a dilemma between what he takes to be the obviously false conception of relations and qualities as capable of being characterised independently of one another, and the inability of any other conception to count as a successful theory. This dilemma informs much of the reasoning at work in chapter three[55], though it is expressed much more explicitly by Bradley in his essay 'Relations':

> But to have an experience as relational, you must have terms which are individuals and which therefore cannot qualify the former unity, but on the contrary so far destroy or supersede it. But when you ask for the unity, which in relational experience has come in and has taken the place of the unity so superseded – you find that there is no answer. There is no unity left, except by a tacit and illegitimate appeal to that which the relational view has discarded. (1935: 637)

Bradley argues that the presupposition of each notion by the other constitutes a co-dependence relation which signals a 'tacit and illegitimate appeal' to the level of feeling. This conception of the notions of relation and quality as co-dependent sins against the requirement we have

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[55] See James Bradley (1984: 233 – 243) for an emphasis on the role of feeling in an interpretation of Bradley's arguments against the relational form. See Levine (2014) for a discussion of Bradley's dilemma.

seen Bradley place on theories if they are to be capable of satisfying our understanding. Bradley intends to show that we cannot simply abandon commitment to the notions' presupposing one another, though. We are *forced* to construe both relations and qualities as co-dependent; the demonstration that we are so forced constitutes the thrust of chapter three.

Bradley begins his argumentative strategy in earnest with the claim that 'qualities are nothing without relations' (1893: 26). Bradley aims to show that it is bound up with the conception of something's being a quality that it be in relation to something else. Bradley says that

> You can never, we may argue, find qualities without relations. Whenever you take them so, they are made so, and continue so, by an operation which itself implies relation. Their plurality gets for us all its meaning through relations; and to suppose it otherwise in reality is wholly indefensible. (1893: 26)

The 'operation' which we perform in our conceiving of something *as* a quality 'itself implies relation', according to Bradley. This operation is the abstraction of items from feeling. To conceive of something as abstracted from something else is, for Bradley, partly constitutive of something's being a discrete item at all. To arrive at content *via* abstraction is to place that content in relation to the process of abstraction[56]: 'There is an operation which, removing one part of what is given, presents the other part in abstraction. This result is never to be found anywhere apart from a persisting abstraction.' (1893: 28). Qualities stand in relation to the process of abstraction. The relation in which they stand is, at least, that of difference: 'Their plurality depends on relation, and, without that relation, they are not distinct. *But, if not distinct, then not different, and therefore not qualities*.' (1893: 28, emphasis added). Strictly speaking, not one but two distinct operations must be performed in order that the ipseity of any quality

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[56] See Mander (1994: 86).

be assured; namely, the process of abstraction, as well as the differentiation of the product from that process. An implication of this conception of what it is for something to be a quality is that we may not conceive of qualities in isolation. Bradley is clear that qualities are never found without relations; by the same token qualities are always found related *to one other*. Qualities, according to Bradley, necessarily appear *en masse*.

Before elaborating on this suggestion in greater detail Bradley describes a defence of the possibility of unrelated qualities which he quickly discards:

> Nor will an appeal to a lower and undistinguished state of mind, where in one feeling are many aspects, assist us in any way. I admit the existence of such states without relation, but I wholly deny there the presence of qualities […] In short, if you go back to unbroken feeling, you have no relations and no qualities. But if you come to what is distinct, you get relations at once. (1893: 26-27)

In the continuum of feeling, where variation in character has not yet been discretely sliced, one may, Bradley argues, claim to find qualities not in relation to one another. Bradley's opponent may argue that the 'aspects' of feeling are not to be counted as in relation, because they have not been isolated and identified as independent from one another. Bradley argues, however, that it is precisely because those aspects have not been individuated from one another that they are not to count as 'qualities' at all. Correct ascription of the word 'quality' to an entity depends on one's having identified something upon which we may perform the ascription; in advance of having made this selection, it is not clear that there is any *thing* available such that we can say that *it* does not stand in any relation. Mere aspects of feeling, according to Bradley, are by definition not identifiable, and are not, therefore available to serve as candidates for predication.

Bradley, then, resumes his defence of the view that the very act of abstraction which supplies thought with content necessarily places that content in relation. Bradley describes a

natural reply to this line of thought[57]. The differentiation of qualities from the process of abstraction, Bradley's opponent argues, is merely a mechanism employed by us in the service of clearing an epistemic route to the relevant items. The necessary attribution of the relatedness of each quality to the process of abstraction is an inevitable consequence of our requiring some epistemic purchase on the world's constituents. The attribution of relatedness' being epistemically inevitable does not imply that those qualities, when considered apart from their representation in thought, are necessarily related. Our epistemic route need not reflect the essential nature of a quality. Bradley swiftly rejects this line of argument[58]. In Bradley's view, and as I have aimed to make clear, the attempt to construe the world as consisting in qualities and relations is an attempt to represent the world *via* discursive faculties. Relations and qualities are contrivances of *thought*. Thought, though, necessarily fails to accurately represent the world; thought's content is universal, the world is particular[59]. There is just no question, on Bradley's view, of considering such items apart from their being represented by us. There is, therefore, no question of the content of thought existing apart from consideration of that content *qua* abstraction. Relations and qualities as such do not exist in the continuum from which they were abstracted[60]. Bradley invites his opponent to prove otherwise, in a characteristically defensive display: '[I] can find no excuse for setting up the result as being fact without the process. The burden lies wholly on the assertor, and he fails entirely to support it.' (1893: 28).

Bradley, as we have seen, denies the applicability of thought's conceptual scheme to reality. We might, like Schiller, ask why Bradley feels it necessary to construct interlocking arguments to the effect that pluralism misrepresents reality, when his conception of thought so obviously rules out any alternative. We ought to remember, though, that Bradley's concern is

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[57] See (1893: 27).
[58] See (1893: 27-28).
[59] J. S. Mackenzie objected to Bradley on the grounds that Bradley's preoccupation with thought was not buttressed by a substantial epistemology; see (1999*a*: 82).
[60] See (1883: 94).

not just to show that representational thought is inaccurate, but that it is essentially contradictory. It is the charge of contradiction which Bradley takes to sanction both his encouragement of thought's 'suicide', and its replacement with non-conceptual 'Absolute' reality.

So far we have seen that, in Bradley's view, the variety of thought's content appears as a coeval group of necessarily related items. One possible response to the claim that thought's content is necessarily relational would be to point out that it is at least conceivable that thought's content consist of one single item. Were the content of thought to be singular, there would be no variety such that relations could hold within it. Of this response Mander[61] argues that Bradley's dismissal of the possibility of thought's consisting of one thing is explained by reference to the empiricist strain in Bradley's philosophical approach. Experience, Mander argues, furnishes us with a 'qualitatively diverse' world. It is worth distinguishing, here, between immediate experience, or 'feeling', one the one hand, and experience generated by the conceptualising faculty of thought, on the other. Immediate experience, according to Bradley, does present the world as diverse, as opposed to homogenous; we do not, though, find a plurality of distinct items there[62]. Feeling does not supply us with a multiplicity of *qualities*, and certainly not qualities in relation. There is a sense, however, in which experience does present the world to us as a plurality. Experience had through the lens of discursive thought reflects the categories distinctive of that conceptual faculty: 'The immediate unity, in which facts come to us, has been broken up by experience, and later by reflection' (1893: 23). It seems more accurate to say that such a plurality is *imposed*, à la Kant[63], rather than found. Bradley evidently employs two distinct notions of experience: non-conceptual feeling and conceptual perception. The former of these two notions cannot be relied upon to deliver the result that the

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[61] See (1994: 86 - 87).
[62] See (1893: 104), and Candlish (1984: 251).
[63] See Baldwin (1990: 31), and Mander (2009: 176).

world necessarily contains a multiplicity of things in relation. The latter notion, on the other hand, represents our capacity to contribute qualities and relations to the world; such a capacity plainly does not yield any extra-mental justification for the reality of the categories it operates with. Indeed, Bradley takes the results of conceptual perception to be systematically misleading[64].

Bradley's response to those who deny the necessary relatedness of thought's constituents can be found here:

> I am not urging that quality without difference is in every sense impossible. For all I know, creatures may exist whose life consists, for themselves, in one unbroken simple feeling; and the arguments urged against such a possibility in my judgement come short. And, if you want to call this feeling a quality, by all means gratify your desire. But then remember that the whole point is quite irrelevant. For no one is contending whether the universe is or not a quality in this sense; but the question is entirely as to qualities […] Our question is really whether relation is essential to differences. (1893: 28-29)

Evidently Bradley does not consider the possibility of a single unrelated quality as constituting a relevant alternative to his conception of thought's content as necessarily related. Bradley's opponent, it is vital to remember, is the pluralist who takes the world to contain more than one thing. Bradley's argument to the effect that multiple things must be related to one another is not defeated by the possibility that there be only one entity, for in making such a claim the pluralist must abandon a defining feature of their position. Mander, though in my view placing too much weight on Bradley's appeal to experience, otherwise correctly identifies the reply to Bradley here considered as irrelevant because not representative of pluralism.

In fact, though, Bradley takes still a stronger line against the possibility of a single unrelated quality. While it is true that commitment to monism is incommensurable with a defence of pluralism, Bradley in fact describes the suggestion as untenable in its own right.

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[64] See (1893: 34).

Mander says that 'the inability of qualities to exist without relations is a function, not of the nature of qualities, but of the nature of plurality' (1994: 87). In my view this is not a wholly accurate characterisation of Bradley's position. Bradley *did* think it was constitutive of something's being a quality at all that it stand in some relation to another quality: 'And a universe confined to one feeling would not only not be qualities, but it would fail even to be one quality' (1893: 28-29). In Bradley's view the notion of a single unrelated quality is not only dialectically irrelevant, but positively incoherent. Above, we saw Bradley's opponent charge him with conflating epistemological and metaphysical necessity. Bradley dismissed the complaint on the grounds that the scheme of relation and quality is patently a scheme of thought, and therefore inseparable from epistemological considerations. A similar defence applies to Bradley's rejection of the possibility of a single, unrelated quality. In Bradley's view such a quality could not be discerned *as* a quality, owing to a lack of distinguishing features. Moreover, and as we have seen, there is no distinction, in Bradley's view, between an item's being identified by *us*, and its possessing identity conditions *simpliciter*[65]. Bradley completes the section in which he aims to establish the necessary relatedness of thought's constituents with the following remark: 'Have qualities without relation any meaning for thought? For myself, I am sure that they have none' (1893: 29-30).

1.2.2

Having taken himself to have established that it is constitutive of something's being an object of thought that it stand in a relation, Bradley proceeds to argue that the necessary relatedness of thought's content leads to insurmountable difficulties. While qualities must stand in relation in order that they count as qualities at all, any explanation of this necessity must fail.

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[65] See (1893: 29).

Just as qualities depend on relations, relations depend on qualities; it is constitutive of something's counting as a relation that it relate qualities to one another. There is no such thing, according to Bradley, as a relation which does not relate some qualities[66]. The prior availability of qualities is therefore a precondition of the possibility of relations. Qualities may not be reduced to relations, on the grounds that the result of such a reduction would have nothing to relate[67]; having nothing to relate, the item in question would not count, for Bradley, as a relation. Bradley describes the notions of relation and quality as co-dependent, and therefore not reducible to one another. Without qualities there can be no relations, and *vice versa*: 'So far as I can see, relations must depend upon terms, just as much as terms upon relations' (1893: 30). The scheme of relation and quality demands that both categories be co-dependent without collapsing into one another. Bradley goes on to argue that this demand is too exacting, and leads to the following infinite regress:

> Hence the qualities must be, and must *also* be related. But there is hence a diversity which falls inside each quality. Each has a double character, as both supporting and as being made by the relation. It may be taken as condition and result, and the question is how it can combine this variety. For it must combine the diversity, and yet it fails to do so. *A* is both made, and is not made, what it is by relation; and these different aspects are not each the other, nor again is either *A* […] This diversity is fatal to the internal unity of each; and it demands a new relation, and so on without limit. (1893: 31)

Bradley argues that the necessary relatedness of qualities results in the unavoidable postulation of internal diversity within any given quality. Moreover, any attempt to account for the relatedness of the diverse aspects of a given quality leads only to the further bifurcation of those aspects, and so on *ad infinitum*. The reasoning at work in the foregoing argument is far from transparent[68]. The chief difficulty in making Bradley's argument intelligible lies in

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[66] See (1893: 32).
[67] See (1893: 32).
[68] Mander, for instance, remarks that 'unfortunately, it is far from clear what Bradley means here' (1994: 88).

finding justification for his holding that the necessary relatedness of qualities *must* result in the postulation of internal diversity within those items. It is not immediately obvious why a quality's being necessarily related to another results in that quality's being internally diverse. In my view Bradley's assertion that qualities be internally diverse represents his attempt to expand on what is, *prima facie*, a problematic conception of a quality. Bradley, as we have seen, claims that qualities are dependent items, insofar as it is constitutive of something's being a quality that it be related to others. Qualities, though, are also independent. Qualities are independent of the relations in which they stand because it is a condition of the faculty of understanding's being satisfied that thought represent items as independent entities. As we have seen, to be dependent is to belong to the non-conceptual realm of immediate experience, rather than the discursive scheme of relation and quality.

Qualities, then, are both independent of the relations in which they stand, and dependent upon them. Bradley's ascription of internal diversity to qualities constitutes an attempt to reconcile their discordant properties. Bradley holds that any given quality possesses at least two 'aspects'. We may, without injury to Bradley's argument, characterise these aspects as properties. A given quality, then, in virtue of being both independent of, and dependent upon, the relation in which it stands, possesses at least two properties. The quality has one property responsible for its being an independent item, and one responsible for its being dependent. The property the quality has in virtue of which it is independent does not explain that quality's capacity for standing in relation to others. The property the quality has in virtue of which it is dependent, by contrast, explains its essentially being related to some other quality. Bradley does not give us examples of properties the possession of which explains either their independence or dependence. Nonetheless, it seems that the motivation for postulating these separate properties is derived from the consideration that possession of one and the same property seems unfit to explain both the independence and dependence of any quality.

Bradley's attempted resolution of the independence and dependence of qualities consists in the postulation of two distinct properties, such that neither of those properties need fulfil apparently contradictory roles.

Bradley immediately recognises that such a strategy will not succeed. For any given quality it is essential that *it* be both independent from and dependent on the relation in which it stands. Qualities essentially inhabit conflicting roles; to reconcile these roles by delegating that work to separate entities, though, merely postpones the difficulty. Having postulated two properties in order that the labour be harmoniously divided we must ask, of those postulates, how *they* stand to each other. Each postulate is itself a quality, and therefore suffers precisely the same conflicting demands as their owner. For either of the properties invoked to explain both the independence and dependence of the quality possessing them, we must likewise ascribe simultaneous independence and dependence. It is, as before, constitutive of something's being an entity at all that it be represented as necessarily related to others. Moreover, and as we have seen, entities must be independent of the constitutive relation in which they stand, in order that they be 'understood' as discrete items.

Bradley derives the following conclusion from the above considerations: 'We, in brief, are led by a principle of fission which conducts us to no end' (1893: 31). Bradley aims to show that the necessary relatedness of qualities is incommensurable with the demand placed on those qualities by the faculty of understanding that they be independent. The postulation of further qualities to perform the role of independence is patently futile, since they are likewise subject to that same demand. Bradley's claim is that, if one quality cannot account for its own independence from the relation which constitutes it, postulating infinitely more will not supply that account. The faculty of understanding places demands upon qualities which they necessarily fail to meet. The attempt to save qualities from relegation to the realm of feeling by appeal to further qualities is bound, in Bradley's view, to be ineffectual.

Blanshard writes

I have failed to see the force of this argument because I fail to see the difference between a and α. Let us suppose the relation between A and B is that of *larger than*; A is larger than B. That means that A must possess something on which the difference is based, in this case its margin of size, which is a. Let us agree that, noticing the difference, we see that it is the margin of size that makes the two distinct. The reference to this element is the result of our distinguishing the two sizes, and it is called α. But surely these two elements are the same. (1984: 216)

Blanshard interprets the postulated diversity of a given quality as consisting in one property responsible for its being related to others, and another property discernible only through our placing it in that relation. According to Blanshard, Bradley distinguishes the property of being responsible for a relation from the property of being identified as the product of that relation. Blanshard argues that these properties are not distinct, and that the internal diversity Bradley describes need not, therefore, be invoked.

A's being larger than B relies, in part, on A's size. Moreover, we identify A as a discrete item, in part, by differentiating its size from that of B. The size of A plays the dual role of being both the source of its relation, as well as discernible only *as the relatum* of that relation. Properties, we have seen, are only identifiable as *relata*, according to Bradley. Properties can, on Blanshard's interpretation, be the partial source of the relation the standing in of which is constitutive of their identity. It is Blanshard's contention that the possibility of one item performing the dual roles of 'condition and result' (1893: 31) tells against Bradley's conclusion that qualities, if they are to be related, must be internally diverse.

I take it that Blanshard is correct where he points out that A's size is both the partial source of, and discernible only with respect to, the relation of being larger than B. I do not, however, agree with Blanshard's explanation of why Bradley ascribes internal diversity to the relevant entities. In my view, the internal diversity of a quality does not, according to Bradley,

consist in the possession of the two properties Blanshard describes. In other words, the two properties Bradley postulates are not those of being the source, and product, of a relation. Instead, and as I have aimed to make clear, the two properties Bradley ascribes to any given quality are those which account for both its independence and dependence.

While Blanshard makes it clear how one and the same property perform both the roles he describes, it is not clear that a single property may account for both the independence and dependence of a quality. To take Blanshard's example, the size of *A*, while partially explaining its being larger than *B*, does not account for *A*'s being independent of that relation. One could argue that the dependence of the relation of *larger than* on *A*'s size just is what that property's independence comes to. For if the relation of *larger than* is dependent on *A*'s size, and dependence is not a symmetric relation[69], it follows that *A*'s size is independent of that relation. Clearly, though, it has been Bradley's aim in the arguments so far discussed to demonstrate that dependence is, here, symmetric. The co-dependence Bradley describes constitutes an extremely tight circle of reasoning the kind of which we have seen Bradley reject as failing to satisfy his demand for explanatory progress.

A's size does not account for the independence of *A*, on Bradley's view. The temptation is to ascribe a further property to *A* in virtue of which it is independent. Given Bradley's commitments, it is clear that no such property will suffice. It is no surprise, therefore, that Bradley does not produce examples of properties which account for their owners' independence. Furthermore, we will incur with every new property postulated a fresh independence to explain; the infinite regress Bradley describes is of the branching variety.

Mander offers an alternative interpretation:

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[69] I take it that this is the orthodox view regarding the relation of dependence. See Koslicki (2013: 32).

I suggest that this is best interpreted as that part of *A* affected by the relation, and that part of *A* unaffected by the relation, or, to put it another way, that part of *A* which actively enters into the particular relational situation in question and that part which remains outside. An example may make this clearer. If *A* is shorter than one metre, the two parts would be *A*'s height and all the rest of *A*'s properties. (1994: 89)

For any item in relation, its relatedness is 'supported' by a specific property. Not all of the properties an entity possesses, though, are directly involved in the relation which that entity stands in. That a bowling ball possesses the property of being heavy, for instance, is irrelevant to its being rounder than a carrot; it is the shape of the bowling ball which partially supports this relation. We must, though, explain the relatedness of both the weight and the shape of the bowling ball, if we're to assert the possibility of such an item at all. Mander identifies the fact that a composite item must itself be unified in order that it be capable of standing in relation. It is not at all clear why, though, in attempting to explain the relatedness of the weight and shape of the bowling ball, we ought to postulate further diversity within those respective properties. Mander's interpretation does not motivate the ascription of infinite fission to the constitutive properties of a given *relatum*. Mander's answer to a separate challenge sheds light on this oversight:

The most natural place to challenge it would seem to be the assumption that […] every related term must break up into these two aspects, for would it not be possible to relate two wholly simple terms? But I think that this line of objection is misguided, in that the whole argument is really functioning as a *reductio ad absurdum* of this very assumption. (1994: 89 – 90)

Mander's interpretation relies on the assumed complexity of *relata*; he argues that the internal diversity of a given quality is taken for granted. It is, Mander claims, against the conception of a *relatum* as composite that Bradley's argument is aimed. In my view this is not correct. Bradley argues that it is a consequence of something's being a *relatum* at all that it must be

internally diverse. It is precisely an argument for the internal diversity of all *relata* which licenses Bradley to ascribe such diversity to the properties constitutive of items. Lacking an argument for the internal diversity of *relata*, on account of Mander's viewing the diversity of qualities as assumed for *reductio*, it is not clear why the properties constitutive of the bowling ball themselves carry the burden of diversity. The infinite regress Bradley describes is a direct consequence of his arguing that all qualities *must* be both dependent and independent. The demand that all qualities be both independent and dependent is, as we have seen, derived from Bradley's concern to satisfy the faculty of understanding, as well as his conception of qualities as constituted by their being in relation. Bradley's argument is a *reductio* of this conception of qualities; moreover, Bradley argues that such a conception is forced on us by the various considerations so far outlined.

1.2.3

So far, we have seen Bradley argue that qualities both must and must not depend upon relations. Relations, similarly, must both depend and not depend upon qualities. Having already established what he takes to be insurmountable difficulties with the conception of qualities so far discussed, Bradley evidently regards his attack on relations as somewhat superfluous[70]. In the final section of 'Relation and Quality' Bradley rehearses lines of thought we saw at work in 'Substantive and Adjective'.

I have already mentioned Bradley's view that it is constitutive of something's counting as a relation at all that it relate some qualities. Relations must, though, be independent entities if they are to count as representable by discursive thought. On the assumption that relations are independent items, it is not clear what their capacity to *relate* consists in. In advance of a

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[70] See (1893: 32-33).

reductive analysis of a relation's capacity to relate, Bradley will deny that relations are so capable. Bradley argues that an obvious approach to explaining the relatedness of a given relation R to its *relata* is the postulation a further relation R_1 in which R and its *relata* putatively stand: 'But if it is to be something to them, then clearly we shall require a *new* connecting relation' (1893: 32, emphasis original).

Clearly though, lacking an explanation of R's relatedness to its *relata*, we similarly lack an explanation of R_1's relatedness to R and R's *relata*. Soliciting further entities for whom we lack an explanation of their capacity to relate, in the service of explaining the capacity of some other item to relate, is, in Bradley's view, profitless. Bradley then reminds us that we will not make an explanatory advance by attempting to reduce relatedness to predication: 'For the relation hardly can be the mere adjective of one or both of its terms; or, at least, as such seems indefensible' (1893: 32). We have seen, above, Bradley's reasons for rejecting this approach[71].

Bradley rests his case. He takes himself to have shown that the notions of quality and relation are necessarily conceived of as depending upon each other. In order, though, that these concepts be properly counted as discursive, their instances must be independent entities. As we saw, it was Bradley's view that the faculty of understanding demands that the content it engages with be represented as independent. These two features of thought's content, namely both their independence and dependence, stand in irresolvable tension with one another. Consequently, Bradley concludes that the scheme of relation and quality cannot meet the adequacy constraints we have seen him place upon successful theories. Bradley demands that these adequacy constraints be fulfilled by a theory if he is to treat the subject matter of that theory as constituting a genuine possibility. In light of the failings of the scheme of relation and quality to satisfy his constraints, Bradley concludes that such a scheme fails to represent reality.

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[71] Bradley briefly restates the difficulties in a footnote, concluding that 'it seems unnecessary to work this all out in detail' (1893: 32, no. 1).

1.3

Conclusion

My aim in the preceding discussion has been to produce an accurate interpretation of Bradley's arguments by placing those arguments in their broader context. The broader context I describe includes Bradley's sceptical orientation as well as his demand for satisfaction of both the intellect and understanding. Having discussed the close connection between the reasoning at work in Bradley's arguments and the methodology which informs them, I aim to have shown that these arguments cannot be faithfully represented without respecting that connection. The dilemmas which Bradley identifies are directly related to the methodological commitments and adequacy constraints here discussed. Consequently, it would not be surprising if Bradley's arguments, when treated in isolation, appear obviously confused. Bradley's arguments, though, are not obviously confused. On the contrary, Bradley's position in *Appearance and Reality* represents a determined though idiosyncratic species of sceptical reasoning, where the methodology informing that reasoning is responsible for the conclusions subsequently drawn. In the next two chapters we shall see that Russell and Moore adopted a conception of philosophy according to which Bradley's methodology is relinquished. Both Russell and Moore held to the view that certain assumed truths constitute unassailable starting points from which further reasoning may proceed. The ultimate source of disagreement between Russell and Moore on the one hand, and Bradley on the other, was the status of their respective methodological principles.

Chapter Two

Mathematics First and Russell's Response

to Bradley

Introduction

In this chapter I describe Russell's response to Bradley's complaints against a pluralist ontology. Bradley's opposition to pluralism was, in Russell's view, rooted in a methodological approach not shared by both figures. I show that Russell, having diagnosed the source of his and Bradley's disagreement as consisting in their commitment to divergent methodologies, rejected the latter's conception of an adequate philosophical theory on the grounds that such a conception rules out the possibility of mathematics' being true.

I begin by discussing Russell's early, Hegelian view, according to which dialectical transitions from sciences more abstract to those less so terminate in Absolute idealism. Russell, on this early view, held that every science is necessarily contradictory, and that resolving these contradictions constitutes dialectical progress. Russell, I show, subsequently abandoned this position, having identified commitment to a particular conception of logic as responsible for the conclusion that sciences are contradictory. Russell replaced the offending view of logic with his own, on which relational statements are conceived of as irreducible to predicative ones. I show that Russell, having endorsed this novel view, was faced with the Bradleyan difficulty of explaining how it is that relations effect relatedness. Russell, I argue, was

ambivalent with respect to the force of this difficulty, and vacillated between consternation and dismissiveness with respect to it.

I claim that Russell's response to Bradley was to concede that he could not provide an analysis which delivers an understanding of how relations effect relatedness. I argue, though, that from 1903 onwards Russell sought to justify his philosophy of logic through appeal to the possibility of inferring from statements of logic those of pure mathematics. Russell's position, first expressed in 1903, but held consistently until at least 1918, was that his choice of logic is justified insofar as statements of pure mathematics are entailed by purely logical ones. I describe this view as a 'mathematics first' approach, on which mathematics is conceived of as prior to logic. Mathematics is prior to logic, on this view, insofar as we may justify our commitment to logical postulates by appeal to the possibility of deriving from those postulates certain mathematical truths, and where our commitment to those mathematical truths is justified independently of their capacity to be derived from logical postulates. It has been acknowledged that Russell held to this view from 1906. It has not been so widely acknowledged, though, that this strategy was present throughout the *Principles of Mathematics*. It has, moreover, not been widely acknowledged that this strategy constituted Russell's response to *Bradley*. That Russell's justification for his philosophy of logic constituted, in his view, a defence of pluralism in the face of Bradley's objections, is a novel thesis which I shall defend, below.

I show that Russell, having adopted a 'mathematics first' position with respect to the justification of his choice of logic, proceeded to diagnose his and Bradley's dispute as turning on their endorsing widely divergent methodological principles. Russell determined that his and Bradley's exchange had terminated in a 'deadlock'. I show that Russell's cognisance of his and Bradley's methodological differences enabled him to assess the status of their dispute. Russell

felt that he was under no obligation to observe the demands of Bradley's method where more fruitful philosophical approaches appeared to him available.

2.1

Russell's Dialectic of Sciences

2.1.1

In this section and the next I shall describe the intellectual journey which Russell took from Hegelian idealism to pluralistic realism. Charting Russell's earliest philosophical developments will allow us to discover precisely when, and why, Russell adopted a view which was radically opposed to that of Bradley. Having outlined these developments we will be better placed to assess Russell's defence of that position.

Russell recounts, in *My Philosophical Development* (1959), the profound influence of McTaggart on his early relationship with philosophy:

> McTaggart had Hegelian answers to the rather crude empiricism which had previously satisfied me. He said he could prove by logic that the world is good and the soul immortal. The proof, he admitted, was long and difficult. One could not hope to understand it until one had studied philosophy for some time. I stood out against his influence with gradually diminishing resistance until just before my Moral Sciences Tripos in 1894, when I went over completely to a semi-Kantian, semi-Hegelian metaphysic. (1959: 30)

Russell can be seen endorsing Hegelian solutions in a letter to Alys:

> The Dilemma at the end has puzzled me for a year – I think there is no solution short of the Hegelian Dialectic. I am thinking of saying more on the independence of desire and knowledge: how they form coordinate realms, and how just as no isolated truth is wholly true, so no isolated object of desire is wholly good – and as thought leads one on dialectically to the Absolute, so desire, by alternate satisfaction and disappointment, leads one on to the Absolute Good. (Quoted in Russell, 1983: 90-91)

The date of this letter, the 26th of October 1894, confirms the chronology reported by Russell in *My Philosophical Development*. Perhaps the clearest statement of Russell's Hegelian

orientation may be found in his 'Note on the Logic of the Sciences' estimated to have been written late in 1896[72]; it is worth reproducing at length:

> Every science works with a certain limited number of fundamental ideas, which number is smaller than that of all fundamental ideas. Now every science may be regarded as an attempt to construct a universe out of none but its own ideas. What we have to do, therefore, in a logic of the sciences, is to construct, with the appropriate set of ideas, a world containing no contradictions but those which unavoidably result from the incompleteness of these ideas. Within any science, all contradictions not thus unavoidable are logically condemnable; from the standpoint of a general theory of knowledge, the whole science, if taken as a metaphysic, *i.e.* as independent and self-subsistent knowledge, is condemnable. We have, therefore, first to arrange the postulates of the science to as to leave the minimum of contradictions; then to supply, to these postulates or ideas, such supplement as will abolish the special contradictions of the science in question, and thus pass outside to a new science, which may then be similarly treated. […] I think, however, that two types of dialectical transition will have to be distinguished: the one […] merely supplies to an abstract idea its necessary and substantive complement, while leaving, to the abstract science, full validity on its own level. In this case, there is hardly any contradiction, but only incompleteness. The other kind of transition, like that from continua to discrete, or from matter and force to (?), is dialectical in the true Hegelian sense, and shews that the notion of the science in question is fundamentally self-contradictory, and must be throughout replaced by another, in any metaphysical construction of the real. (Russell, 1990: 5)

This note figures (1959: 40-41) in a selection of Russell's writings judged to be representative of his early work, and of which he said, 'The notes I made at that time have, however, a possible historical interest, and, although they now seem to me to be misguided, I do not think that they are any more so than the writings of Hegel' (1959: 33). In this note Russell describes an approach in which the attempt to 'construct a universe' from a given science is guided by the *desideratum* that the science in question be conceived of as not leading to 'unavoidable' contradictions. It is Russell's view here that for any science so treated, unavoidable contradictions will remain. These 'special contradictions' are to be resolved through the science in question's being supplemented with postulates from another. Having resolved the contradictions of one science through the employment of notions belonging to another, we shall be faced with another science of which the avoidable contradictions must then be expunged.

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[72] See Russell (1990: 3).

This new science, though, shall likewise possess unavoidable contradictions, and consequently it 'may then be similarly treated'. In May of 1896, shortly before his writing the above, Russell had read McTaggart's *Studies in Hegelian Dialectic*, the very first passage of which exhibits a clear influence on Russell's view:

> Hegel's primary object in his dialectic is to establish the existence of a logical connection between the various categories which are involved in the constitution of experience. He teaches that this connection is of such a kind that any category, if scrutinised with sufficient care and attention, is found to lead on to another, and to involve it, in such a manner that an attempt to use the first of any subject while we refuse to use the second of the same subject results in a contradiction. The category thus reached leads on in a similar way to a third, and the process continues until at last we reach the goal of the dialectic in a category which betrays no instability. (1896: 1)

The parallels between the interpretation of Hegel expressed in this passage and the views present in Russell's note support the characterisation given in *My Philosophical Development* of McTaggart as the principal philosophical influence upon Russell during this period[73].

Russell offers the following example of his envisaged dialectical procedure:

> Thus e.g. Number, the fundamental notion of Arithmetic, involves something numerable. Hence Geometry, since space is the only directly measurable element in sensation. Geometry, again, involves something which can be located, and something which can move – for a position, by definition, cannot move. Hence matter and Physics. (Russell, 1990: 5)

There are several features of this view which are relevant for our purposes. Firstly, the dialectical transition proceeds from a science with greater degree of abstraction to that of lesser degree. Secondly, it is the presence of unavoidable contradictions in the philosophy of each science which spurs on the dialectical transition from one science to another. I shall elaborate on each of these features in turn.

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[73] Russell does, though, frame his dialectic in terms which suggest a greater desire to engage with the technical details of particular sciences than does McTaggart. Levine attributes this feature of Russell's view to the influence of Ward; see Levine (2019: 30-31).

From Russell's example, quoted above, it is clear that the dialectical transition from science to science involves the supplementation of a more abstract science with postulates from that which is relatively less abstract[74]. Arithmetic is held to be in need of supplementation by geometry; in turn geometry requires the addition of physics. As the dialectic proceeds, we may eventually reach psychology, as Russell writes in a set of notes from 1896-98 titled 'Various notes on Mathematical Philosophy' (1896-98): '*Perhaps* there may be hope in restoring the pre-eminence of the *here*, as a source of absolute position; *perhaps* we may replace force by conation, and pass on into psychology.' (1896-98: 16, emphasis original). Sciences are more abstract insofar as they treat their subject matter as capable of a greater degree of *independence* from the subject matter of other sciences. Arithmetic, for instance, treats numbers as independent of space and time. Geometry, while concerning points in space, proceeds without relating those points to force; whereas physics, on this view, does not require that minds be given an explanatory theoretical role[75]. Importantly, sciences of lesser abstraction are held by Russell to be *logically prior* to those of greater degree. This view is of course counter-intuitive to those of us taught that *beyond* the limits of chemistry's explanatory purview lies physics.

That the subject matter of any science is independent of another is shown to be false, according to Russell, by the presence of unavoidable contradictions which are surmountable only through adverting to the resources of those sciences further along the dialectical road. The word 'abstraction' may be replaced by 'false abstraction' in any sentence of Russell's Hegelian dialectic without distorting that view, for the degree to which the subject matter of a science is treated as independent of others is the degree to which that science is false. In 'Various Notes on Mathematical Philosophy' Russell writes

> The principle of our dialectic appears to lie in making the Whole gradually more explicit. Our separate particles turn out, first to be related to other particles, and then to be

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[74] See Levine (1998: 90-92).
[75] See McTaggart (1896: 26-27).

necessarily related to all other particles, and finally to err in being separate particles at all. With this we pass to the plenum. (1896-98: 23)

Here Russell conceives of the replacement of a construal of particles as independent from one another with that of a continuous plenum as reflecting dialectical progress. Conceiving of items as dependent, rather than independent, facilitates the possibility of our grasping 'the Whole', in which all entities are found to be interdependent, and where the subject matter of any science is seen to rely for its intelligibility on that of all others downstream of it. Russell's view of abstraction as falsification can be found in work written as early as 1895, where in his first published review, titled 'Review of Heymans', he writes

> Mechanics involves the abstraction of motion from the moving matter; these two are regarded as separately constant, though the motion is allowed to be transmitted from body to body; in fact, the orthodox mechanical doctrine might be compared to the Transmigration of Souls. Thus the principle is not applied to the real, but to an intellectual and abstract construction of the real, resting on the distinction between substance and attribute. (Russell, 1990: 255)

The extent to which mechanics involves abstraction is the extent to which it fails to apply to 'the real'. The expressions 'the Whole', 'the real', and 'the Absolute' are all employed synonymously, and stand for the final stage of dialectical transition, in which we come to a grasp of the world free of (false) abstraction, and without a conception of the subject matter of any science as independent of those less abstract. Crucially, arriving at this terminus involves grasping the truth of idealism, for as we have already seen, the theoretical role played by minds in the dialectic is logically *prior* to that of matter, space and time, and even number. Only at this final stage of the dialectic will our apprehension of the world be liberated from the contradictions generated through abstraction.

It is, we have seen, the presence of contradictions which fuels the motion of Russell's dialectic of sciences. It is important for what follows that we appreciate the nature and significance of such contradictions in further detail. One of the earliest expressions of the

relationship of contradiction to dialectical progression may be found in Russell's 1896 paper

'The Logic of Geometry' (1896*a*):

> Finally, the postulate from which the whole discussion started, the relativity of position, made it impossible to avoid circles in our definitions: points could only be defined by lines, and lines by points. Thus, even in the a priori part of Geometry, we have a space which cannot stand by itself, a thing all relations, without any kernel of thinghood to which the relations can be attached. This forces us to attempt a resolution of the contradiction by abandoning the purely geometrical standpoint; but such an attempt would fall outside the limits of the present paper, and would only be possible on the basis of a general metaphysic. (286)

The relevant contradiction follows, according to Russell, from our conception of the identity of a point in space as wholly exhausted by its relation to other points[76]. Moreover, this conception of a point's identity is, on Russell's view, forced upon us by philosophical considerations. Russell during this period held to the 'Axiom of Free Mobility', described in his 1896 'The A Priori in Geometry' (1896*b*). This axiom asserts that '*Spatial magnitudes can be moved from place to place without distortion*' (1896*a*: 268, emphasis original). In other words, for any shape *X*, *X* is in principle capable of occurring at any location in space; or 'a figure which is possible in any one position in space is possible in every other' (1896*a*: 268). It is absurd, in Russell's view, to suppose this axiom false, on the grounds that an item's shape would in that case be determined to some extent merely by its location. Space must be conceived of as entirely 'passive'[77], and not capable of exerting any effect upon the items inhabiting it, according to Russell. Russell argues that the contrary view is vulnerable to the following objection:

> This want of homogeneity and passivity is, however, absurd; no philosopher has ever thrown doubt, so far as I know, on these two properties of empty space; indeed they seem to flow from the maxim that nothing can act on nothing, for empty space is rather a possibility of being filled than a real thing given in experience. We must, then, on purely

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[76] See also Russell's 1895 'The Free-Will Problem from an Idealist Standpoint' (Russell, 1990: 234).
[77] See (1896*a*: 269; 276).

philosophical grounds, admit that a geometrical figure which is possible anywhere is possible everywhere […]. (1896*a*: 269)

Russell here argues from the nature of space to the impossibility of its exerting an influence on those things located within it. Consequently, Russell concludes that space must be 'homogenous'; each point in space must be qualitatively identical to every other, in order that the Axiom of Free Mobility be true. The philosophical reasons for Russell's endorsing the Axiom of Free Mobility therefore lead directly to the view he endorses in *An Essay on the Foundations of Geometry*, namely that space, whether Euclidean or not, must of necessity possess a constant curvature[78,79]. If the curvature of space was not constant, the Axiom of Free Mobility could not be true[80]. Importantly, Russell claims that in order for this axiom be true, the identity of a point must be exhausted by its relations to other points. Russell writes, 'Hence, positions in space, if our axiom be true, must be wholly constituted by external relations, *i.e.*, *Position is not an intrinsic, but a purely relative, property of things in space*' (1896*b*: 296, emphasis original). Take two arbitrarily chosen points in space *A* and *B*. If *A* and *B* are to be qualitatively identical, but numerically distinct, their distinctness must not consist, on Russell's view, in their possessing different intrinsic properties. If the numerical non-identity of *A* and *B* consisted in their possessing distinct intrinsic properties, then space would not be 'homogenous'. The necessary uniformity of space would, Russell evidently felt, be threatened by the possibility of spatial points differentiated from one another by divergent intrinsic properties. Consequently, Russell held that spatial points are capable of being defined solely by appeal to the relations they bear to one another. Spatial points, therefore, are entirely

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[78] See Russell (1897: 21-22).

[79] In his (1959) Russell observes the effect Einstein's discoveries had on his position: 'Einstein's revolution swept away everything at all resembling this point of view. The geometry in Einstein's General Theory of Relativity is such as I had declared to be impossible.' (31)

[80] Russell offers the following example of a space with non-constant curvature: '[the Axiom's] meaning will become clearer by reference to a case where it does not hold, say the space formed by the surface of an egg. Here, a triangle drawn near the equator cannot be moved without distortion to the point, as it would no longer fit the greater curvature of the new position' (1896*a*: 268).

definable in terms of their relations to one another, and are not differentiated through appeal to their possessing uniquely identifying properties.

That *A* and *B* are qualitatively identical while numerically distinct, however, constitutes a contradiction, according to Russell. To see why we must examine the following passage from *An Analysis of Mathematical Reasoning* (1898):

> We are supposed to have two terms A and B, with a relation R which transforms them into $A\beta$ and $B\alpha$. β is an adjective which has reference to B, and α similarly has reference to A. Neither can be expressed without this reference, and α and β differ in content. But A and B, considered without reference to the relation R, have no differences of conception corresponding to the differences α, β. [...] Thus we have a difference without a point of difference, or, in the old formula, a conception of difference without a difference in conception. This contradiction belongs, therefore, to all relations of our fourth type; and relations of this type pervade almost the whole of Mathematics, since they are involved in number, in order, in quantity, and in space and time. (1898: 225-226)

Discovering just what Russell held to be problematic here requires that we emphasise the conception of a spatial point he had endorsed, according to which: 'points must be wholly constituted by relations, and can have no intrinsic nature of their own. A point is defined by its relation to other points.' (1896*b*: 298). We have just seen that Russell adopts this view on the grounds that alternative conceptions of spatial points threaten the viability of his Axiom of Free Mobility. Furthermore, Russell held to the view that relational statements must be reducible to predicative ones:

> *We may say, generally, that any relation implies, and is equivalent to, (1) an adjective of each of the related terms* (2) *an adjective of the whole into which any two terms are related* terms can be collected. Omitting (2), which is not relevant to this discussion, we may say that relations are distinguished according as the adjective of either term can, or cannot be expressed without reference to the other term. (1898: 224, emphasis added)

The logical apparatus available to Russell in the relevant period extended no further than to *subject-predicate* logic. Anachronistically, we may describe such a view of logic as consisting in the contention that every declarative statement is the value of a function with exactly one

argument place. Less anachronistically, we might characterise subject-predicate logic as a conception of logic on which statements possess exactly two logically significant features, and where these features correspond to the grammatical categories of subject and predicate. The relational statement 'A is 5 metres from B' is, therefore, to be analysed as a pair of subject-predicate sentences. One such sentence is '$A\beta$', where 'A' stands for a spatial point, and 'β' stands for the property of *being-5-metres-from-B*. Russell therefore suggests that 'β' 'is an adjective with reference to B'. The second sentence of this pair is '$B\alpha$', where 'B' stands for a spatial point, 'α' stands for the property of *being-5-metres-from-A*, and where 'α' therefore 'has reference to A'.

The difficulty is this. Owing to the postulation of Russell's Axiom of Free Mobility, and concomitantly his holding that the curvature of space must be constant, spatial points must be conceived of as qualitatively identical. Consequently, the relatedness of A and B is not explicable through appeal to their possession of distinct properties, for by hypothesis they do not possess distinct properties. We have, therefore, a conception of two items' being different, without a difference in our construal of which concepts truly apply to them. The requirement that spatial points be homogenous is, in Russell's view, in irresolvable tension with the contention that relational statements reduce to predicative ones. We lack the capacity to differentiate spatial points through appeal to their properties, and moreover, the differentiation of one item from another *can only be effected* by an appeal of precisely this kind.

A first response to this alleged difficulty is to point out that A and B clearly do differ in their properties, for A possesses β, B possesses α, while A does not possess α and B does not possess β. Russell responds:

> Either α or β alone may, however, be considered as expressing a difference between A and B; β, in fact, gives to A the adjective of differing from B in a certain manner, and α expresses the same difference with B as starting-point. We have thus a difference between A and B, namely that expressed by either α or β, but we have no corresponding point of

difference. We cannot use the difference between α and β to supply the point of difference, for both α and β state a difference, and therefore *presuppose* a point of difference. (1898: 225-226, emphasis original)

Russell here argues that A's possessing β and not α, and B's possessing α and not β, does not *explain* our conception of A and B as numerically distinct, but merely 'presupposes' that distinction. The possession of properties β and α cannot, therefore, figure as that upon which the relatedness of A and B *depends*. Predicates featuring in subject-predicate reductionist analyses of relational statements must not themselves presuppose the possibility of relatedness. The relatedness of A and B both must and cannot depend upon their possessing distinct properties, where the properties β and α are *ruled out* as inappropriate candidates for fulfilling the relevant explanatory role.

It is worth noticing that any relational statement not reducible to predicative ones of the specified kind presents this difficulty to Russell. We may, for present purposes, describe such relational statements as asserting the holding of an 'external' relation. The relation of distance, by these lights, counts as a *symmetrical* external relation. Both statements asserting the holding of symmetrical external relations, and those asserting the holding of asymmetrical external relations, issue in the difficulty described by Russell as that of 'a conception of difference without a difference of conception' (1898: 226). We shall see that Russell, as his views developed, became increasingly concerned that external asymmetrical relations could not be adequately captured on the view that relational statements reduce to predicative ones, for external asymmetrical relations figure prominently in mathematics. It is not, however, the asymmetry of a relation, but its externality, which renders it beyond the reach of Russell's early logical techniques. This fact is obscured by Russell's employing terminology divergent from current usage. Russell, for instance, appears to suggest that symmetrical relations *are* reducible to properties in his 'Drafts of the *Principles of Mathematics*':

> Among the terms commonly regarded as relational, some, such as equality and simultaneity, are capable of reduction to what is called identity of content. But these are to be further analysed into sameness of relation to a given term. For the so-called properties of a term are, in truth, other terms to which it is related, so that a common property of two terms is a third term to which both have the same relation. This reduction can be effected with all symmetrical relations; these, therefore, are not properly relations at all. All irreducible relations are unsymmetrical, and there must be irreducible relations, since a proposition must contain two terms at least, and the proposition constitutes a relation between them. (Russell, 1993: 94)

Crucially, in 'The Classification of Relations' (1899*b*) Russell defines a 'symmetrical' relation as both symmetrical, in the sense of 'symmetrical' contemporarily understood, and *transitive*[81]. Relations which are not transitive but are symmetrical, contemporarily understood, he terms 'reciprocal', offering 'spatial or temporal separation' as examples of such relations. Consequently, we should not conclude, on the basis of Russell's claiming that statements involving symmetrical relations are reducible to predicative formulations, that the relation of distance is in his view likewise reducible; the relation of distance is not symmetrical *and* transitive. Russell does repeatedly emphasise the importance of asymmetrical relations to the contradiction of relativity; Russell, though, would have included among relations not symmetrical some which we would now describe as symmetrical. It is, to clarify, the *externality* of a relation which leads to relevant contradiction, not its asymmetry. Russell, though, termed all relations presently understood as external 'asymmetrical', though contemporarily we would regard some such relations as in fact symmetrical.

Russell, during his idealist period, diagnosed the source of the so-called 'contradiction of relativity' with respect to geometry as consisting in the false abstraction of that science's subject matter. Geometry, therefore, essentially leads to the relevant inconsistency, and the inconsistency may only be surmounted through a dialectical transition to a science less abstract. As Griffin correctly writes

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[81] (1899*b*: 138).

As a neo-Hegelian, Russell took the contradiction of relativity to show the perils of abstraction, rather than the failings of the dialectic. The solution for each version of the contradiction was to build a new science on the basis of the old by adding new concepts which would enable the diverse but indiscernible elements of the original science to be distinguished in the new. The procedure was always to provide the missing difference of conception by means of a dialectical supersession to a new, less abstract science. (2012: 2)

We shall see, in the next section, that Russell's mind changed in this respect, and that his discovering the logic of relations led him to the view that sciences need not harbour the unavoidable contradictions responsible for fuelling dialectic motion.

2.2

Relations

2.2.1

We now have a clearer impression of the philosophical view to which Russell would, from at least 1899 onwards, be opposed. In this section I describe Russell's conversion to pluralism, and isolate the particular Bradleyan difficulty with which he was then faced. I show that Russell was conflicted with respect to the correct attitude to take regarding the problem of 'unity' in 1899. By 1903, though, Russell had settled on the view that his position, while vulnerable to the relevant problem, is nonetheless correct. In other words, Russell accepted that the problem of unity was, on his view, insoluble, though he did *not* view this as a sufficient reason to reject his position. In section 3 I shall discuss in further detail precisely why it was that in Russell's view the virtues of his then approach outweighed its vices.

In *An Analysis of Mathematical Reasoning* Russell can be seen isolating the kind of relation which gives rise to the so-called 'contradiction of relativity'. Russell writes

> Now this analysis ought, no doubt, to apply to all relations: they ought all to be relations of adjectives. But it would seem, to put the distinction in a different way, that at least some relations can *only* be regarded as relations of things: in such a case we have, in both terms, adjectives of relation, but we have not a relation of adjectives. A type of such relations is causality or interaction. To be a cause is not, so far as can be discovered, an adjective of a thing *per se*: nothing can be discovered by analysis which will reveal, apart from the relation of causality, a conceptual difference between what can be a cause and what can be an effect. […] [T]he related terms are differentiated *by* the relation, not by any discoverable inherent properties in which they differ. (1898: 224, emphasis original)

We have described such relations as 'external', bearing in mind their description by Russell as asymmetrical. In *An Analysis of Mathematical Reasoning* Russell concludes that the dependence of a philosophically satisfactory conception of spatial points upon relational statements asserting the holding of external relations gives rise to unavoidable inconsistencies. Moreover, the existence of such contradictions partially *defines* mathematics:

> This is the contradiction of a difference between two terms, without a difference in the conceptions applicable to them. I shall call it the contradiction of relativity. This, with addition and the manifold, appear to define the realm of Mathematics. (1898: 166).

By the following year though Russell's position had changed. On the 27 January[82] 1899 Russell read 'The Classification of Relations' to the Cambridge Moral Sciences Club. There Russell says

> We have seen that diversity is a relation, and is not analysable into a pair of predicates of the related terms, but, on the contrary, is prior to all predication. I wish now to extend the first part of this result to all relations, i.e., to show that no relation is analysable into a pair of predicates of the related terms. Mr. Bradley has argued much and hotly against the view that relations are ever purely "external". I am not certain whether I understand what he means by this expression, but I think *I should be retaining his phraseology if I described my view as the view that all relations are external*. It is argued that a relation must make a difference to the related terms, and that the difference must be marked by a predicate which the terms would not otherwise possess. This I deny. (1899*b*: 143, *emphasis added*)

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[82] (1899*b*: 136).

Russell here denies that relational statements are reducible to predicative ones. Where earlier Russell had assumed that the presence of the contradiction of relativity provides evidence for the necessity of carrying out dialectic transitions, he had in 1899 evidently decided that the generation of the relevant contradiction instead constitutes a reason to abandon the reductive view of relations. Griffin writes

> [In 'The Classification of Relations'], Russell does not provide an argument against [the 'doctrine of internal relations'], but his grounds for rejecting it can be found in parts of the typescript of the *Analysis of Mathematical Reasoning* (*AMR*) which he incorporated into the 1899–1900 draft of *The Principles of Mathematics*. They are, rather surprisingly, precisely that, in the case of asymmetrical relations, the doctrine of internal relations leads to the contradiction of relativity. In fact, he takes the very two pages from the *AMR* typescript on which he had presented the argument which showed that the contradiction was endemic in mathematics and simply changed the conclusion. Instead of a *modus ponens* argument from the doctrine of internal relations as unstated premiss to the contradiction of relativity as conclusion, he gives a *modus tollens* argument refuting the doctrine of internal relations because it entails the contradiction of relativity. (2012: 3)

Griffin's[83] observation here helps us to see precisely when Russell came to reject the reductive approach to relatedness and why. Russell aimed to avoid the generation of contradictions in the philosophy of mathematics and, having performed an analysis revealing just which logical doctrines were responsible for those difficulties he emphatically dispensed with them in favour of a non-reductive approach to relations. As Russell says in his 'Drafts of the *Principles of Mathematics*'

> We cannot hope, therefore, so long as we adhere to the view that no relation can be "purely external", to obtain anything like a satisfactory philosophy of mathematics. As soon, however, as we adopt a different theory, the logical puzzles, which have obstructed our advances, are seen to be artificial. (1993: 93)

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[83] See also Griffin (1991: 364-365).

Evidently, a conception of mathematics according to which it constitutes a false abstraction, essentially issuing in contradictions in its philosophy and demanding a Hegelian dialectic terminating in idealism, was not deemed satisfactory.

Russell writes

> Finally, I must confess that the above theory raises a very difficult question. When two terms have a relation, is the relation related to each? To answer affirmatively would lead at once to an endless regress; to answer negatively leaves it inexplicable how the relation can in any way belong to the terms. I am entirely unable to solve this difficulty, but I am not convinced that it is insoluble. At any rate, the difficulty seems equally to affect former theories. When a subject has a predicate, is the predictability of the predicate a new predicate of the subject? This question seems to raise precisely the same difficulty for the opposite theory as the former question raised for mine. To solve this difficulty – if indeed it be soluble – would, I conceive, be the most valuable contribution which a modern philosopher could possibly make to philosophy. (1899*b*: 146)

Here Russell raises a dilemma for his position clearly reminiscent of Bradley's concerns. Russell suggests that through conceiving of relational statements as irreducible to predicative ones, he is thereby met with the task of providing an explanation of the possibility of relatedness. On the assumption that relations effect relatedness through themselves being related to their *relata*, a regress beckons; while on the assumption that relations do not stand in relation to their *relata*, we are entirely without an explanation of what relatedness consists in. The challenge for Russell is to provide an explanation of how relations effect relatedness which does not lead to an infinite regress. For our purposes it is crucial to acknowledge the importance of this task for Russell in 1899. Russell clearly holds that the challenge of explaining the possibility of relatedness constitutes a serious objection to his position, and that meeting that objection would signal a monumental philosophical advance. Russell, in 1899, deflects the difficulty onto competing theories. The question of how relations effect relatedness is just as problematic for Russell's view as is that of how properties inhere in substances. On balance, where both Russell's and his opponent's views suffer comparable explanatory gaps, Russell

favours his approach, on which certain contradictions in the philosophy of mathematics are dissolved, to a view on which such contradictions are held to be unavoidable.

By the time of his having finished writing *Principles of Mathematics* though, Russell's view had become more complex. Russell concedes that his conception of relational propositions as *unities* involves the following difficulty:

> Consider, for example, the proposition "*A* differs from *B*". The constituents of this proposition, if we analyse it, appear to be only *A*, difference, *B*. Yet these constituents, thus placed side by side, do not reconstitute the proposition. The difference which occurs in the proposition actually relates *A* and *B*, whereas the difference after analysis is a notion which has no connection with *A* and *B*. It may be said that we ought, in the analysis, to mention the relations which difference has to *A* and *B*, relations which are expressed by *is* and *from* when we say "*A* is different from *B*". These relations consist in the fact that *A* is referent and *B* relatum with respect to difference. But "*A*, referent, difference, relatum, *B*" is still merely a list of terms, not a proposition. A proposition, in fact, is essentially a unity, and when analysis has destroyed the unity, no enumeration of constituents will restore the proposition. The verb, when used as a verb, embodies the unity of the proposition, and is thus distinguishable from the verb considered as a term, though I do not know how to give a clear account of the precise nature of the distinction. (1903: §54)

A unified proposition is not equivalent to the mere aggregate of its constituents. The product of any given analysis, though, is just such an aggregate. The difference between a proposition and an aggregate of its constituents is that in the proposition one of those constituents, namely a relation, *relates* the others, thereby unifying them. In the aggregate, by contrast, the relation does not figure *as relating*. Russell says that he does 'not know how to give a clear account of the precise nature of the distinction' between a relation as relating, and a relation as presented in the analysis of a proposition's constituents. In other words, analysing a proposition does not *thereby* impart to us an understanding of how the unifying relation of a proposition effects relatedness. The explanatory gap Russell identifies in 'The Classification of Relations' cannot be filled through appeal to analysis, for in analysis the relation responsible for effecting unity necessarily fails to appear as exhibiting the relevant capacity. Russell writes

It is also said that analysis is falsification, that the complex is not equivalent to the sum of its constituents and is changed when analysed into these. In this doctrine, as we saw in Parts I and II, there is a measure of truth, when what is to be analysed is a unity. A proposition has a certain indefinable unity, in virtue of which it is an assertion; and this is so completely lost by analysis that no enumeration of constituents will restore it, even though itself be mentioned as a constituent. *There is, it must be confessed, a grave logical difficulty in this fact, for it is difficult not to believe that a whole must be constituted by its constituents.* (1903: §439, emphasis added)

Here Russell expressly concedes that the inability of analysis to provide for an understanding of unity is a 'grave logical difficulty'. The difficulty consists in the presence of an explanatory gap between analysis and the phenomenon analysed. Ultimately Russell concludes that the unity of a proposition is 'indefinable'. The view that the unity of a complex is indefinable was one which Russell had already endorsed as early as 1899, where in 'The Fundamental Ideas and Axioms of Mathematics' (1899*a*) he makes the following claim:

Thus in "*A* differs from *B*", which is *one* proposition, all the presuppositions together are *A and B*, or, at most, *A and B and* diversity. The unit, in this case, and in all such cases, is more complex than all its parts together. […] A complex unit cannot be defined as having no presupposition, but only as differing from all its presuppositions together. But this is a purely negative definition: the only positive definition of a complex unit seems to involve the assertion that it is one. But *one* seems to mean the same as *indefinable*. In the case of simple terms this is evident: for simple terms, having no presuppositions, are indefinable. And with complex units, the same seems to be true. For definition can only consist in enumeration of indefinable constituents, and we have seen that, in the case of complex units, such enumeration does not constitute definition. (1899*a*: 302-303, emphasis original)

In 1899 Russell pre-empts those discussions of *Principles of Mathematics* in which the limits of analysis are drawn:

Wherever there is a relation, wherever, that is, we have truth or falsehood, analysis is more or less destructive. A proposition may contain two terms and a relation, but it is not simply equivalent to these. For the relation as such is a term, which does not relate anything. That something is lost by analysis appears from the fact that the whole is true or false, while the parts are neither. […] And the same thing is evident from a mere consideration of meaning. "*A* differs from *B*" is not equivalent to "*A* and diversity and *B*". […] Thus speaking generally, whatever can be analysed without change of meaning, is many; what is either incapable of analysis, or, by analysis, loses part of its meaning, is one. And the one is simple in the first case, complex in the second. (1899*a*: 299-300)

'The Fundamental Ideas and Axioms of Mathematics' is a work belonging to Russell's post-Hegelian period, for, as Griffin[84] observes, the contradiction of relativity does not appear there. Russell, while clear in the just-quoted passages that unities may not be analysed without loss, does not suggest that this failing constitutes a serious objection to the view that there are such things as irreducibly relational propositions. Russell confidently asserts the indefinability of complexes, without suggesting that the presence of an explanatory gap between *analysans* and *analysandum* itself renders his position doubtful. Indeed, Russell strongly indicates that it is precisely the indefinability of a given item which signals its being *one* rather than many.

In 1903 Russell says

> I have already touched on a very important logical doctrine, which the theory of whole and part brings into prominence—I mean the doctrine that analysis is falsification. Whatever can be analysed is a whole, and we have already seen that analysis of wholes is in some measure falsification. But it is important to realize the very narrow limits of this doctrine. We cannot conclude that the parts of a whole are not really its parts, nor that the parts are not presupposed in the whole in a sense in which the whole is not presupposed in the parts, nor yet that the logically prior is not usually simpler than the logically subsequent. In short, though analysis gives us the truth, and nothing but the truth, it can never give us the whole truth. This is the only sense in which the doctrine is to be accepted. In any wider sense, it becomes merely a cloak for laziness, by giving an excuse to those who dislike the labour of analysis. (§138)

Russell here claims that while analysis does indeed omit the distinctive unity of propositions, the constituents of a complex revealed by analysis are not for that reason to be considered false abstractions. The presence of an explanatory gap does not, in Russell's view, show that analysis is essentially misleading.

From what we have seen, it should be clear that Russell is somewhat ambivalent with respect to the so-called 'problem of unity' in the period from 1899 to 1903. In 'The Classification of Relations' Russell appears to conceive of the issue as the single most

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[84] See Griffin (1991: 364; note 11). See also (Russell, 1993: *xx*). Note though that 'Fundamental Ideas and Axioms of Mathematics' is, while post-Hegelian, pre-logicist; see Griffin (2007: 78). See also Levine (2018: 308), for a discussion of Russell's 'Moorean', or 'pre-Peano', period.

important problem in philosophy. In 'The Fundamental Ideas and Axioms of Mathematics', by contrast, Russell fails to acknowledge anything problematic whatsoever in the fact that unity is an unanalysable feature of complexes. In *Principles of Mathematics* something of the position from 'The Classification of Relations', *as well as* that of 'Fundamental Ideas and Axioms of Mathematics', appears to surface. On the one hand, in *Principles of Mathematics* Russell clearly does consider the presence of an explanatory gap of the kind discussed to be a 'grave logical difficulty'; while on the other, he maintains that unity is indefinable, and that analysis reveals truth and not falsehood. In the next section we shall see how Russell was able, in 1903, to justifiably hold both that his position faced a serious objection which he could not meet, as well as that his view was in its essentials correct.

2.3

Mathematics First

2.3.1

In this section I shall argue that Russell, from at least 1903, held that mathematics is prior to logic, where mathematics' being prior to logic consists in the fact that we may achieve justification for asserting certain axioms of logic on the basis that the axioms in question are consistent with, and capable of being employed in the derivation of, statements of mathematics. Moreover, mathematics' being prior to logic consists in the fact that statements of mathematics are believed to be true independently of our acknowledgement of their capacity to be derived from, as well as their consistency with, logical axioms. In what follows my use of the word 'priority' is to be understood in the sense just outlined.

Russell, I shall argue, held that this relation of priority could be exploited in order to justify his endorsement of a logic of relations. We shall see that Russell defended his

endorsement of a view vulnerable to Bradleyan objections of the kind identified above through appeal to the indispensable role the logic of relations may play in the deduction of mathematical truths. It has been observed that Russell, from 1906 onwards, expressly adopted the view that justification for asserting mathematical statements need not be sourced through appeal to the logicist thesis[85]. In this section I shall be arguing that this conception of the relationship between mathematics and logic was in fact present earlier than has often been noticed. In section 4 we shall see that Russell, by 1910, arrived at the conclusion that Bradley's objections to pluralism are rooted in a methodology which Russell did not share.

Russell, as we have seen, identified the source of the contradiction of relativity through his carrying out a classification of relations. So-called 'external' relations, we saw, both must and cannot be reduced to the possession of properties, on the conception of relations Russell endorsed during his Hegelian period. Having rejected that early conception of relations, Russell subsequently held that relational statements are irreducible to predicative ones. Moreover, in *Principles of Mathematics* Russell argues that the capacity for relations to effect relatedness is indefinable. From Bradley's point of view, though, failure to close the explanatory gap identified above is decisive evidence that the non-reductive conception of relatedness ought to be rejected. In the 1897 Appendix to *Appearance and Reality*, Bradley writes

> Too often a writer will criticise and condemn some view as being that which the mind cannot accept, when he apparently has never asked himself what it is that would satisfy the intellect, or even whether the intellect could endure his own implied alternative. What in the end then, let us ask, would content the intellect?
> While the diversities are external to each other and to their union, ultimate satisfaction is impossible. (568)

And

[85] See, *e.g.*, Proops (289-290).

> I take up certain facts or truths […] that I find are offered me, and I care very little what it is I take up. These facts or truths, as they are offered, I find my intellect rejects, and I go on to discover why it rejects them. It is because they contradict themselves. *They offer, that is, a complex of diversities conjoined in a way which does not satisfy my intellect, a way which it feels is not its way and which it cannot repeat as its own, a way which for it results in mere collision. For, to be satisfied, my intellect must understand, and it cannot understand by taking a congeries, if I may say so, in the lump. My intellect may for certain purposes, to use an old figure, swallow mysteries un-chewed, but unchewed it is unable in the end to stomach and digest them.* It has not, as some opponents of Hegel would seem to assume, any such strange faculty of sensuous intuition. On the contrary my intellect is discursive, and to understand it must go from one point to another, and in the end also must go by a movement which it feels satisfies its nature. (570, emphasis added)

Bradley here claims that no explanation of the possibility for 'external' items to join with one another is possible, and that consequently the postulation of unities cannot supply 'intellectual satisfaction'. That the relevant explanatory gap is in principle incapable of being bridged constitutes a decisive reason to reject the view in question, according to Bradley. Vitally, for our purposes, Russell held, in 1903, that even though the capacity for a relation to effect relatedness is not one which admits of further explanation, sufficient justification for holding that such entities *do* effect relatedness may be achieved through other means. In other words, Russell's conception of what it is to be intellectually satisfied by a philosophical view diverges from that of Bradley. Russell's justification for holding that there are external relations, and that such relations successfully effect relatedness, is, I shall now argue, derived from his holding that mathematical truths may be inferred from logical ones of an irreducibly relational character.

It is my contention that Russell's attempt to derive mathematical truths from logical ones was, in part, motivated by the desire to justify his commitment to a certain conception of logic. In this I agree with Gödel:

> The analogy between mathematics and a natural science is enlarged upon by Russell also in another respect (in one of his earlier writings). He compares the axioms of logic and mathematics with the laws of nature and logical evidence with sense perception, *so that the axioms need not necessarily be evident in themselves, but rather their justification lies (exactly as in physics) in the fact that they make it possible for these "sense perceptions" to be deduced* […]. (1944: 121, emphasis added)

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Gödel here clearly interprets Russell as holding that justification for logical axioms is found through appeal to the role such axioms may play in the derivation of certain target propositions. These target propositions are analogous to the role played by sense perceptions in the empirical sciences. In Russell's case, the relevant target propositions are received mathematical truths. My view also echoes Hager's:

> As against foundationalist accounts of Russellian analysis which hold that logic justifies mathematics, it might be more correct to say that mathematics justifies logic, since mathematics is mostly more certain than its logical premisses. (1994: 44)

Hager argues that the foundationalist interpretation of Russell is mistaken. On the foundationalist reading, Russell holds that our certainty with respect to the truth of mathematical statements is derivative, and depends upon the self-evidence or intuitive appeal of the logical propositions from which those mathematical statements are deduced. Not only is the foundationalist reading mistaken, according to Hager, but the correct interpretation precisely reverses the relationship between mathematics and logic that such a reading describes. Godwyn and Irvine write, in a similar vein, that

> For Russell, it is a simple Moorean fact that we are more certain of much of elementary mathematics than we are of many logical axioms and their derivative proofs. Despite his commitment to logicism, this observation alone is sufficient to vitiate Frege's epistemic version of logicism. *Perhaps surprisingly, Russell even concludes that it is in part our knowledge of elementary mathematical propositions that eventually helps form the ground for our knowledge of many principles of logic, rather than vice-versa.* (2003: 195, emphasis added)

Godwyn and Irvine here clearly anticipate the view I shall proceed to defend[86]. Moreover, their description of Russell's position with respect to mathematical truth as reminiscent of Moore's

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[86] See also Williamson (2016: 271-272).

approach to common sense is an insightful[87] comparison which I shall confirm in the next chapter.

It is my view that Russell's aim to derive mathematics from logic was *not* motivated by a desire to justify the view that mathematics is true by appeal to the identification of mathematics with logic. It was not Russell's view that justification for the claim that mathematics is true is found through appeal to the fact that mathematical truths may be derived from logical ones. This is not a novel claim, Proops, for instance, has observed that 'In short, the truth of mathematics is a point of departure for Russell, not a destination.' (2006: 281). Kraal says the following, of the 'traditional' view[88], that Russell's logicism was aimed at providing justification for the assertion of mathematical statements:

> According to the traditional interpretation, Russell's logicism aims at dispelling uncertainty (or increasing certainty) about the truth of mathematics. This interpretation traces back to Carnap, and can be found in well-known studies by e.g. Hempel, Quine, and Pollock. […] Major proponents of the traditional interpretation—e.g. Carnap, Hempel, Quine, and Pollock—have typically not bothered to seek to justify this interpretation by referring to specific passages in Russell's *Principles*, but have instead presented their view of Russell's aim as if it were a well-known fact. To some extent this is understandable, for until recently there has not been much disagreement as to the aim of Russell's logicism, and so there was probably no sense of a need to justify the present interpretation. Nowadays, however, when there is disagreement, the present interpretation would seem to require some sort of justification.
>
> As it turns out, it is quite hard to provide a justification for the present interpretation […]. (1495-1496)

Irvine writes

> The received view is that, according to Russell, clear and immediate epistemic gains would result from the reduction of mathematics to logic. By reducing mathematics to logic the problem of justifying mathematical belief would be reduced to the comparatively easier problem of justifying the self-evident principles of logic. […] This standard epistemic interpretation of Russell's logicism needs to be carefully appraised. *Perhaps surprisingly, such an account is palpably inconsistent with Russell's explicitly stated views on the subject.* In addition, in and of itself such an account is susceptible to a number of well-known, related objections. Briefly put, it is unlikely that mathematics should gain its sole

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[87] See (no.121).

[88] See, *e.g.*, Griffin (1980: 118), for the 'traditional view'.

epistemic justification via logic since parts of mathematics are themselves more certain than (and are often known independently of) the requisite body of logical belief. […] the so-called standard epistemic interpretation which is so often attributed to him must be incorrect. (1989: 305, emphasis added)

And finally, Klement says

I believe Wright and others of like mind fundamentally conceive of their project as an epistemological one: to secure the epistemological footing of our beliefs in arithmetical truths by showing them to be entailed by truths of logic along with additional principles having roughly the epistemological status of definitions. This is certainly not how Russell conceived his project. If anything, Russell thought that mathematics was already on solid ground, epistemologically. Russell understood his project instead as an application of a general philosophical methodology that he was fairly explicit about in more than a dozen places. Indeed, it is somewhat of a mystery why this aspect of Russell's philosophy is not better known. (2012: 143-144)

Proops, Kraal, Irvine and Klement have all rejected the interpretation of Russell's derivation of mathematics from logic which describes that derivation as an effort to increase our certainty with respect to mathematical statements.

What is novel in my account is my contention that Russell's understanding of mathematics as prior to logic constituted a defence of his commitment to a logic of *external relations*, in the face of criticism from Bradley. I therefore aim to draw a connection between Russell's views with respect to the relationship between mathematics and logic, and his response to Bradley's objections.

Evidence that Russell conceived of his logical axioms as justifiably assertible on the basis of their facility in the deduction of mathematical truths can be found in his discussions of both geometry and dynamics. Russell argues that the conception of space as necessarily not absolute is a mistaken view resulting from commitment to the theory of relations we saw Russell subscribing to in his Hegelian phase. On the view that no relation is external, space may not be conceived of as consisting of points standing in the external relation of diversity. Pure mathematics though, Russell argues, does not itself recommend any one particular

conception of space as that which we actually inhabit. Rather, pure mathematics asserts

conditional statements in which the consequences which obtain *if* a particular kind of space

exists are made perspicuous[89]. Russell, having argued at length in chapter fifty-one against the

view that space cannot consist of points, seeks to show that whether or not space is absolute is

an empirical question, not one decidable through sole appeal to pure mathematics. Importantly,

for our purposes, Russell remarks that, on prior conceptions of logic to his own, the question

of whether or not space is absolute was incorrectly held to be logical, rather than empirical. By

contrast, the alleged contradiction in the notion of absolute space is removed on Russell's view,

and the question as to the nature of space is restored to the realm of empirical enquiry:

> With a subject-predicate theory of judgement, space necessarily appears to involve
> contradictions; but when once the irreducible nature of relational propositions is admitted,
> all the supposed difficulties vanish like smoke. (1903: §431)

The conception of space as consisting in points standing in external relations to one another is,

in Russell's view, a consistent one, on his conception of logic. Conditionals involving absolute

space belong to pure mathematics, alongside conditionals involving other kinds of space, for

Russell's logic is capable of defining such spaces without contradiction. Russell goes on, in

part *VII*, to examine dynamics in the same vein. There Russell offers the following analogy

between dynamics and geometry:

> In the present work, however, we are not concerned with the question: What is the nature
> of the matter that actually exists? *We are concerned merely with the analysis of rational
> Dynamics considered as a branch of pure mathematics*, which introduces its subject-matter
> by definition, not by observation of the actual world. Thus we are not confined to laws of
> motion which are empirically verified: non-Newtonian Dynamics, like non-Euclidean
> Geometry, must be as interesting to us as the orthodox system. (§437, emphasis added)

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[89] See Russell (1903: *xLv*).

The study of motion through space, like that of space itself, consists, from the perspective of pure mathematics, in conditional statements. Russell describes the geometry of pure mathematics as issuing in conditional statements which do not assert the existence of those spaces defined in the statements' antecedent clauses. Rational dynamics, similarly, involves statements of conditional form not possessing existential import. Russell had regarded it as a victory for his logic of relations that the purview of pure mathematics was not, with respect to geometry, constrained by irrelevant empirical disputes. Rational dynamics, likewise, is a branch of pure mathematics on Russell's view, and therefore a branch of symbolic logic. Russell therefore emphasises the irrelevance of empirical matters for the study of rational dynamics. Rational dynamics does not in and of itself recommend a view as to how we ought to understand actual examples of motion; rather, we may, with its aid, describe the character motion must have in various hypothetical spaces.

Russell unambiguously commits himself to the empirical claim that motion is absolute. Russell argues that both Newton's bucket and Foucault's pendulum are decisive experiments which establish this conclusion. The view of relations he had endorsed as a Hegelian is, however, inconsistent with this empirical claim, owing to the dependence of the notion of absolute motion on that of absolute space, and the inconsistency of his earlier views with that latter notion. The logic of relations Russell employs in 1903 is, by contrast, consistent with the possibility of absolute motion. Crucially, though, Russell says

> For us, since absolute time and space have been admitted, there is no need to avoid absolute motion, and indeed no possibility of doing so. *But if absolute motion is in any case unavoidable, this affords a new argument in favour of the justice of our logic, which, unlike the logic current among philosophers, admits and even urges its possibility.* (1903: §463, emphasis added)

Given the possibility of motion's being absolute, it is, in Russell's view, evidence for his conception of logic's being correct that it is consistent with the relevant possibility. Russell

evidently feels that consistency with the empirical possibility of absolute motion constitutes an 'argument in favour' of the logic he endorses. Rational dynamics is, we have seen, a branch of pure mathematics, according to Russell. Of the various kinds of motion dealt with by the conditionals of rational dynamics, one, namely absolute motion, obtains in the actual world, in Russell's view. A logic consistent with the possibility of absolute motion is *therefore* more defensible than one which is not, *ceteris paribus*. It is, in other words, a *desideratum* of any view of logic that the view in question does not involve commitment to logical axioms which rule out any of the possibilities of motion described in pure mathematics. Pure mathematics, therefore, is prior to logic, for Russell argues that his being justified in asserting a particular view of logic is achieved through the logic in question's consistency with certain empirical possibilities which we admit *independently* of the possibility of that consistency. It could not count as justification for a certain of view of logic that it is consistent with some other truths if those other truths were not believed independently of our acknowledgement of the relevant consistency. In other words, the possible phenomena described by pure mathematics are possibilities Russell is committed to in advance of his inquiry into logical axioms. The direction in which the inquiry proceeds is *from* mathematical possibilities *to* logical postulates.

Russell continues:

> Thus, to conclude: Absolute motion is essential to Dynamics, and involves absolute space. This fact, which is a difficulty in current philosophies, *is for us a powerful confirmation of the logic upon which our discussions have been based*. (§469, emphasis added)

The study of dynamics which is carried out from the standpoint of pure mathematics is liberated by the logic of relations insofar as conditionals involving the notion of absolute motion may be admitted as true. Employment of the logic of relations serves to rescue certain conditional statements from neo-Hegelian condemnation. Such conditionals ought not be ruled out as involving contradictory notions, according to Russell, for it is an empirical matter what the

nature of space actually is. Moreover, Russell evidently holds that motion is, as a matter of empirical fact, absolute. The possibilities which pure mathematics admits are diminished by a logic on which the notion of absolute space harbours irresolvable contradictions. Vitally, though, *that* the relevant conditionals are true is not, in Russell's view, rendered any more or less certain by the discovery of his logic. Rather, the *logic* in question receives 'powerful confirmation' to the extent that it delivers Russell's desired results. That from Russell's logic we may derive, without additional support, conditional statements of pure mathematics already considered by him to be true on other grounds, lends, on this view, compelling support for the truth of the logical axioms postulated. In other words, Russell seeks to justify his logic through a demonstration of its facility in the deduction of both geometry and dynamics, where both pursuits count as branches of pure mathematics, and neither is conceived of as ruling out the possibilities of absolute space or absolute motion *a priori*. Russell, therefore, views it as good justification for his adopting certain logical views that the logic in question is consistent with such truths of pure mathematics as those of geometry and dynamics.

In the preface to *Principles of Mathematics* Russell writes

> The doctrines just mentioned are, in my opinion, quite indispensable to any even tolerably satisfactory philosophy of mathematics, as I hope the following pages will show. But I must leave it to my readers to judge how far the reasoning assumes these doctrines, and how far it supports them. *Formally, my premises are simply assumed; but the fact that they allow mathematics to be true, which most current philosophies do not, is surely a powerful argument in their favour.* (*xLvi*, emphasis added)

Here Russell clearly aims to justify his logic through appeal to the fact that where opposing views have failed, his succeeds in being consistent with a body of mathematical truths. Russell does not argue that the proceeding work gives us further reason to think *mathematics* true, but that it constitutes a 'powerful argument' in favour of adopting his position with respect to logic. The philosophical justification for Russell's logical axioms is derived from their being

consistent with mathematical truths; while the justification for thinking mathematics true is independent of the attractiveness of the logic with which it is identified.

Further evidence that in Russell's view the truths of mathematics constitute a fixed point against which logical views must be judged may be found in his discussion of Zeno's paradox. Zeno's paradox, Russell says, follows from the assumption that no whole may have the same number of terms as any of its parts[90]. Russell concludes that 'There is no doubt which is the correct course. The [assumption which leads to the Achilles paradox] must be rejected, being directly contradicted by Arithmetic.' (§341). Russell here clearly views it as decisive that a certain assumption in the theory of 'whole and part' must be rejected, on the grounds that it is inconsistent with arithmetic. The truths of arithmetic therefore are prior to certain claims in the theory of whole and part, for where statements of the former conflict with the latter, there is 'no doubt' that the latter must be rejected, rather than the former. That certain statements of arithmetic are true is a non-negotiable methodological commitment, on Russell's view.

Let us take stock. Russell, I have shown, was led to think Hegelian idealism true on the basis of his perception of the dialectic from which it emerges as an inevitable consequence of the contradictions present in science. Russell, having located the source of such contradictions in the doctrine of internal relations, sought to exchange that doctrine for his own conception of relations as external. Russell was subsequently faced with the difficulty of explaining just what the capacity for an external relation to relate consists in. We saw that Russell was ambivalent with respect to this difficulty, and that he both recognised its force and maintained that the relevant phenomenon is indefinable. In this section, I have argued that Russell, although he did not think the capacity of relations to relate explicable through analysis, nonetheless felt that his view of relations as external is justified by appeal to the fact that his position, in contrast to his opponent's, is capable of being fruitfully employed in the deduction of pure mathematics.

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[90] Russell (1903: §340).

Russell's position with respect to the difficulty of explaining what relatedness consists in is, in 1903, to deny that such a difficulty gives us decisive reason to reject the offending logic. In other words, Russell's conception of what it is to be intellectually satisfied by a given philosophical view is not that of Bradley. Where Bradley holds that the presence of an explanatory gap is sufficient reason to reject a view, Russell evidently views such a weakness as outweighed by consistency with the accepted truths of mathematics. Bradley, in a letter to Harold Henry Joachim, writes

> The only thing I did before being laid up again was to read some of Russell's book on Mathematics. I am sure that if I knew more of the subject I should think even more highly of it than I do. But as a statement of first principles it is to me quite unintelligible [. . .] Again apparently some of his working ideas [. . .] he hardly attempts to justify except by saying that he requires them. (1999*b*: 40)

This letter is, in my view, one of the most revealing texts available concerning the dispute between Bradley and Russell, for it demonstrates clearly the extent to which these figures operated with opposing methodological principles. Bradley here complains that Russell fails to 'justify' his views in a sufficiently robust fashion, and that Russell does not therefore adequately discuss 'first principles'. Bradley holds that it is insufficient justification for a view that it leads to desirable results, hence his claim that Russell's 'saying that he requires' certain assumptions is unpersuasive. From what we have seen, though, it should be clear that it is *precisely* the utility of his logic in contributing to the deduction of mathematics which Russell takes to constitute justification for his position. Where Bradley and Russell differ therefore is in their position with respect to the validity of this methodological stance.

That Russell viewed his logic as justifiable by appeal to the possibility of employing it to derive mathematics is clear from his 1906 article 'On 'Insolubilia' and their Solution by Symbolic Logic':

> The method of logistic is fundamentally the same as every other science. There is the same fallibility, the same uncertainty, the same mixture of induction and deduction […] The object is not to banish 'intuition', but to test and systematise its employment, to eliminate errors to which its ungoverned use gives rise, and to discover general laws from which, by deduction, we can obtain true results never contradicted […] The 'primitive propositions' with which the deduction of logistic begin should, if possible, be evident to intuition; but that is not indispensable, nor is it, in any case, the whole reason for their acceptance. This reason is inductive, namely that, among their consequences […] many appear to intuition to be true, none appear to intuition to be false, and those that appear to intuition to be true are not, so far as can be seen, deducible from any system of indemonstrable propositions inconsistent with the system in question. (1906: 194)

It is Russell's view that, while certain logical propositions may strike us as intuitively true, by far the more important justification for our endorsing them is their efficacy in the deduction of consequences with which we agree, and their not entailing consequences with which we do not. Russell explicitly states that a proposition's being 'evident to intuition' is not the whole reason for its adoption, nor is it indispensable. We may, then, dispense with apparently self-evident propositions if we find them unsatisfactory in some other respect.

That a logical proposition is intuitively true is a *defeasible* reason to think it correct. Logical propositions are judged chiefly against their *consequences*. Russell's approach is clearly 'mathematics first', insofar as our conception of logic ought, in his view, be dictated by the demands of mathematics, not *vice versa*.

In a 1907 paper titled 'The Regressive Method of Discovering the Premises of Mathematics' Russell emphasises the same position[91]:

> There is an apparent absurdity in proceeding, as one does in the logical theory of arithmetic, through many rather recondite propositions of symbolic logic, to the 'proof' of such truisms as 2+2=4: for it is plain that the conclusion is more certain than the premises, and the supposed proof therefore seems futile. But of course what we are really proving is not the truth of 2+2=4, but the fact that from our premises this truth can be deduced. (272)

> Thus in mathematics, except in the earliest parts, the propositions from which a given proposition is deduced generally give the reason why we believe the given proposition. But in dealing with the principles of mathematics, this relation is reversed. Our propositions are too simple to be easy, and thus their consequences are generally easier

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[91] See Patton (2017: 110-116) for a discussion of the precedent already establish by the end of the 19th century, by William Stanley Jevons and John Venn, for the regressive method in mathematics.

than they are. *Hence we tend to believe the premises because we can see that their consequences are true, instead of believing the consequences because we know the premises to be true.* But the inferring of premises from consequences is the essence of induction; thus the method in investigating the principles of mathematics is really an inductive method, and is substantially the same as the method of discovering general laws in any other science. (273-274, emphasis added)

Russell here makes it very clear that our *reason* for believing statements of mathematics true is not that such statements may be inferred from purely logical ones of which we are certain[92]. Rather, we believe that logical statements are true precisely because from those statements others, of which we are independently assured, may be inferred. Such an approach is, according to Russell, 'substantially the same' as that pursued in the empirical sciences. What Russell's 'regressive method' has in common with empirical science is that in both pursuits the rationale for carrying out an enquiry is a desire to explain how it is that certain received facts obtain, and where our providing such an explanation does not serve to lend any more credence to our assertion that such facts obtain than we already possessed. The discovery, for instance, that the presence of oxygen is often responsible for combustion has not, presumably, led to a renewed confidence in the flammability of matches. Moreover, the method is inductive in both fields, insofar as 'we are simply betting on inventiveness: we think it unlikely that we should not have thought of a better hypothesis if there were one.' (1907: 275). In other words, we have not proved with infallible certainty that our hypothesis is correct; our grounds for thinking it so consist in the fact that is consistent with the data from which we began our enquiry, as well as, among other virtues[93], that it enjoys predictive power. Nothing, though, rules out *a priori* the future possibility of our discovering a hypothesis which succeeds over the former and consequently replaces it.

With respect to the investigation of mathematical statements, the *explanans* arrived at is, Russell claims, both more simple than the *explanandum* in one respect, and more complex in

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[92] See Hager (2003: 310).
[93] See Russell (1907: 275).

another. The *explanans* is simpler than the *explanandum* insofar the former contains fewer constituents than the latter. Russell writes

> The 'logical simplicity' of a proposition is measured, roughly speaking, by the number of its constituents. Thus $2 + 2 = 4$ is simpler than 2 sheep+2 sheep= 4 sheep, because the latter contains all the constituents of the former with one addition, namely 'sheep'. (1907: 272-273)

We must assume, on the basis of the date this paper was presented, that Russell understands by the word 'proposition' here a worldly entity containing those items it is about, rather than a linguistic item. A proposition which is logically simpler than another, therefore, is a proposition consisting of fewer constituents. Russell emphasises, though, that in certain cases, something's being logically simpler than another item may well correspond with an increase in relative complexity of a non-logical kind:

> It has been a mistake to suppose that a simpler idea or proposition is always easier to apprehend than a more complicated one; and this mistake has been the source of many of the errors of *a priori* philosophers. (1907: 273)

A proposition which is logically simpler than another may simultaneously count as more *difficult to apprehend*. Russell points out that '$1 + 1 = 2$' is far easier to apprehend than are the logical axioms from which it may be derived. Logical axioms are, Russell says, 'too simple to be easy'; the logical simplicity of logical axioms serves to impede our ability to apprehend them. In turn, this difficulty in apprehending propositions of greater logical simplicity than others results in our being less certain of logically simpler propositions than we are of logically more complex ones, *ceteris paribus*.

In *Principia Mathematica* we find[94]:

> We have […] avoided both controversy and general philosophy, and made our statements dogmatic in form. *The justification for this is that the chief reason in favour of any theory on the principles of mathematics must always be inductive, i.e., it must lie in the fact that*

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[94] See Morris (2015: 137-138).

the theory in question enables us to deduce ordinary mathematics. (Russell and Whitehead, 1925: *v*, emphasis added)

Russell here explicitly echoes the claim made in 1907, that the reason for thinking logical principles correct is that from such principles 'ordinary mathematics' may be deduced. Russell elaborates:

> The proof of a logical system is its adequacy and its coherence. That is: (1) the system must embrace among its deductions all of those propositions which we believe to be true and capable of deduction from logical premisses alone […] and (2) the system must lead to no contradictions […]. (1925: 12-13)

Here Russell makes it very clear that in his view it is constitutive of a logical system's being provable that we may, through its means, deduce propositions we believe to be true. That this was Russell's view in *Principia Mathematica*, then, strongly suggests that it was an official methodological tenet of Russell's logicism that our justification for adopting a logical system *depends upon* the ability possessed by that logic to be employed in the deduction of propositions we believe to be true. The relevant target propositions, therefore, stand in a relation of priority to the logical axioms, insofar as our belief in their truth is independent of their capacity to be deduced by those axioms. Rather, and as Russell emphasises, our judgement as to the correctness of logical axioms is made in the light of their capacity to be employed in the deduction of results believed to be true on grounds independent of the possibility of that deduction. Our belief in the truth of mathematical statements must be independent of their capacity to be deduced from logical ones if they are to fulfil the role of fixed commitments, *against which* we are able to judge the correctness of our choice of logical axioms.

In his 1911 paper 'The Philosophical Implications of Mathematical Logic' Russell writes

> In mathematical logic it is the conclusions which have the greatest degree of certainty: the nearer we get to the ultimate premises the more uncertainty and difficulty do we find. (285)

Russell here echoes his description, given in 1907, of mathematics as *more certain* than the logical axioms from which mathematical statements may be deduced. That mathematics is, in Russell's view, more certain than are purely logical axioms suggests that we do not, in our discovery of mathematics' logical principles, achieve further justification for thinking that, for instance, statements of arithmetic are true. Instead, the logical principles in question are sufficiently uncertain that an appraisal of their truth must appeal to the possibility of deducing from them mathematical statements of which we are certain.

It is my contention that Russell's position with respect to the priority of mathematics over logic had not changed in the respect so far emphasised since at least 1903. Evidence for this claim may be found through further examination of ''Insolubilia' and Solution by Symbolic Logic'. Russell, immediately prior to that which I have quoted from the same article, quotes and criticises Poincaré:

> M. Poincaré says (p. 295):
>
> 'Must one follow your rules blindly? Yes – otherwise it would be intuition alone which would permit you to discriminate between them; but then they must be infallible … You have no right to say to us, "True, we make mistakes, but you make mistakes too." For us, making mistakes is a misfortune, a very great misfortune, but for you it is death.'
>
> These remarks seem to me to embody a misconception of the claims of logistic, and of the nature of the evidence on which it relies. But the misconception is a very natural one, and may have been shared by some of its advocates as well as its enemies.
>
> (1906: 193)

Russell proceeds to describe the process by which logical postulates are discovered as just as 'inductive', 'fallible', and 'uncertain' as those of any other science. Poincaré appears, in the quote Russell provides, to ascribe to Russell the view that logical postulates must be held infallible. Russell denies the accusation, and goes to great lengths to correct the misconception he perceives in Poincaré's position. Crucially, for present purposes, Russell adds this footnote to the last word of the just quoted passage: 'Indeed, I shared it myself until I came upon the

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contradictions.' (1906: 193, no. 2)[95]. What this footnote suggests is that Russell abandoned the view that Poincaré attributes to him upon discovery of Russell's paradox. Russell discovered this paradox in 1901[96]. We may conclude, therefore, that Russell replaced his 'pre-paradox' conception of how logical postulates ought to be discovered with some other conception, subsequent to his unearthing the relevant paradox. We have already seen that in *Principles of Mathematics* Russell, on several occasions, provides arguments intended to establish justification for his commitment to certain logical postulates. In *Principles of Mathematics*, therefore, Russell appears to employ a method according to which logical postulates are justifiably adopted insofar as they do not conflict with mathematical claims. This method clearly resembles that which Russell endorses from 1906 onwards. Russell, from at least the time of *Principles of Mathematics*, was committed to the priority of mathematics over logic. That Russell was so committed may be established through the evidence internal to *Principles of Mathematics* already presented, namely those passages I have cited in which Russell aims to provide support for his logic through appeal to the fact that it is not inconsistent with a variety of mathematical claims. This footnote from 1906, though, provides further evidence that Russell, from 1901 onwards, was not operating with a conception of what it is to discover logical postulates according to which those postulates count as infallible items immune to revision. Instead, logical axioms are, subsequent to his discovery of the paradox, held by Russell to be entirely revisable. That such items are revisable implies a criterion of revisability, according to which logical propositions are either maintained or exchanged insofar as they either meet or fail to meet that criterion. We have seen Russell repeatedly describe it as a *desideratum* for any view of logic that it lead to the possibility of deriving mathematical statements from logical ones, and that logical propositions may be accepted as axioms insofar

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[95] Levine (2019: 44) observes the importance of this footnote for identifying the development of Russell's methodological views.
[96] See Irvine and Deutsch (2021: §2).

as they contribute to the relevant derivation and rejected insofar as they do not. Given that Russell, in the footnote I have cited, describes his own views as having changed upon discovery of the paradox, and given that immediately following that footnote Russell describes, at length, a view according to which mathematics is prior to logic, we may conclude that Russell adopted the view that mathematics is prior to logic upon his discovery of the relevant paradox.

What distinguishes the view expressed in these later passages from Russell's earlier writings is the degree to which Russell in 1906, 1907, 1910, and 1911 accepts that among his chosen logical axioms statements which are not self-evident[97] may be included. This change of view concerning the self-evidence of logical axioms is very plausibly the result of Russell's requiring increasingly unobvious axioms in order to execute the logicist programme. What I would like to emphasise, though, is that even during the period in which Russell *did* plausibly claim self-evidence for his logical postulates[98], namely in 1903, it was not due to their derivation from logical propositions that mathematical ones acquired the status of certain truth. In other words, Russell's opinion changed with respect to the issue of self-evidence in logic. What did *not* change was the method of justification Russell employed, such that we are justified in our commitment to logical postulates where those postulates do not contradict mathematical statements, and where we need not, in order that we be justifiably committed to the truth of the mathematical statements in question, appeal to their capacity to be derived from logical postulates. The perceived self-evidence of Russell's logical postulates was not their reason for adoption in 1903. This is clear from what we have already seen, that Russell repeatedly provides *arguments* in support of his choice of logic. If Russell had felt that the self-

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[97] In his 1911 paper 'On the Relation of Mathematics to Logic', for instance, Russell writes, '[M]any of the ultimate premises [of the foundations of mathematics] are intrinsically less evident than many of the consequences which are deduced from them. Besides, if we lay too much stress on the self-evidence of the premises of a deductive system, we may be led to mistake the part played by intuition […] in mathematics. The question of the part of logical intuition is a psychological question and it is not necessary, when constructing a deductive system, to have an opinion on it.' (294).
[98] That Russell considered his logical axioms self-evident in 1903 is convincingly argued for by Proops (2006: 287-289).

evidence of his logic sufficed to justify his adoption of it, he would not have attempted to source that justification in other ways. I have shown, throughout the preceding discussion, that Russell did indeed attempt to justify his adoption of a novel logic on the grounds that through its means mathematics may be deduced. Whether self-evident or not, then, Russell consistently held to the view that decisions of logic are *posterior* to the acceptance of mathematics as true. That mathematics is true was, as a matter of method, a datum from which Russell began his investigation into its foundations. Russell's adoption of the view that mathematics enjoys priority over logic, in the sense of 'prior' previously described, from 1906 onwards is well-appreciated. What I have here demonstrated is that Russell's view was in this respect stable from at least 1903 onwards.

From what I have said so far, then, it should be clear that I do not hold that Russell's attempt to deduce mathematics from logic was, either in 1903 or later, aimed at providing justification for the assertion of mathematical statements. It was not Russell's aim to establish the truth of mathematics through appeal to the truth of his logical postulates; rather, and as we have seen, Russell's approach was conducted from the reverse point of view. My interpretation, therefore, is in opposition to that of Carnap[99], where he writes

> The problem of the logical and epistemological foundations of mathematics has not yet been completely solved. This problem vitally concerns both mathematicians and philosophers, for any uncertainty in the foundations of the "most certain of all the sciences" is extremely disconcerting. Of the various attempts already made to solve the problem none can be said to have resolved every difficulty. These efforts [. . .] have taken essentially three directions: *Logicism*, the chief proponent of which is Russell; *Intuitionism*, advocated by Brouwer; and Hilbert's *Formalism*. (1964: 41)

Carnap here conceives of Russell's logicism as an attempt to provide *epistemological* foundations for mathematics[100]. Carnap implies that securing such a foundation would serve to

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[99] See also Hempel (1964).
[100] See Kraal (2014: 1496-1497).

remedy the alleged uncertainty in 'the most certain of all sciences'. C. W. Kilmister, in a similar vein, writes

> We were supposed to be achieving the certainty of mathematics from the a priori knowledge of the absolute truth of logic and such an axiom [as that of reducibility] clearly had no place. (1998: 280)

Russell, as we have seen, was opposed to this conception of the role logic played in his philosophical outlook.

Bradley presents the following interpretation of Russell's view: 'I understand Mr. Russell to hold that mathematical truth is true perfectly and in the end, since the principles as well as the inferences are wholly valid' (1914: 280). Bradley argues that Russell's holding mathematical truths to be 'true perfectly and in the end' is a position derived from the perceived validity of the logical 'principles' serving as the foundations of mathematics. Bradley therefore misunderstands Russell's broader methodological position. Bradley argues that the principles Russell's conception of mathematics allegedly depends upon are not well justified enough to be legitimately employed in the service of securing mathematical truth. Consequently, Bradley's complaint, that Russell cannot explain what the capacity of an external relation to relate consists in, was intended by Bradley to undermine both Russell's logic *and* the supposedly derivative certainty of mathematics. Russell, in *Principles of Mathematics*, accepted that he could not provide the relevant explanation. Crucially, though, he did not thereby accept Bradley's conclusion that mathematics is not wholly true. Russell did not accept this conclusion because he did not endorse its negation on the basis that mathematics is derivable from the logic of relations. Instead, Russell aimed to provide argumentative support for his conception of logic through appeal to its capacity for aiding us in the deduction of pure mathematics. Moreover, that mathematics is true was a non-negotiable methodological principle of Russell's. Russell did not view it as fatal to his position that he could not offer an

explanation of relatedness which was satisfactory to Bradley. A methodological vacuum insulated Russell against the challenges levelled at him. In the next section, we shall see that Russell, at a certain stage, identified the source of his and Bradley's disagreements as consisting in precisely the kind of methodological divergence I have described. Having located the methodological rift which separated Bradley and himself, Russell sought to formulate objections which could cross the divide and reach his target. Russell, we shall see, turned his attentions towards Bradley's method.

2.4

Sufficient Reason

2.4.1

In a 1910 issue of *Mind* Bradley discusses Russell's 1903 position, articulating the following complaint against the view he finds there:

> I encounter at the outset a great difficulty. Mr. Russell s main position has remained to myself incomprehensible. On the one side I am led to think that he defends a strict pluralism, for which nothing is admissible beyond simple terms and external relations. On the other side Mr. Russell seems to assert emphatically, and to use throughout, ideas which such a pluralism surely must repudiate. He throughout stands upon unities which are complex and which cannot be analysed into terms and relations. These two positions to my mind are irreconcilable, since the second, as I understand it, contradicts the first flatly. (1914: 280)

Bradley here perceives a tension in Russell's position, holding that Russell is committed to two contradictory doctrines. Russell, according to Bradley, is committed both to the claim that the world consists exclusively of simple items and external relations, and that the world contains

unities not reducible to aggregates of simple items and external relations[101]. Bradley

subsequently discusses Russell's view that the phenomenon of unity is indefinable:

> Mr. Russell, I cannot doubt, is prepared here with an answer, but I have been unable to
> discover in what this answer consists. To urge that these unities are indefinable would to
> myself be merely irrelevant. If they had no meaning they could serve no purpose, and the
> question is with regard to their meaning. If that is not consistent with itself or with Mr.
> Russell's main doctrine, then that meaning is not admissible as true, unless it is taken
> subject to an unknown condition. But, if so taken, that meaning, I would urge, is not
> ultimate truth. For a certain purpose, obviously, one can swallow whole what one is unable
> to analyse; but I cannot see how, with this, we have rid ourselves of the question as to
> ultimate truth.
>   On my own position here I need not dwell. For me immediate experience gives us a unity
> and unities of one and many, which unities are not completely analysable or intelligible,
> and which unities are self-contradictory unless you take them as subject to an unknown
> condition. (1914: 281, emphasis added)

Bradley suggests that Russell's holding that the notion of unity is indefinable constitutes an

inadequate defence of a view which incurs a considerable explanatory burden. Bradley claims

that for something to be indefinable is for it to lack 'meaning', and that meaningless postulates

cannot serve to fulfil a theoretical role. A clue as to how Bradley understands the word

'meaning' may be found in the second paragraph. Bradley argues that something unanalysable

is for that reason unintelligible. In other words, we can have no grasp of an item for which we

have no further available analysis. Any item of which we can have, in principle, no intelligible

grasp, is 'meaningless' according to Bradley. What it is for a notion to be intelligible is for it

to be capable of being *analysed*.

Evidence that in Bradley's view notions incapable of analysis must be jettisoned can be

seen here:

> But the business of metaphysics is surely to understand; and if anything is such that, when
> thought of and not simply felt, it goes to pieces in our hands, we can find but one verdict.
> Either its nature is nonsensical, or we have got wrong ideas about it. […] Force, energy,
> power, activity, these phrases certainly are used too often without clear understanding. *But*

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[101] We must remember that by 1910 Russell had, with respect to the unities to which he was ontologically
committed, exchanged propositions for facts.

no rational man employs them except to convey some kind of meaning, which is capable of being discovered and subjected to analysis. And if it will not bear scrutiny, then it clearly does not represent reality. (62-63)

Bradley claims that it is irrational to employ a phrase whose meaning is incapable of being 'subjected to analysis'. Moreover, a notion which cannot be analysed does not 'represent reality'. The claim, in *Appearance and Reality*, that unanalysable notions do not represent reality clearly pre-empts Bradley's assertion in *Essays on Truth and Reality*, that discourse involving such notions is incapable of delivering 'ultimate truth'. Russell freely admits that the capacity for a relation to effect relatedness is not analysable. Bradley therefore draws the conclusion that unities are not intelligible, and that the notion of a unity is a meaningless one.

Here it is worth emphasising a radical point of difference between Bradley and Russell. The central distinction between Bradley's and Russell's approaches is in their conception of what it is for a notion to be intelligible, and consequently for a notion to be capable of doing duty in a correct theory. Bradley views it as a requirement on something's being intelligible that it admits of analysis into simpler notions not presupposing the possibility of the *analysandum*. Russell, by contrast, holds that a notion may be accepted as intelligible so long as its relationship to other notions is capable of being made perspicuous, and where our appreciation of those connections simultaneously endows us with some further degree of insight into the relevant phenomenon. Russell, in other words, does not require that notions be capable of analysis, in order that we be justified in legitimately employing them. Levine describes Russell's view:

> For Russell, we (do and should) accept the axioms of logic, as we accept the general laws of science, by considerations as to how well they cohere with and systematize our other beliefs. In Bradley's terminology, Russell now holds—and continues to hold in subsequent writings that in determining what to believe "the test which we do apply, and which we must apply, is that of system." (2019: 45)

That Russell took this view is shown by what has already been established, namely that the relationship holding between mathematics and logic is one in which the possibility of deducing the former from the latter serves to illuminate the nature of, and justify our commitment to, the latter. This is not, though, to deny that Russell was in favour of pursuing analysis in cases where it is capable of being carried out. Clearly Russell valued analysis as a philosophical tool. What is being denied is that in Russell's view it is a necessary condition on employing some notion in a philosophical theory that the notion in question admit of an analysis.

That Bradley and Russell differ fundamentally in their conception of what it is for a theory to include acceptable notions serves to explain the intractability of their dispute, and moreover the extent to which Russell felt able to maintain his position without having satisfied Bradley's demands. Russell, in other words, did not simply reject Bradley's *conclusion* that no more than one thing is real. Rather, and as we shall now see, Russell rejected the adequacy constraint Bradley places on intelligible notions, and replaced it with an alternative conception of what it is for a notion to be justifiably employed.

Bradley, in 1914, writes

Any idea, of course not meaningless, let it be ever so monstrous, is thinkable, so long, that is, as you do not think it out. […] Thus a relation without terms is a thinkable idea. 'Relation' and 'exclusion of terms' and 'coupling' are all thinkable, and their union without doubt is an object *somehow*; but then the question is *how*. […] But realize what you are doing, cease to ignore and to forget, and once begin to make explicit every 'somehow', and your relation without terms is either transformed or goes to pieces before your eyes. (1914: 302, emphasis original)

Bradley here argues that a notion may be viewed as 'thinkable', so long as the notion in question is not subject to scrutiny through our 'thinking it out'. With respect to the issue of unities, Bradley argues that one may accept their possibility just so long as one does not attempt to explain *how* such items are possible. Bradley identifies the activity of 'thinking out' some phenomenon with an analysis of its possibility. Just here Russell sharply diverges from

Bradley. Russell does not hold that scrutiny of some phenomenon requires our performing an analysis upon it, such that its possibility is explicable in simpler terms. Russell, as we have seen, holds that it is sufficient justification for the employment of a notion that statements involving it enter into inferential relations with statements involving other notions to which we are committed, and that the character of these inferential relations are themselves capable of being made transparent. Bradley says, 'From the terms and the relations, as materials, the series cannot be made *anyhow*, and the question as to the *how* to myself seems vital' (1914: 308, emphasis added). The question of *how* a relation relates is, in Bradley's view, one which it is vital to answer, and one which, if unanswerable, gives us a decisive reason to reject any view postulating such items. Russell does not place the same importance on this question as does Bradley. In Russell's view it is not a sufficient reason to reject a theory that we have no available explanation of how the items postulated come to the possess the capacities ascribed to them.

In his 1910 reply to Bradley Russell writes

> Mr. Bradley finds an inconsistency in my simultaneous advocacy of a strict pluralism and of "unities which are complex and which cannot be analysed into terms and relations". It would seem that everything here turns upon the sense in which such unities cannot be analysed. I do not admit that, in any strict sense, unities are incapable of analysis; on the contrary, I hold that they are the only objects that can be analysed. What I admit is that no enumeration of their constituents will reconstitute them, since any such enumeration gives us a plurality, not a unity. But I do not admit that they are not composed of their constituents; and what is more to the purpose, I do not admit that their constituents cannot be considered truly unless we remember that they are their constituents. The view which I reject holds (if I understand it aright) that the fact that an object x has a certain relation R to an object y implies complexity in x and y, i.e., it implies something in the "natures" of x and y in virtue of which they are related by the relation R. It seems to be held that otherwise all relations would be purely fortuitous, and might just as well have been other than they are, and this, it is thought, would be intolerable. This opinion seems to rest upon some law of sufficient reason, some desire to show that every truth is "necessary ". I am inclined to think that a large part of my disagreement with Mr. Bradley turns on a disagreement as to the notion of "necessity". I do not myself admit necessity and possibility as fundamental notions: it appears to me that fundamentally truths are merely true in fact, and that the search for a "sufficient reason" is mistaken. (1910: 373-374)

Russell argues that Bradley is committed to 'some law of sufficient reason'. Russell diagnoses Bradley's objections to pluralism as rooted in the view that on the pluralist position, no sufficient reason can be found explaining why it is that any given relational statement is true. Russell argues that the proposed reduction of relatedness to inherence is itself a strategy pursued in an effort to provide a sufficient reason for the truth of certain statements. Take, for example, the statement 'shade of black α is darker than shade of orange β'. This statement may, on the relevant proposal, reduce to the pair of statements: 'shade of black α is F' and 'shade of orange β is G', where 'F' and 'G' stand for different properties of darkness. Russell argues that this reductive strategy is pursued on the basis that the truth of the statement 'shade of black α is darker than shade of orange β' is in some sense explained by the products of the reduction. Given α and β, as well as their respective properties, we arrive, it is supposed, at a kind of intellectual satisfaction with the truth of the original relational statement not derived from familiarity with that statement alone. Intellectual satisfaction of this kind depends upon the fact that given the above items and their properties, it is necessarily the case that the relational statement in question is true. Russell argues that it is a mistake to search for this kind of satisfaction with respect to relational statements generally. Moreover, he ascribes to Bradley a mistake of just this kind. I have been arguing that it is distinctive of Bradley's view that he demands that notions be analysed if they are to be legitimately employed in philosophical theories. In my view both Russell's ascription to Bradley of a commitment to a law of sufficient reason, and my own description of Bradley as demanding the analysis of notions, may be happily reconciled. In other words, I think that it is possible to view Bradley's demand for analysis as itself a species of commitment to the law of sufficient reason, and, moreover, that Russell identifies this feature of Bradley's approach.

Russell, in his study of Leibniz, discusses the role played by the principle of sufficient reason in combatting a felt dissatisfaction with contingent propositions[102]. Bradley exhibits a similar opposition to inexplicable contingencies where he writes

> Relative chance stands for something which is, but is, in part, not connected and understood. It is therefore that which exists, but, in part, only somehow. The relatively possible is, on the other hand, what is understood incompletely, and yet is taken, more or less only somehow, to be real. Each is thus an imperfect way of representing reality. […] If chance is thought of, it is at once but merely possible; for what is contingent has no complete connection with Reality. (393)

The extent to which something appears merely possible, or contingent, is precisely the extent to which it has not been 'understood completely', according to Bradley. Recall the following remark:

> But the business of metaphysics is surely to understand; […] Force, energy, power, activity, these phrases certainly are used too often without clear understanding. But no rational man employs them except to convey some kind of meaning, which is capable of being discovered and subjected to analysis. And if it will not bear scrutiny, then it clearly does not represent reality. (1883, 62-63)

Bradley here explicitly identifies the pursuit of *understanding* with the subjection to analysis of a given notion. We have here further evidence, beyond that discussed in chapter one, that Bradley viewed the acquisition of understanding as involving analysis. Where Bradley claims that allegedly contingent statements are those which have not been thoroughly understood, then, his view is that such statements have not been satisfactorily analysed. Bradley therefore holds that our intellectual dissatisfaction with contingency, or our failure to fully 'understand' contingencies, is a result of our not having carried out an analysis on statements alleged to be contingent. Vitally, Bradley's demand for analysis emerges from the same intellectual dissatisfaction with sheer contingency which Russell attributes to Leibniz. In other words, what

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[102] See Russell (1900: 28; 35).

is objectionable in both Bradley's and Leibniz' view, according to Russell, is their inability to

rest content with truths which are 'merely true in fact'.

Russell argues that Bradley's methodological position is untenable. To see why, we must

examine the following passage[103]:

> It is, of course, highly probable that there are difficulties in my position which I have failed
> to appreciate; meanwhile, the chief hope of philosophical progress seems to lie in the
> endeavour to discover clearly the exact points of difference between divergent views. For
> example, it appears self-evident to Mr. Bradley that a relation implies diverse terms,
> whereas to me this appears by no means self-evident. Such a state of things is eminently
> unsatisfactory, and seems to lead to a deadlock. In favour of the premises from which I
> start, there is, however, a kind of inductive argument: they allow much more truth to
> science and common sense than is allowed by the opposite premises, and they do not
> require us to "condemn, almost without a hearing, the great mass of phenomena". I should
> not lay stress upon this argument, but for the fact that, where there is a dispute as to
> fundamentals, more strictly philosophical arguments become impossible. The progress of
> philosophy seems to demand that, like science, it should learn to practise induction, to test
> its premises by the conclusions to which they lead, and not merely by their apparent self-
> evidence. To reject such a test is to assume - what none but a philosopher would assume -
> that metaphysical theories have a greater degree of certainty than the facts of science and
> of daily life. (1910: 378)

Russell acknowledges that the gap between his own point of view and that which he attributes

to Bradley is incapable of being effectively bridged through philosophical argument. Bradley's

chief premise, that phenomena must admit of analysis in order that they be justifiably

postulated, is sufficiently different from Russell's own philosophical methodology to render

fruitful engagement between the respective parties impossible. Bradley's and Russell's views

as to what constitutes a notion capable of legitimate postulation in a theory diverge so sharply

that criticisms levelled by either figure against the other are bound not to convince. Bradley's

objection, that Russell fails to provide an analysis of the capacity for a relation to relate, is

evidently countered by Russell with the complaint that Bradley's view constitutes an

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[103] We shall examine Bradley's response to Russell's argument from the desirability of a position's being consonant with science and common sense in the following chapter.

unreasonable demand for explanations of unanalysable phenomena. Indeed, Russell's objection to Bradley here might be compared with Grice's and Strawson's treatment of Quine:

> It seems clear that we have here a typical example of a philosopher's paradox. Instead of examining the actual use that we make of the notion of *meaning the same*, the philosopher measures it by some perhaps inappropriate standard (in this case some standard of clarifiability), and because it falls short of this standard, or seems to do so, denies its reality, declares it illusory. (1956: 146-147, emphasis original)

We might characterise Russell's attitude towards Bradley's position in precisely these terms. Bradley, according to Russell, measures the notion of unity by an inappropriate standard which it is impossible to meet. Bradley, unsatisfied with that notion, both denies its reality and declares it illusory.

Arguments given by either figure to the effect that the other fails to meet adequacy constraints which are not themselves shared by both parties are bound, therefore, to be ineffectual. Having arrived at a 'deadlock', Russell claims that the *impasse* may be resolved in his favour through an emphasis on his theory's being consistent with science and common sense. Russell argues that where his and Bradley's views differ radically with respect to method, a decisive case may be made for rejecting the monistic position and adopting pluralism, for Bradley's view, unlike his own, involves rejecting the claims of science and common sense. Where two positions conflict in method to the extent that no claim may be made on behalf of one against the other which does not presuppose its own superiority, Russell argues that we must judge each respective view in light of its consistency with a body of scientific and common sense truths. The truths of mathematics are, in Russell's view, included in the set of scientific statements against which philosophical theories must be judged. Consequently, we may conclude that according to Russell, a given philosophical position is to be viewed as closer to truth to the extent that it concords with a body of statements within which those of mathematics are included. Insofar as Bradley's view leads to the endorsement

of theories not consistent with mathematics, science generally, and common sense, it ought, Russell held, to be rejected. We saw, in the previous section, that Russell expressly cites consistency with mathematics as counting in favour of a given view of logic. Here Russell echoes this position, though he subsumes mathematics under the broader umbrella of 'science and common sense'.

Griffin writes:

> Bradley had once been Russell's philosophical hero, and Russell, though often contemptuous of other Hegelians, always retained his respect for Bradley. Their philosophical positions, however, had become so far apart [by the time of the *Principles of Mathematics*] that their subsequent exchanges were less interesting than might have been expected. Arguing from radically different premisses each tended to miss the other's point. (1992: 274)

Griffin here is correct in his description of Bradley's and Russell's views as separated by some distance. Russell cannot, though, be fairly accused of having missed Bradley's point. Rather, and as we have just seen, Russell *himself* diagnoses the source of the relevant dispute as consisting in each figure's commitment to premisses radically different from that endorsed by the other. Russell clearly identifies his and Bradley's differences as emerging from an interaction between incommensurable methodological points of view. It is, therefore, something of an injustice to Russell to portray him as an unwitting and myopic participant in a fruitless stalemate, for Russell clearly saw that further engagements with Bradley would not be productive. Where it is unjust to hold that Russell missed Bradley's point, it is likewise inaccurate to hold that Bradley failed to acknowledge the true nature of his and Russell's dispute. Bradley, we have seen, repeatedly raises precisely what is at issue between himself and Russell, namely, their differences with respect to the requirement that one *analyse* one's operative notions.

Russell sought to bring matters to a close:

> I fully recognise the vital importance of the questions you raise, particularly as regards "unities"; I recognise it is my duty to answer if I can, &, if I cannot, to look for an answer as long as I live […] (1914/1999)

This letter has often been interpreted[104] as evidence that Russell ultimately conceded the charges levelled against him by Bradley, and that subsequently Russell bravely continued to produce work while keenly aware that the basis upon which his entire outlook was founded suffered a fatal inadequacy[105]. I propose to interpret this letter differently. Firstly, we must appreciate that the letter in question was a response to Bradley's sending a copy of *Essays on Truth and Reality* to Russell[106]. The letter is not, in other words, a spontaneously written confession. We must infer therefore that Russell was obliged, upon receipt of a recent work discussing his own ideas and written by Britain's most famous philosopher, to formulate *something* in reply. It is my contention that Russell's intention in writing this letter was to put his and Bradley's published disputes to a halt. Russell, we have seen, felt that the interactions between him and Bradley had terminated in a deadlock. Russell, in other words, aimed to placate Bradley, and to avoid embroiling himself in further discussions of the kind he had already identified as futile. A potential objection to my interpretation is that I do not take Russell's words at face-value, but instead attribute to him an ulterior motive in writing this letter. A strength of my reading, though, is that it provides an explanation for Russell's expressing views in published work which are at odds with those communicated in private correspondence. Russell, as we have seen, makes no such concession as that present in his letter to Bradley in the work written for *Mind*; rather, Russell there aims to throw doubt upon the methodological assumptions which give rise to Bradley's concerns. Given that Russell's response in *Mind* is in tension with that articulated to Bradley in the quoted letter, we must, for charity's sake, reject one or the other as not representing Russell's 'official' view. On balance

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[104] See, e.g. Rodríguez-Consuegra (2004: 428-429).
[105] A notable exception is Lebens (2017: 152).
[106] See Monk (1996: 339).

we ought, I submit, to reject the letter. Russell had other motives for appearing concessive to Bradley in correspondence. It is prudent, moreover, when interpreting a historical figure, to lay more weight on published work than private correspondence where the two conflict, for we must assume that work prepared for public consumption represents the considered position of the figure in question.

Chapter Three

Bradley and Moore on Common Sense

Introduction

In this chapter I examine the way in which Moore employed his common sense method against Bradley's monistic conclusions. I begin by returning to Bradley's methodology, earlier described in chapter one, before presenting the opposing methodology adopted by Moore. Moore's holding that the successful analysis of a phenomenon is irrelevant to the consideration of that phenomenon's being possible marks a departure from Bradley. Moreover, Moore held that commitment to common sense claims need not be justified. Moore directs these views against Bradley explicitly in his 1910-11 lectures *Some Main Problems of Philosophy* (1953), and, I shall argue, implicitly in 'A Defence of Common Sense' (1925). In the following discussion I focus on Moore's objections to positions expressly held to by Bradley. It is plain, though, that Moore intended his approach to counter a range of idealist views, and that his targets were various. I take it that my focus on Moore's application of a distinctive common sense method to Bradley's views does not exclude the possibility of its being applied otherwise.

3.1

Analysis and Justification

3.1.1

We have already seen that Bradley, throughout his corpus, speaks of the demand that philosophical positions satisfy the faculty of 'understanding', if they are to be considered successful[107]. It will be useful in what follows to return once again to certain aspects of Bradley's methodology, in order that those contrasting features of Moore's opposing position be more sharply defined.

Satisfaction of our understanding, recall, is an adequacy constraint on philosophical theories. Bradley often describes a variety of positions which fail to provide 'satisfaction', rather than providing a precise formulation of the constraint he has in mind. We can, however, deduce from these negative remarks something of the positive constraint which Bradley endorses. For instance, Bradley, in a letter to G. F. Stout, claims that 'When the question is of understanding you can't appeal to brute fact' (1999*a*: 220). Writing to Andrew Seth Pringle-Pattison, Bradley objects to an approach which he evidently finds unsatisfactory:

> Well, what is demanded by the intellect? […] You seem ready to take up the crude given fact of the union of the One & Many in the self & to offer this crude fact to the intellect as payment in full so far as principle goes. I find this out of the question. […] And any feature of crude fact, anything merely given with & to the rest, is to the intellect a something else. Explanation by a merely given principle cannot be satisfaction in full. (1999*a*: 111)

And furthermore

> [Y]ou seem to urge that any sort of conjunction or togetherness is all that I have a right to conclude to. But that to me does not satisfy the intellect, & of course 'reduction to law' is no ultimate satisfaction if the law is merely given to the intellect. (1999*a*: 112)

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[107] See Levine (2014) for an extended discussion.

Bradley denies that 'principles', 'laws', or 'crude facts' are capable of providing 'satisfaction' if they are merely *given*. Bradley also denies that facts which are *brute* may deliver understanding. Bradley, then, is dissatisfied by positions which assume certain principles without explaining those principles in a sufficiently illuminative way; the taking of some principle or law for granted is rejected as an inadequate foundation for pursuing philosophical enquiry. Metaphysics, in Bradley's view, is the study of those principles which are assumed elsewhere. In the introduction to *Appearance and Reality* Bradley characterises the enquiry which follows like so:

> We may agree, perhaps, to understand by metaphysics an attempt to know reality as against mere appearance, or the study of first principles or ultimate truths […] Metaphysics takes its stand on this side of human nature, this desire to think about and comprehend reality. And it merely asserts that, if the attempt is to be made, it should be done as thoroughly as our nature permits. (1893: 4)

Metaphysics, on this view, is the attempt to scrutinise 'first principles'; moreover, that scrutiny ought to be carried out as 'thoroughly as our nature permits'. Bradley remarks to Pringle-Pattison that '[T]o say finite things do not contradict themselves if you leave them alone will not do in metaphysics, the business of which is *not* to leave them alone but understand them' (1999*a*: 112). Bradley evidently takes the business of metaphysics to be that of enquiring after the most fundamental principles in the philosophical catalogue, where the truth of those principles is not taken for granted. That Bradley does not take the truth of these principles for granted is demonstrated by his jettisoning a great deal of them as false or 'unreal' where argumentative support for their being true is absent. Bradley, infamously, rejected the now commonplace assumption that relational statements are capable of being wholly true[108].

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108 Bradley (1893: 34).

Bradley, as well as finding brute accounts unsatisfactory, rejects circular explanations as inadequate to justify commitment to a principle or assumption:

> But where we move in circles like these, and where, pushing home our enquiries, we can find nothing but the relation of unknown to unknown – the conclusion is certain. We are in the realm of appearance, of phenomena made by disruption of content from being, arrangements which may represent, but which are not, reality. (1893: 307)

Where the truth of an assumption is in question, it is plainly no advance to attempt to secure that result by appeal to reasoning which employs the relevant assumption. In order that we be justified in endorsing an assumption Bradley demands that we provide a demonstration of its truth. The demonstration which we give must not terminate in brute claims, and it must not defer to circular reasoning. We must, in Bradley's view, be able to explain the possibility of phenomena in terms which do not presuppose their possibility. For the faculty of understanding to be satisfied, then, it must be presented with a *reductive analysis*. Furthermore, our being justified in taking a phenomenon to be possible at all is dependent on our understanding's being satisfied. Evidence for Bradley's demand that phenomena be reductively explained in order that understanding be delivered can be seen in the following passage[109]:

> We never have, or are, a state which is the perfect unity of all aspects; and we must admit that in their special natures they remain inexplicable. *An explanation would be the reduction of their plurality to unity, in such a way that the relation between the unity and the variety was understood.* (1893: 468, emphasis added)

Bradley, moreover, ventures to carry out reductive analyses on such fundamental notions as predication and relatedness in chapters two and three of *Appearance and Reality*. Bradley

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[109] The remainder of chapter twenty-six of *AR* is given over to a detailed examination of a 'proposed reduction' (469) of the Absolute to an identity of Thought and Will. Bradley declares this proposal a failure, and consequently claims that the Absolute *cannot* be understood; see (1893: 482).

attempts, at length, to reduce both predication and relatedness to identity[110]. Bradley holds that the notions of predication and relatedness are 'contradictory' because attempts to 'understand' them through a reduction to identity produce only falsehoods[111]. Bradley's demand for reductive explanations constitutes the foundation of his rejection of predication and relatedness as contradictory. Bradley's insistence that we do not take phenomena for granted but attempt to 'justify them and make them intelligible to ourselves' (1893: 25) is the demand for an explanation of phenomena in terms which do not presuppose their possibility. Bradley applies this method to notions which plainly resist reductive analysis. Bradley argues that such notions must therefore be considered inexplicable or else involve falsehoods. In Bradley's view to accept the first horn of this dilemma is to embrace dogmatism, and to accept the second is to contravene the law of non-contradiction[112].

Bradley holds that his endorsing the requirement that theories satisfy our understanding is essential for 'free sceptical enquiry'. Our not assenting to the possibility of phenomena without the requisite 'understanding' is altogether healthier a stance to take, in Bradley's view, than is commitment to unjustified and dogmatically held beliefs[113]. Bradley describes his methodology as 'experimental'; he claims not to know, in advance of carrying out his enquiries, which phenomena will turn out to be justified as possible[114]. The picture we are presented with is that of a sceptical enquirer *par excellence*. Bradley's freedom from prejudice contributes to his carrying out an extraordinarily thorough-going sceptical enquiry, the stakes of which are high. There is, however, a ready objection to Bradley's sceptical orientation. Bradley's

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[110] See Baxter (1996) for a detailed reconstruction of Bradley's reductive approach.

[111] For instance: 'We say all this, but from the interpretation, then 'before *D*' *is C*, and 'to the right of *F*' *is E*, we recoil in horror. No, we should reply, the relation is not identical with the thing.' (1893: 20).

[112] See (1893: 139; 152) for Bradley's endorsement of the relevant law.

[113] 'Such a scepticism, I would add, if not the best issue, may serve at least as a deliverance from spiritual oppression. For it may free us on every side from the tyranny of intellectual prejudices, and in our own living concerns from the superstitious idolatry of abstract consistency' (Bradley, 1914: 445). See also Bradley (1883: 4).

[114] See Bradley (1914: 311).

adequacy constraint plausibly suffers the charge that is itself inadequately justified. John Stuart

Mackenzie articulates the challenge in a letter to Bradley:

> Thus, when you say "Think, & follow your thought till it is satisfied", the question seems
> to rise, What do we mean by thinking? What is thought, that it should claim to be satisfied?
> Why not say, "Feel, & follow your feeling", or "Will, & follow your volition"? Or why
> not say, "Think, but take care you do not follow your thought too far"? Perhaps these are
> absurd questions; but I confess it seems to me that if they were fairly asked & answered
> we might get a clearer idea of the kind of satisfaction that thought may fairly expect.
> (1999*a*: 82)

Bradley's attempt to free philosophy from dogmatism through the employment of sceptical

reasoning seems at first sight maximally uninhibited. Mackenzie points out, however, that there

are numerous competing adequacy constraints one may adopt. Bradley's preference for the

constraint he in fact selects appears, in the light of available competitors, to betray precisely

the kind of prejudice which Bradley solicited sceptical enquiry to rid us of. The resulting picture

is no longer that of a free-wheeling sceptical venture. On the contrary, Bradley, in Mackenzie's

view, holds to a controversial assumption in the form of a methodological principle. Bradley

is, according to this objection, in the grip of a definite theory, namely that theory which claims

phenomena may not to be accepted as possible in advance of a reductive analysis of them. That

Bradley accepts some shortcomings in his treatment of the methodological principle in question

is suggested by Mackenzie's comments:

> I see that the merely negative criticism which I have made on your method does not much
> affect you. You do not profess to have the best method, & you do not profess to have any
> completeness in your results.
>
> Your explanation of the method adopted in your 'Appearance and Reality' is frank, but
> does not seem to me satisfactory. (1999*a*: 84)

It is a good question whether Bradley could provide some justification for his methodology's employment which could persuade one of its correctness. One strategy Bradley might employ in pursuit of justification of his methodological principle would be to apply that principle to itself. To carry out a reductive analysis of the principle which itself demands phenomena be reductively analysed may provide the justification for that principle's application which we have found wanting. To hold to the view, though, that the principle in question is justified where it satisfies its own requirements, is already to consider the principle in question *a standard worth meeting*. If the success of self-examination by the principle justifies its application elsewhere, that can only be because we viewed the passing of that exam as sufficient for accreditation, in advance of its being passed or failed. Viewing the justification of our employment of a methodological principle as consisting in that principle's meeting its own demands betrays a prejudice for the principle of the kind we saw identified by Mackenzie. It is presumably no answer to the opponent of Bradley's methodology to argue that the methodology lives up to its own standards, where the appropriateness of those standards is precisely what is in question.

Perhaps another tactic one might adopt in order to justify Bradley's methodological principle would be to scrutinise it by the lights of a higher order principle. If, though, Bradley is to justify his methodology 'all the way up', so to speak, he will have to provide some rationale for holding to the relevant higher order principle. Clearly, analogous difficulties to those already discussed will emerge for any higher order methodological principle one might choose. The chain of justification must come to an end, on pain of regress. The appeal to higher order principles in order to supply the justification for employing those of a lower order cannot go on indefinitely.

Bradley describes the criticisms levelled at his chosen adequacy constraint where he writes

"But how" I may be asked "can you justify this superiority of the intellect […]? On what foundation, if on any, does such a despotism rest? For there seems no special force in the axiom if you regard it impartially […] For all axioms, as a matter of fact, are practical. They all depend upon the will. They none of them in the end can amount to more than the impulse to behave in a certain way." (1893: 151-152)

Bradley's critic here argues that the demand for intellectual satisfaction lacks motivation, and that the mere 'impulse' to carry out enquiries to a certain explanatory standard does not confer upon that standard any peculiar legitimacy. Bradley responds as follows:

I can admit the general truth contained in this objection. The theoretical axiom is the statement of an impulse to act in a certain manner. When that impulse is not satisfied there ensues disquiet and movement in a certain direction, until such a character is given to the result as contents the impulse and produces rest. […] Thinking is the attempt to satisfy a special impulse, and the attempt implies an assumption about reality. You may avoid the assumption so far as you decline to think, but, if you sit down to play the game, there is only one way of playing. (1893: 152-153)

Bradley evidently agrees with the criticism that his statements of a demanding adequacy constraint constitute the expression of 'an impulse to act in a certain manner'. Bradley is unperturbed by this objection. The adequacy constraint Bradley endorses is not in his view a *prescription* but a *description* of how, as a matter of fact, a certain kind of enquiry does proceed. We are, of course, at liberty not to embark upon the relevant enquiry. If we do not, so much the worse for us; we shall not achieve 'understanding'. In the next section we will see that Moore did, indeed, adopt an alternative approach.

3.1.2

In *Some Main Problems of Philosophy* Moore can be seen adopting a distinctive methodology very different in character to that which I have attributed to Bradley. Moore begins with a pronouncement on some of the broad aims which philosophers attempt to achieve:

[…] [T]he most important and interesting thing which philosophers have tried to do is no less than this; namely: To give a general description of the *whole* of the Universe, mentioning all the most important kinds of things which we *know* to be in it, considering how far it is likely that there are in it important kinds of things which we do not absolutely *know* to be in it, and also considering the most important ways in which these various kinds of things are related to one another. (1953: 1)

Moore categorises the efforts of philosophers with respect to this aim:

And I wish to begin by describing these views, because it seems to me that what is most amazing and most interesting about the views of many philosophers, is the way in which they go beyond or positively contradict the views of Common Sense: they profess to know that there are in the Universe most important kinds of things, which Common Sense does not profess to know of, and also they profess to know that there are *not* in the Universe […], things of the existence of which Common Sense is most sure. (2)

Philosophers, in their attempts to provide a 'general description of the whole of the Universe', advance theses which both outrun the bounds of, and contradict, common sense. Common sense, unlike philosophical theory, does not provide us with a complete description of the Universe[115]. Philosophical theories are bound, therefore, to pronounce upon matters which common sense does not. Moreover, philosophical theories may deny that some or all of the members of the set of beliefs which constitutes the common sense view are true; indeed, according to Moore Bradley's is an example of one such theory[116]. Common sense evidently takes a central role in Moore's overview of philosophy and its aims; Moore categorises various positions *in terms of* their relation to common sense. Moore does not, though, in either *Some Main Problems of Philosophy* or 'A Defence of Common Sense', give a precise definition of 'common sense'. The absence of such a definition ought not, though, be viewed as a mere

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[115] 'I do not know that Common Sense can be said to have any views about the *whole* Universe; none of its views, perhaps, amount to this.' (1953: 2)
[116] See Moore (1953: 207-211; 283-287). I will return to these criticisms, below.

oversight. Rather, it is distinctive of Moore's approach that he gives examples without offering general criteria met by putative instances:

> Many philosophers have, I think, really believed the theory, and it also may seem very plausible so long as you merely state it in general terms, such as: All that we know of material objects is that they are the unknown causes of our sensations; and this is what we mean by 'material objects'. But it also seems to me to lose its plausibility, so soon as you consider what it implies in particular concrete instances. (1953: 136-137)

Moore expressly places general claims in opposition to particular instances, and construes the common sense approach as consisting of particular cases rather than principles. As Baldwin says, 'This appeal to the particular, once introduced, becomes a hallmark of Moore's style, reaching its climax in his 'Proof of an External World'' (1990: 155)[117].

Importantly, Moore takes it that a position's contradicting common sense is *prima facie* reason to examine that theory with a critical eye. Moore takes the position which says that time is unreal as an example case. In Moore's view scrutiny of the doctrine of time's unreality is warranted because the truth of that doctrine would undermine our common sense commitment to the notion of *practical importance*:

> If, indeed, it were true that nothing does exist in Time, nothing whatever could have any practical importance at all. For what we mean by saying that a thing has practical importance is that it has results, in the *future*, which are important. And obviously, if there is no Time, nothing can have any results of any sort at all, good or bad […] It is, no doubt, immensely important that we should all have beliefs with regard to the temporal relations of *particular* things. An enormous number of our actions are guided by such beliefs. (1953: 203)

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[117] Sommerville, in the same vein, writes 'He has no *theory* of common sense; his examples alone have to bear the burden of conveying what he means. In his defense he is not trying to convince his readers of the truth of any philosophical, or any other specialist, doctrine: he is defending simply our knowledge of the beliefs he is striving to articulate and nothing more.' (1986: 251)

Furthermore: 'If they do mean to contradict Common Sense, then obviously their view is very important, in the sense I have explained' (1953: 204). Moore claims that if time were unreal, there should no longer be any question of practical importance whatsoever. Moore argues that since we do, as a matter of fact, consider some matters to be of practical importance, a position which threatens to undermine this commitment is *therefore* 'very important'. In Moore's view the fact that some philosophical position contradicts common sense suffices for it to be worthy of our attention. With respect to the doctrine of time's unreality Moore claims to be certain of its falsity:

> It might be said that it is a wholly unimportant question, and pure waste of time to discuss it, because it is absolutely certain which the right answer is – so absolutely certain that things do exist in time. And I admit I do think this very certain; and I admit also, that, if I thought everybody was agreed to its certainty, I should probably not think it worthwhile to pay much attention to it. But, however certain it may be, surely the fact, if it be a fact, that people are *not* agreed about it, does make a difference. (1953: 203)

Moore goes on to argue that, despite its being certain that the doctrine in question is false, it *is* worth discussing on account of the fact that some, including Bradley, have sincerely believed in its truth[118]. The possibility of disabusing those who hold views contradictory to common sense of their conclusions constitutes the motivation for Moore's enquiry here. In other words, Moore does not assess Bradley's claims with a view to determining their truth, for their being true is, in Moore's view, out of the question[119].

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[118] An anonymous referee for *Idealistc Studies* rightly points out that Moore's characterisation of the view that time is unreal as leading to the conclusion that things do not exist in time is inaccurate if applied to Bradley. For Bradley, things which are unreal nonetheless exist; see Bradley (1893: 131-132). Moore himself observes this complaint and discusses Bradley's distinction between reality and existence; see (1953: 211-215). We will see, below, that Moore's holding Bradley's theoretical views to contradict practical ones constitutes an interpretation of Bradley which fails to respect the sharp distinction between theory and practice Bradley subscribes to.
[119] Hence Keith Campbell's description of Moore as a 'whistle-blower' (1988: 161–162).

Moore's commitment to the truth of common sense beliefs can be seen clearly in his discussion of Hume. 'Hume's principles', Moore argues, are to be rejected precisely insofar as they undermine our belief in common sense truths[120]:

> It seems to me that, in fact, there really is no stronger and better argument than the following. I *do* know that this pencil exists; but I could not know this, if Hume's principles were true; therefore, Hume's principles, one or both of them, are false. I think this argument really is as strong and good a one as any that could be used: and I think it really is conclusive. In other words, I think that the fact that, if Hume's principles were true, I could not know of the existence of this pencil, is a *reductio ad absurdum* of those principles. (1953: 120)

Moore takes this argument to be conclusive because he holds that the premise from which he begins is known with a greater degree of certainty than any which would count against it[121]:

> I admit, however, that other arguments may be more convincing; and perhaps some of you may be able to supply me with one that is. But, however much more convincing it may be, it is, I think, sure to depend upon some premiss which is, in fact, less certain than the premiss that I do know of the existence of this pencil; and so, too, in the case of any arguments which can be brought forward to prove that we do not know of the existence of any material object. (1953: 126)

Vitally, for our purposes, Moore also holds that his knowledge that the pencil exists is more certain than any other premise which would count in its *favour*:

> But whether the exact proposition which formed my premise, namely: I do know that this pencil exists; or only the proposition: This pencil exists; or only the proposition: The sense-

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[120] This argument anticipates a more general formulation in 1925: 'I have an absolutely conclusive argument to show that none [of the truisms] does entail both of two incompatible propositions. Namely this: All of the propositions in (1) are true; no true propositions entails both of two incompatible propositions; therefore none of the propositions in (1) entails both of two incompatible propositions.' (116)

[121] Here it is confirmed that the claims of science (including mathematics) play an analogous role in Russell's philosophy to those of common sense in Moore's. In 1924 Russell writes: 'Even if I could see no way of answering the objections to relations raised (for example) by Mr. Bradley, I should still think it more likely than not that some answer was possible, because I should think an error in a very subtle and abstract argument more probable than so fundamental a falsehood in science. Admitting that everything we believe ourselves to know is doubtful, it seems, nevertheless, that what we believe ourselves to know in philosophy is more doubtful than the detail of science, though perhaps not more doubtful than its most sweeping generalizations.' (1924: 144–145)

data which I directly apprehend are a sign that it exists; is known by me immediately, one or other of them, I think, certainly is so. And all three of them are much more certain than any premiss which could be used to prove that they are false; *and also much more certain than any other premiss which could be used to prove that they are true*. (125, emphasis added)

These remarks point to a crucial difference in approach between Bradley and Moore. In Moore's view, it is not possible to justify one's belief that there exists a pencil by appeal to supporting claims, for there is no claim one could make in pursuit of that justification which is known with greater certainty than is the relevant premise. Since no putatively justificatory claim will be known with any greater certainty than is the premise in question, no such claim will be able to lend support for that premise. Moore's guiding methodological principle, namely that common sense claims are known, with certainty, to be true, is ultimately unjustified. Moore can give no justificatory argument for his being certain of the relevant claims which may increase our credence with respect to those claims. The claims of common sense are, in Moore's view, known with certainty to be true, and unjustifiable in other terms. Bradley, we saw, denies that claims are true precisely insofar as there is no available explanation of their being so in simpler terms. Moore did not adopt Bradley's methodology. In Moore's view, failure to supply a reductive analysis of a claim of common sense is irrelevant to our legitimately holding that claim to be true. Moore *separates* the project of analysis from that of justifying our belief in common sense claims. In chapter fourteen of *Some Main Problems of Philosophy* Moore can be seen deliberating over the correct analysis of belief. Moore rehearses some of Russell's difficulties with the conception of belief as a two-place relation. Moore, in light of the difficulties he recounts, discusses a Russellian inspired alternative, in which talk of items believed, rather than revealing grammatically isomorphic ontological commitments, is merely a *façon-de-parler*. For our purposes it is not necessary to assess the relative merits of these separate accounts of belief. It is vital, however, to notice that Moore holds the project of

analysing belief to simultaneously contribute to an analysis of the nature of truth. Importantly, though, failure to supply an analysis of belief should not, in Moore's view, undermine our commitment to the possibility of true beliefs. It is worth quoting Moore at length:

> But if we thus admit that we don't know precisely what the analysis of belief is, does it follow that we must also admit that we don't know what truth is, and what is the difference between truth and falsehood? It might seem as if it did; for how we were led into this discussion as to the nature of beliefs, was because we found an obscurity in our proposed definition of truth, which it seemed impossible we could entirely clear up except by discovering exactly what sort of thing a belief is. And I think it is true that the failure to analyse belief, does mean a corresponding failure to give a complete analysis of the property we mean by 'truth'. But the point I want to insist on is that nevertheless we may know perfectly clearly and definitely, in one respect, what truth is […] In short, it seems to me that these questions as to the analysis of belief are quite irrelevant to *the* most important question as to the nature of truth. And I want to insist on this, because I think it is very easy not to distinguish clearly the different questions; and to suppose that because, in one respect, we must admit a doubt as to the nature of truth, this doubt should also throw doubt on more important matters, which are really quite independent of it. (1953: 266 – 267)

Bradley, as we have seen, does not distinguish doubts regarding the analysis of a given phenomenon from doubts regarding that phenomenon's possibility. By contrast, in Moore's view the lack of an available analysis of some phenomenon does not necessarily undermine the legitimacy of our holding that phenomenon to be possible. In the case of common sense claims, lack of an available analysis is irrelevant to our taking those claims to be true. Moore does not provide reasons for his holding to this position. No reason could be given, in Moore's view, which would establish that common sense claims of the relevant kind are not undermined by failure of analysis; Moore holds that common sense claims are known with more certainty than any putatively supporting reason could be. Moore does, by contrast, give reasons *not* to subscribe to views which involve the denial of common sense truisms:

> It is, of course, the case that all philosophers who have held such views [as are incompatible with the propositions enumerated] have repeatedly, even in their philosophical works, expressed other views inconsistent with them: i.e., no philosopher

has ever been able to hold such views consistently. One way in which they have betrayed this inconsistency, is by alluding to the existence of other philosophers. Another way is by alluding to the existence of the human race, and in particular by using 'we' in the sense in which I have already constantly used it […] (1925: 115)

Moore points out the awkwardness of denying that the truisms he lists are in fact true[122], and goes on to charge philosophers who claim that, whether true or not, those propositions can never be *known* with holding to a self-refuting position (1925: 116-118)[123]. These negative arguments, though, cannot form the basis for Moore's asserting the truisms he does. Moore[124] is clear that he is more certain of those truisms than he is of any argument in support of their truth. We must conclude that Moore's negative arguments to the effect that contrary positions lead to either intolerably awkward or self-refuting views are, strictly speaking, superfluous.

Moore's regarding the project of analysis as independent from considerations of the truth or falsehood of common sense claims can be seen in the following passages:

> Possibly some positive analysis of belief *can* be given […] but I know of none perfectly clear and satisfactory. I propose, therefore, to the give up the attempt to analyse beliefs. I think it must be admitted that there is a difficulty and a great difficulty in the analysis of them; and I do not know that any one would say they had a theory about the matter which was quite certainly true. (1953: 266)

As well as:

> Well, I admit I can't define [truth], in the sense of analysing it completely: I don't think this can be done, without analysing belief. But obviously from the fact that we can't analyse it, it doesn't follow that we may not know perfectly well *what* relation it is; we may perfectly well be *acquainted* with it; it may be perfectly familiar to us; and we may

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[122] It is worth emphasising that the argument given by Moore, to the effect that those who hold views incompatible with common sense undermine their position through commitment to the existence of philosophers, misses its target if aimed at Bradley. Bradley held that certain phenomena are unreal, not that they don't *exist*.
[123] See Skirry (2003: 395-399).
[124] Moore (1953*:* 125).

know both that there is such a relation, and that this relation is essential to the definition of truth. (1953: 267 - 268)

In 1925 Moore echoes these earlier claims:

As I have explained under *I*, I am not at all sceptical as to the truth of such propositions as 'The earth has existed for many years past', 'Many human bodies have each lived for many years upon it', i.e., propositions which assert the existence of material things: on the contrary, I hold that we all know, with certainty, many such propositions to be true. But I am very sceptical as to what, in certain respects, the correct *analysis* of such propositions is. (1925: 127)

We may conclude, from these remarks, something of the extent of Moore's claim to certainty. Moore is certain of the truth of a variety of different sentences; he is not, however, certain of the truth of any analyses of those sentences. In other words, the extent of Moore's certainty reaches only to expressions of common sense truisms framed in *ordinary language*. Moore's certainty with respect to the truisms he describes is not transferable to putatively synonymous expressions for those truisms exemplifying *analyses*. Insofar as Moore claims to be certain of common sense truisms, but uncertain of claims made in technical philosophical language, we may conclude that assertions made in technical philosophical language do not themselves count as common sense claims.

3.2

Bradley and Moore

3.2.1

Bradley appears to place himself in opposition to certain features of common sense where he writes[125] 'Any serious theory must in some points collide with common sense.' (1893: 279). And

> For myself I must confess that I see no way, whether now or in the future, by which the clear thinking which calls itself 'Common Sense' and is satisfied with itself, can ever be reconciled to metaphysics. […] For 'Common Sense' it will remain that the final result of reflection will seem not only out of harmony with experience but in collision with sound thought. And for 'Common Sense' also it will remain that we shall be able to live only so far as, wherever we feel it to be convenient, we can forget to think. (1914: 444)

Elsewhere Bradley is less measured:

> Common sense openly revolts against the idea of a fact which is not a reality; or again, as sober criticism, it plumes itself on suggesting cautious questions, doubts which dogmatically assume the truth of its coarsest prejudices. (1893: 423)

It is likely that comments such as these lead Moore, in 1925, to charge opponents of common sense with speaking contemptuously (1925: 119). Insofar as Bradley denies the truth of common sense claims, it is plausibly due to the failure of his opponents to supply reductive analyses of them. Common sense is 'dogmatic'; it has not withstood the sceptical enquiry Bradley requires. As we have seen, in Moore's view, failure to supply an analysis of a common sense claim is not a sufficient reason to deny the truth of the claim.

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[125] Wollheim describes Bradley as having 'parted company with common sense' (1969: 47), though Wollheim points out that the empiricist views to which Bradley was often objecting may also be viewed as less than common sensical (1969: 46).

Bradley's position with respect to common sense, though, is more complex than it may at first sight appear. Bradley, for instance, defends common sense morality against the utilitarian 'ethical science'[126] of Henry Sidgwick:

> But when science ceases to understand and proposes to alter the facts, then common experience has a right to be heard, and the more loudly it speaks the better for all parties. […] Science (to repeat it) is absolutely free while it is theory […] and what is called 'common sense' is simply out of court. But when it becomes art […] then it must answer for itself and not fall back on the privileges of theory. (Bradley, 1935: 115)

Bradley objected to Sidgwick's 'casuistry'[127] on the grounds that it is too abstract to capture the particularity of our moral lives. For our purposes it is Bradley's separation of practical considerations from theoretical ones, rather than the details of his disagreement with Sidgwick[128], which are important. Bradley argued that 'ethical science', operating with abstract notions and general principles, is too removed from the sphere of practical action to bear upon it: 'for me Ethics is not practical' (1935: 114), and '[A] practical collision between Ethics and morality is for me a sheer impossibility, because the former has nothing whatever to do with practice' (1935: 114). In Bradley's view the division between practice and theory renders both spheres wholly separate from one another. Common sense, according to Bradley, is clearly a faculty exercised in relation to practical matters, rather than theoretical ones. Bradley's objections to common sense must therefore be construed as objections to common sense taken as constituting a *theory*, rather than a wholesale rejection of the relevant faculty's utility in other areas. Bradley's adequacy constraint is, as I have said, an adequacy constraint on philosophical theories. Insofar as common sense is not presented as a theory, our failure to provide reductive analyses of common sense statements is not viewed by Bradley as

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[126] Bradley (1935: 104).

[127] (1935: 105; 107; 111; 115).

[128] See Schneewind (2010: 21-41) for an extended discussion of the role common sense plays in Sidgwick's position.

problematic. It is for this reason that Bradley would likely have been unmoved by Moore's criticism, described above, that time's being unreal is inconsistent with the possibility of practical importance. Where Moore identifies a tension between the view that time is unreal and our practical interest in the future, Bradley held that theoretical claims cannot be taken to bear upon the non-theoretical sphere of practical action.

Elsewhere, Bradley presents himself as holding views in agreement with common sense. Bradley claims that common sense has been illegitimately appropriated by his opponents:

> And what is here assumed is that the reality, or the type, itself is self-contained and fixed. This is an assumption made often by that which would wrongly usurp the name of Common Sense. (1914: 258)

And:

> The doctrine that there is no perfect truth or sheer error may be said to conflict with Common Sense, if you understand by that term the fixed prejudices of one-sided reflection. This is the Common Sense which we too often find with the specialist and in the market-place. But if Common Sense is taken more widely, the above conflict disappears. Is it after all a paradox that our conceptions tend all more or less to be one-sided, and that life as a whole is something higher and something truer than those fragmentary ideas by which we seek to express and formulate it? Is it after all the man who is most consistent who on the whole attains to greatest truth? To most, if not to all of us, I should have thought that there came moments when it seemed clear that the Universe is too much everywhere for our understanding. (1914: 268)

In an article addressed to Russell, Bradley writes:

> I will end by noticing briefly Mr. Russell's contention that on his view we are less in conflict with science and with common sense. This is an argument which I am very far from undervaluing. In fact the doctrine which I hold I hold largely because it seems to me to remain, more than others, in harmony with life as a whole […] [I]t is not in my power to judge as to how far [Russell's] views are in harmony with science and common sense, if I use these terms, that is, in anything like a wide meaning. (1914: 291)

And lastly, in a 1903 letter to G. F. Stout, Bradley says,

> With regard to 'common sense' & 'the plain man', I follow Hegel in holding that an appeal to the theories & reflections of Common Sense only takes you away from the substance of Common Sense. (1999*a*: 250)

Bradley, throughout these remarks, appeals to a notion of common sense which has not been 'usurped', or else to a 'wide' conception of common sense, or again to the 'substance' of common sense[129]. Bradley places two distinct conceptions of common sense in opposition to one another:

> I am not to be moved here by the charge of an insult offered to Common Sense. For not only in speculation but in life we must all be ready to affront that which somewhere, perhaps, in the name of Common Sense may claim our respect. Common Sense certainly should consists, and at its best it certainly does consist, in the emphasis everywhere, whether in theory or in conduct, on what may be called the main view – the view, that is, which mistrusts and keeps farthest from mere abstractions, and comes nearest on the whole to that which is entire and is sane. But Common Sense, taken (as too often it may be seen) at its worst, is in its essence a one-sidedness, which we must not be afraid to mark as stupid or even, perhaps, to denounce as immoral. (1935: 640)

Bradley argues that his position agrees with common sense construed 'at its best'. With common sense 'at its worst', though, Bradley does not hesitate to express disapproval. Bradley, it seems, would have disapproved of the conception of common sense we have found endorsed by Moore. Truisms of the kind found in 1925, presumably, constitute 'fragmentary ideas'[130], in Bradley's view. Bradley held that claims are truer the closer they come to describing the

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[129] In a letter to William James, Bradley writes 'I begin to wonder if I am not asked by you to start by assuming as true a sort of common-sense realism & to swallow without demur all the difficulties which belong to it. Of course I hold that since Hegel the Thing in itself has been exploded & that for me knowledge or belief beyond experience is impossible. And yet you seem to me now to ask me to agree that the contrary is true' (1999*b*: 112). Here Bradley evidently identifies common sense with a Kantian commitment to noumena. Clearly this conception of common sense could not be further from Moore's, for whom expressions made in technical language depart from common sense.

[130] Bradley (1914: 268).

world in full[131]. Statements which omit any information about the world are to that extent false. The common sense claims asserted by Moore make no claim whatsoever to attempt to capture the world in full, and therefore count, in Bradley's view, as falling short of 'Absolute' truth. Moreover, and vitally for present purposes, Moore clearly intends to supplant the philosophical theories of others with his common sense approach. Insofar as Moore conceives of common sense truisms as *competing* with theoretical views[132], Bradley would not have accepted the defence that Moore's approach need not meet the standard of explanation he demands theories achieve.

Bradley and Moore, then, differ fundamentally with regards to the certainty of sentences such as 'the earth has existed for many years past'. Bradley holds the unqualified assertion of such sentences to be unjustified if presented as competitors to alternative metaphysical theses; in advance of a reductive analysis of Moore's truisms, we ought not to assent to their being true. Moore evidently disagrees; even if we *could* produce an analysis satisfying Bradley's constraint it would not provide us with any reason to assent to the truth of the relevant claim. Moreover, truisms of the kind found in 'A Defence of Common Sense' are known, with certainty, to be true, without justification of any kind.

In a 1904 letter to Russell, Bradley writes:

[I]f you or Mr Moore should put out your views on first principles in [a] form which does not cause me too great difficulty, I shall lose no time in making my acquaintance with them.' (1999*a*: 272)

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[131] See Bradley (1893: Ch. 24).

[132] Baldwin affirms the claim that Moore viewed common sense claims as relevant to the assessment of theoretical ones where he writes '[Moore] does now think that in important respects philosophy is answerable to common-sense' (1990: 156).

In 1907 Bradley complains that both Russell and Moore have failed to discuss 'first principles'. Furthermore, Bradley argues that Russell has failed to *justify* his employment of certain notions:

> I don't think that anything could do more for the study of philosophy among us than that you should put out your views on first principles in the form of a discussion of first principles. I have seen nothing to lead me to think that Mr. Moore will or indeed can do this, & you are so much occupied with what may be better in itself, I do not doubt, but not so good in that way. (1999*b*: 44 – 45)

> Self-contradictory ideas such as 'class' & 'the relation of a term to itself' seem used with no sufficient justification. (1999*b*: 44 – 45)

Earlier in the year Bradley voiced these same concerns regarding Russell's methodology to Harold Henry Joachim:

> The only thing I did before being laid up again was to read some of Russell's book on Mathematics. I am sure that if I knew more of the subject I should think even more highly of it than I do. But as a statement of first principles it is to me quite unintelligible […] Again apparently some of his working ideas […] he hardly attempts to justify except by saying that he requires them. (1999*b*: 40)

The indispensability of a notion to securing some result is evidently not sufficient justification for its employment, according to Bradley; as we have seen, it is a reductive analysis that Bradley demands be provided if 'justification' is to be achieved. Bradley's letter to Joachim echoes statements made by the latter in his *The Nature of Truth*:

> In his [*A Critical Exposition of the*] *Philosophy of Leibniz*, in various articles in *Mind*, and in his *Principles of Mathematics*, [Russell] constantly applies the principles of the New Philosophy to […] the criticism of current philosophical views. But – no doubt quite rightly – he neither offers, nor professes to offer, a systematic exposition of the logic and metaphysics whose principles he is applying […] At times, indeed, Mr. Russell refers us to the writings of G. E. Moore. But although Mr. Moore's *Principia Ethica*, and his articles in *Mind*, contain interesting indications (and more or less fragmentary expositions) of a new logic and metaphysics, I have not been able to discover in them anything like a systematic account. (1906: 32)

Joachim observes Russell's admission of Moore's influence with respect to his general orientation[133], but charges both figures with failing to provide a 'systematic account' of certain principles. Evidently Bradley both respected Russell's work more highly, and attempted to engage with it more thoroughly, than he did the work of Moore[134]. Where Bradley and Joachim viewed Russell's employment of various notions as insufficiently justified, however, it is clear that they held Moore to be guilty of the same failings.

I have so far been placing Bradley's views in opposition to those Moore describes in *Some Main Problems of Philosophy* and 'A Defence of Common Sense'. Both of these works, however, were published after Bradley's death in 1924. The letter quoted above, in which Bradley complains of a lack of discussion of 'first principles' in Moore and Russell, cannot therefore automatically be taken to apply to the common sense view so far discussed; indeed, it is controversial just when Moore adopted that view[135]. Moreover, given that Bradley does not appear to have kept up with the development of Moore's thought closely, we cannot assume him to have detected the emergence of a commitment to the truth of common sense claims in work Moore had published during Bradley's lifetime. It is a good question, then, just which principles of Moore's Bradley has in mind where he complains of their being insufficiently examined. It is not my intention, in this article, to speculate as to precisely which principles of

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[133] An admission evinced from the following remark made in the preface to *The Principles of Mathematics*: 'On fundamental questions of philosophy, my position, in all its chief features, is derived from Mr. G. E. Moore.' (1903: *xiv*)

[134] Candlish's observation that Bradley viewed Moore as 'philosophically negligible' (2007: 4) appears accurate. Bradley's less than soaring opinion of Moore can be traced to an exchange between the two surrounding the publication of Moore's 'The Nature of Judgement' (1899); see (1999*a*: 176 – 177). Bradley had also read Moore's 'The Refutation of Idealism' (1903*a*), as well as portions of *Principia Ethica* (1903*b*), reporting dissatisfaction with both in 1904 to Stout (1999*a*: 259). I can find no evidence that Bradley read any other of Moore's works.

[135] See MacBride (2018: 91–92) for a discussion of the views of several commentators on the inauguration of Moore's common sense approach. Baldwin (1990: 155) locates the inception of Moore's common sense approach in his 1910-11 lectures. Both MacBride and Black (1939: 26 – 27), however, argue that Moore's commitment to common sense orientated philosophy emerged prior to the date on which Bradley complains at Moore's lack of explanation of 'first principles'. MacBride argues that Moore's common sense approach was present in 1900, Black argues for the later date of 1905-6. As I say, above, it is unlikely Bradley would have been as informed as either Black or MacBride. The presence of a common sense approach to philosophy in Moore prior to Bradley's letter does not necessarily support the assertion that Bradley levels his criticisms against that approach.

Moore's Bradley takes to warrant further discussion; suffice it to say that Bradley principally objected to a commitment to pluralism, in advance of having justified that commitment via the presentation of a reductive analysis of its possibility. Rather, I would like to highlight the fact that Moore *does* take himself to be responding to Bradley in *Some Main Problems of Philosophy* and 'A Defence of Common Sense'. In other words, although Bradley's criticisms of Moore were likely made against a conception of philosophy Moore, in *Some Main Problems of Philosophy* and 'A Defence of Common Sense', had since replaced, Moore's mature method *was* employed by him against Bradley's monistic conclusions. That Moore places himself in explicit opposition to Bradley in *Some Main Problems of Philosophy* can be seen in a number of passages; Moore mentions Bradley by name no fewer than forty-two times in that work. Examples include the following:

> I propose to quote a few passages from Mr. Bradley's book called *Appearance and Reality*. Mr. Bradley is certainly one of the most eminent of living philosophers; and anything which he says, even if nobody else said it, would probably be worth attention […] I want to give [the quotations], too, because I think they are a good illustration of a kind of difficulty, which is constantly occurring when we study the works of philosophers – a kind of difficulty, which seems to me to be one of the greatest which does occur […] (207 – 208)

And:

> And the second theory about truth which I wish to mention because it seems to me to conflict with millions of obvious facts, is a theory which is, I think, held by Mr. Bradley among others. (283)

Moore, then, clearly identifies Bradley as the chief target of his criticisms in *Some Main Problems of Philosophy*. In his 1919 article 'External and Internal Relations' Moore again charges Bradley with holding to a position which 'obviously flies in the face of common

sense'[136] (51). In 1925, Moore does not mention Bradley by name. Nonetheless, we can, through a process of triangulation, locate Bradley as a target in that work. That Bradley features as an adversary in 'A Defence of Common Sense' can be established by demonstrating a continuity in vocabulary between *Some Main Problems of Philosophy*, where Bradley is an explicit target, and 'A Defence of Common Sense', where he is not. In 'A Defence of Common Sense' Moore repeatedly mentions those who hold that his truisms are not 'wholly true'[137]. Moore also mentions those who hold to the position that all falsehoods are merely 'partial' falsehoods[138]. Moore, in *Some Main Problems of Philosophy*, had explicitly taken issue with Bradley's doctrine of 'degrees of truth'[139], whereby no statement is held to be 'wholly true' nor 'wholly false'. Moore describes Bradley's view as the following: 'It says: 'Absolutely every belief, without exception, is *both* partially true, and *also* partially false; no belief is *wholly* true, and none is *wholly* false […]' (1953: 284). Moore says

> And I think Mr. Bradley does, in fact, mean to deny that any of our beliefs are *wholly* true, even in this ordinary sense. I think he would object to our saying that any of them are wholly true in any sense at all. I think, therefore, that this argument is in fact not merely a defence of my own doctrine, but also an attack on his. (1953: 287)

Evidently Moore takes himself to be expressly 'attacking' Bradley's position here. Where Moore, in 1925, opposes himself to those who hold the view that all statements are partially false, as well as those that hold no statement to be wholly true, it seems clear that Bradley remains the principal figure in mind. Moore also takes aim, in 'A Defence of Common Sense', at those who have held to the view that time, space, and selves, are unreal. Bradley, in

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[136] Whether or not Moore's criticisms of Bradley in 'External and Internal Relations' are sound is a matter which cannot be settled here. Candlish has argued convincingly that they are not; see (2007: Ch. 6). See Lebens (2017) for an opposing view.
[137] (1953: 112; 113).
[138] (1953: 109–110).
[139] (1953: 283–287).

Appearance and Reality, argued at length against the reality of time, space, and selves[140].

Moreover, in chapter eleven of *Some Main Problems of Philosophy* (201–215) Moore had offered an extended treatment of Bradley's position with respect to time's unreality. It is, in my view, implausible to suggest that Moore does not consider Bradley his primary opponent in 1925where he describes positions the latter held, and which Moore had himself previously objected to at length. Lastly, and as I mentioned above, Moore mentions those philosophers who talk contemptuously of common sense. Bradley, as we have seen, is plausibly guilty of this charge. I do not doubt that other thinkers satisfy some of the descriptions Moore produces in 'A Defence of Common Sense'[141], and that Moore had various opponents in mind. It does seem plausible, however, to suggest that Bradley remained a figure worth refuting, as late as 1925[142].

We have seen that Bradley's objection to Russell's and Moore's early works consists in his arguing that the 'principles' employed in those works are insufficiently justified to be legitimately assumed in the service of further enquiry. We have also seen that Bradley objects to common sense statements on the grounds that they are 'dogmatic' and 'fragmentary'. Bradley holds that 'free sceptical enquiry' is valuable chiefly because it frees us from dogma and prejudicially endorsed assumptions. Furthermore, Bradley identifies sceptical enquiry with the project of reductive analysis, and the satisfaction of that enquiry with being justifiably employable. Bradley's comments with respect to 'first principles', made in private

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[140] See (1893: Ch. 4; Ch. 10).

[141] Berkeley, for instance, is a named target; Moore also, undoubtedly, has Hume in mind (Stroll, 1994: 19), as well as McTaggart.

[142] Kevin Morris and Consuelo Preti (2015) have convincingly argued that Moore's 'Proof of an External World' (1939) is fruitfully read as engaging with idealist metaphysics, and that Moore's position in 1939 exhibits a continuity in focus with his 'Refutation of Idealism' (1903*a*). An anonymous referee has pointed out that insofar as Moore's 1939 position draws upon concerns of his from 1903, we may conclude that Moore had Bradley in mind as a target in 'Proof of an External World'. In my view this conclusion is somewhat hasty, for while Moore does mention Bradley in his 'Refutation of Idealism', his target appears more squarely to be the idealism of Berkeley; see for instance (1903: 445; 453). Bradley, in private correspondence, expressly denied that he held to the assumptions Moore ascribed to proponents of idealism; see Bradley (1999*a*: 259).

correspondence, are plausibly not aimed directly at the methodology at work in *Some Main Problems of Philosophy* and 'A Defence of Common Sense'. Vitally, though, for our purposes, the methodology at work in *Some Main Problems of Philosophy* and 'A Defence of Common Sense', *is* aimed at Bradley. Moore's commitment to the truth of certain claims independently of their being analysed signals the adoption of a methodology which does not operate with the adequacy constraints Bradley charged Moore's earlier work with failing to meet. Moore claimed that he did not need to produce an analysis of a phenomenon in order that he be committed to that phenomenon's possibility. By contrast, Bradley felt that failure to analyse phenomena is sufficient for rejecting the possibility of those phenomena. Moore, in his view, need not *justify* his assenting to the truth of those statements he lists in 1925; rather, Moore need only adopt a method which does not include commitment to the adequacy constraint Bradley endorses. Furthermore, Moore's method rules out as inappropriate the giving of reasons for its adoption. Any argument in favour of the position that Moore's method is correct is, in Moore's view, less certain than are the truisms that method is characterised in terms of.

Moore's adoption of a novel method is bound to appear omissive. Moore must not appraise his approach by the lights of Bradley's adequacy constraints if his adoption of that approach is to count as robust. Indeed, it would be misleading to say that either Moore or Bradley's methodology was justified, until the meaning of 'justify' has been settled. To settle the meaning of the word 'justify', though, with respect to methodological choices, is to formulate a meta-theoretical decision procedure. It is, though, distinctive of Moore's approach that he is more certain of the truisms he asserts than any philosophical jargon one might adduce in support of it, including, presumably, meta-theoretical decision procedures. Moore's approach renders justification superfluous. Moore, then, does not take himself to be justified in his assenting to common sense truisms, regardless of the content we ascribe to the word 'justify'. Moore's approach, though not 'justified', does not *contravene* Bradley's adequacy

constraint; rather, Moore's is an approach on which the relationship between justification and reductive analysis is re-appraised, and the connection between those two notions consequently severed. Moore's approach constitutes the adoption of a methodology antithetical to that demanding justification, and was adopted with Bradley's position expressly in mind.

3.3

Conclusion

Moore, we have seen, adopted a distinctive methodological principle which consisted in treating as unassailable certain common sense claims. Bradley, by contrast, had argued that common sense claims may not supplant the conclusions of sceptical philosophy, for common sense claims do not provide us with 'understanding', and do not therefore satisfy the adequacy constraint described at the beginning of this chapter. We saw that, upon inspection, Bradley's sceptical orientation involves subscription to certain assumptions about what satisfaction consists in, and that Bradley's adopting this orientation therefore constitutes the endorsement of a substantial theory. Bradley's view, moreover, is vulnerable to the charge that it is itself inadequately justified. Moore, by contrast, adopted a position according to which meta-theoretical justification is irrelevant to the appraisal of common sense claims. On Moore's position, any argument designed to undermine common sense consists of claims bound to count as less certain than are the assertions which that argument is designed to attack.

Chapter Four

Analysis, Decomposition, and Unity in Wittgenstein's *Tractatus*

Introduction

In both this chapter and the next I turn to Wittgenstein's treatment of a recognisably Bradleyan difficulty, namely that of explaining how complex items come to be unified. In this chapter I argue against a specific interpretation of Wittgenstein's views, and in doing so I clear the ground for the positive proposal I introduce in chapter five. In both this chapter and that which follows it I focus my discussion on the problem of the unity of *propositions*. In other words, the problem with which Wittgenstein deals is that of how propositions come to be unified. At the end of chapter five I show how my proposed interpretation of Wittgenstein's treatment of the problem of the unity of the proposition may be easily extended to that of the unity of facts more generally.

The aim of this chapter is to show that a particular interpretation of Wittgenstein's approach to the problem of unity is mistaken. According to several commentators, Wittgenstein's strategy with respect to that problem is to adopt an ontological position on which propositions are fundamental ontological postulates. This interpretation has been endorsed in the form of at least two more specific varieties. Leonard Linsky (1992) has argued that Tractarian propositions are ontologically prior to their constituents, and that Wittgenstein therefore absolves himself of the requirement that the unity of propositions be explained.

Anthony Palmer (1988) and José Zalabardo (2015; 2018) argue for the more radical view that Tractarian propositions are *without* constituents, are not unities, and that the request for an explanation of the unity of a proposition is therefore inappropriate if levelled at Wittgenstein. I aim to place both Linsky's, Palmer's, and Zalabardo's interpretations in the broader context of their relationship to the influential reading of Hidé Ishiguro (1969; 1990). In turn, I offer an objection to Ishiguro, and argue that what I find objectionable in that approach is present also in Linsky, Palmer, and Zalabardo. In other words, my description of Linsky's, Palmer's, and Zalabardo's views as in error involves my attributing to them a mistaken interpretation of Wittgenstein's *Tractatus*, the original statement of which may be found in the position of Ishiguro. The resulting picture is a collection of interpretations whose common features are charted, and their failings subsequently identified.

My objection to Ishiguro's view relies upon the introduction of a conceptual distinction between analytical procedures owed to Michael Dummett (1981*a*; 1981*b*). Dummett has argued that Frege employed two different conceptions of analysis, namely 'analysis' and 'decomposition', to separate effect. Here I shall not argue that Dummett is correct with respect to the historical claim he makes concerning Frege. Rather, I argue that Dummett does indeed identify a legitimate conceptual distinction, regardless of whether Frege himself availed himself of that distinction. Moreover, Wittgenstein *did* employ that distinction, and that he did so is a fact which may be brought to bear on the issue of whether Ishiguro, and concomitantly Linsky, Palmer, and Zalabardo, are correct in their assessments. I shall claim that all four of the just mentioned commentators draw conclusions concerning Wittgenstein's ontological views without appreciating the distinction Wittgenstein observes between analysis and decomposition. I shall argue that all four critics implicitly portray Wittgenstein's ontological views as expressed in passages of the *Tractatus* in which decomposition, rather than analysis, is the operative notion. By contrast, I argue that Wittgenstein's conception of an object is more

accurately characterised through the examination of remarks concerned with analysis, rather than decomposition.

I begin by presenting the distinction between analysis and decomposition Dummett describes, before arguing that Wittgenstein does indeed employ that distinction. I then examine Ishiguro's view, before objecting to that position on the basis that Ishiguro does not observe the presence of the relevant Dummettian distinction in the *Tractatus*. I subsequently identify the same shortcoming in Linsky's, Palmer's, and Zalabardo's readings, and draw the conclusion that they therefore mischaracterise Wittgenstein's approach to the problem of unity.

4.1

Dummett on Analysis and Decomposition

4.1.1

In this section I shall outline the Dummettian distinction between 'analysis' and 'decomposition'. Having drawn the relevant distinction, we will be better placed to see how it applies to the *Tractatus*, and, finally, to the issue of propositional unity.

Frege emphasises the priority of judgements over concepts on more than one occasion. Frege, for instance[143], writes 'I start out from judgements and their contents, and not from concepts […] I only allow the formation of concepts to proceed from judgements.' (1979: 16); as well as

> Now I do not believe that concept-formation can precede judgement because this would presuppose the independent existence of concepts, but I think of a concept as having arisen by decomposition from a judgeable content. (1980: 101)

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[143] See also Frege (1979: 253).

Dummett offers an interpretation of these remarks in which the epistemological priority of judgements over concepts is consistent with the epistemological priority of words over sentences. Dummett, as is well-known, has argued that Frege employs two different conceptions of analysis:

> We recall the distinction we have drawn between two kinds of analysis of a sentence into constituents. A sentence is constructed out of component words […] This kind of analysis relates to the sense of the sentence, and the constituents of the sentence, with respect to an analysis of this kind, are just the primitive component words […] The other kind of analysis is needed in order to determine the validity of inferences in which the sentence may be involved, and it is unnecessary, for someone to understand the sentence, that he be aware of the possibility of an analysis of this kind: in this sort of analysis, the 'constituents' into which the sentence may be analysed may be complex incomplete expressions which we form from the sentence itself by omitting some other expression or expressions from it […] (1981*a*: 65)

Elsewhere[144] Dummett terms the former notion 'analysis' and the latter 'decomposition'. Analysis consists in identifying those constituents from which a sentence has been *constructed*, and which must be grasped by a speaker if they are to understand the relevant statement. That sentences are complexes composed of constituents which are epistemologically prior to the entities they combine to form is a presupposition of the possibility of analysis. Decomposition, by contrast, involves the formation of expressions through the replacement of others by free variables. The products of decomposition are not, according to Dummett, epistemologically prior to the items from which they have been decomposed; they need not be grasped by a competent speaker in order that sentences involving them be understood. Decomposition furnishes us with *features* capable of being shared by sentences, rather than genuine constituents of those sentences:

> The complex predicate 'ξ killed ξ' cannot be regarded as literally a *part* of the sentences in which it occurs: it is not a word or a string of words, not even a discontinuous string. There is no part in common to the sentences 'Brutus killed Brutus' and 'Cassius killed Cassius' which is not also part of the sentence 'Brutus killed Caesar': yet the predicate 'ξ

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[144] See (1981*b*: 271).

killed ξ' is said to occur in the first two and not in the third. Such a complex predicate is, rather, to be regarded as a *feature* in common to the two sentences [...] (1981*a*: 31, emphasis original)

Features, Dummett holds, are not literal components, or 'parts' of the items they are features of. Zalabardo's description of features concurs with Dummett's in this respect: 'people share heights, incomes, hobbies, and character traits without being compounded from these items' (Zalabardo, 2015: 112). The features arrived at through the decomposition of sentences include, on Dummett's view, functional expressions. The sentence 'Brutus killed Caesar' may, for example, be conceived of as the value of 'Brutus killed ξ' for argument 'Caesar', the value of 'ξ killed Caesar' for argument 'Brutus', or the value of 'ξ killed ζ' for arguments 'Brutus' and 'Caesar'. We shall see, below, that these alternatives are not exhaustive. Importantly, examples abound of functions which do not figure as components of their values[145]. The number 6, for instance, is the value of function $\zeta + \zeta$ for arguments 3 and 3, though the function $\zeta + \zeta$ does not figure as a component of the number 6.

Decomposition is a procedure necessary for the success of at least two objectives, in Dummett's view. Firstly, what Sullivan calls the 'extraction of concepts' (2004: 694) from sentences may be explained through appeal to the notion of decomposition. Frege, we have seen, says that he thinks of 'a concept as having arisen by decomposition from a judgeable content', and that 'concept-formation' cannot precede judgement. By replacing two constants of 'Brutus killed Brutus' with free variables we may arrive at the functional expression 'ξ killed ξ'. This functional expression is, we have said, a feature of every sentence which is its value; the sentence 'Brutus killed Brutus' then has at least this feature in common with all other sentences which are values of the relevant function. The sentence 'Brutus killed Brutus',

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[145] The canonical example is due to Frege (1979: 255), who points out that while Stockholm is the value of the function *the capital of* ζ for the argument *Sweden*, neither the function nor argument feature as constituents of the value in question.

therefore, exhibits a feature common also to 'Cassius killed Cassius'. One need not, according to Dummett, grasp what it is these sentences have in common in order to understand either of them. It is not necessary, in order to understand 'Brutus killed Brutus' that one be cognisant of its being the value of 'ξ killed ξ' for arguments 'Brutus' and 'Brutus'. Rather, for the understanding of a sentence it is sufficient to understand the sentence's component words and the significance of their mode of combination. If one does grasp the feature shared by these sentences, though, one has thereby identified the concept *suicide*:

> The proposition that Cato killed Cato shows the same thing. Here, I we think of 'Cato' as replaceable at its first occurrence, then 'killing Cato' is the function; if we think of 'Cato' as replaceable at its second occurrence, then 'being killed by Cato' is the function; finally, if we think of 'Cato' as replaceable at both occurrences, then 'killing oneself' is the function. (Frege, 1879: 66)

Importantly, our grasp of this concept depends, in Dummett's view, upon our being able to detect commonalities shared by sentences. The extraction of concepts therefore is posterior to the understanding of sentences. To appreciate the fact that 'Brutus killed Brutus', 'Cassius killed Cassius', and 'Caesar killed Caesar' are members of a class, namely that class of sentences which are values of the function 'ξ killed ξ', is to appreciate the fact that they express the same concept. As Sullivan says

> Each of the members of the now distinguished class of sentences (iv) says of some individual that he killed himself; otherwise put, in each of these sentences the concept of suicide is expressed. It is the fact that this concept is expressed in each of them that distinguishes the class. Thus anyone who comes to be able to distinguish this class for the first time can be thought of as acquiring a grasp of the distinguishing mark of the class, in this case, a grasp of the concept of suicide. […] [I]t will be a conceptual achievement to recognise that 'Cato killed Cato' belongs to a class of sentences […] in each of which this concept is expressed. (2004: 695)

The priority of judgements over concepts consists in the fact that one must *already* understand a sentence in order that it be decomposed into a functional expression such that the features it possesses common to other sentences be brought to light, though one need not acknowledge a sentence's belonging to a particular class which includes other sentences in order to grasp its meaning. That whole sentences are prior to concepts does not, on Dummett's view, imply that sentences are epistemologically prior to the words contained in them, for the concept expressed by a sentence is not, in the present context, to be identified with the meaning of any word(s) which combine to form that sentence.

Secondly, decomposing sentences into functional expressions containing free variables is necessary if we are to capture the validity of inferences involving those sentences[146]. The validity of the inference from '$a > b$' and '$b > c$' to '$a > c$', for instance, is capable of being rendered perspicuous only by construing each sentence as decomposing into a two-place, rather than one-place, functional expression, along with its arguments. Observation of this point figured prominently in Russell's[147] criticisms of subject-predicate logic, and his subsequent concern to establish a logic of relations. That one and the same sentence admits of more than one decomposition into a functional expression and argument(s) is a detail of crucial importance, to which I shall shortly return.

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[146] Linsky elaborates: 'The predicate 'ξ killed ξ' must be distinguished from the predicate 'ξ killed η' for the latter is the predicate which by double quantification yields 'Everyone kills someone.' This double quantification cannot arise from the former predicate.' (1992: 269).
[147] See Russell (1900: 13-15; 1903: §214-216).

4.2

Decomposition

4.2.1

Where Frege, in the quotations given at the beginning of the preceding section, describes a relation of priority in which judgeable contents stand to concepts he is expressly employing, according to Dummett, the notion of decomposition, rather than that of analysis. Whether or not Dummett is correct in attributing to Frege the employment, on distinct occasions, of analysis and decomposition is not my present concern. Rather, my contention is that Dummett has identified a legitimate conceptual distinction, and that this distinction may be brought to bear upon issues of *Tractatus* exegesis. I will, however, employ passages of Frege's in order to precisify the conceptual distinction I have in mind; instances in which I do so ought to be read as contributing to this effort of precisification, rather than as staking out historical claims regarding Frege. Below, I shall claim that Ishiguro, McGuinness, Linsky, Palmer, and Zalabardo all subscribe to an implicit understanding of a Tractarian object which centrally involves the notion of decomposition, to the exclusion of analysis. In order to establish this claim, however, it is necessary to conceive of the conceptual distinction Dummett makes as somewhat broader in application than I have so far described it as being. In order to show that the notion of decomposition may be legitimately extended beyond application to those items Dummett is concerned with, I shall here discuss the precedent set by Frege. Frege, in at least one instance, evidently conceives of decomposition in such a way that it applies to items distinct from those Dummett discusses in the passages of his I have quoted.

Dummett clearly takes the distinction between analysis and decomposition to concern linguistic items. It is *sentences* to which the procedures of analysis and decomposition apply,

as Dummett presents the matter in the passages I have quoted. Frege, meanwhile, emphasises

the possibility of decomposing *thoughts* in 'On Concept and Object'[148]:

> […] [A] thought can be split up in many ways, so that now one thing, now another, appears as subject or predicate. The thought itself does not yet determine what is to be regarded as the subject. If we say 'the subject of this judgement', we do not designate anything definite unless at the same time we indicate a definite kind of analysis; as a rule, we do this in connection with a definite wording. *But we must never forget that different sentences may express the same thought*. […] Language has means of presenting now one, now another, part of the thought as the subject […]. (1892: 188, emphasis added)

The presentation of a thought takes place, 'as a rule', through the employment of language,

according to Frege. One and the same thought may be decomposed in numerous ways, where

each decomposition of the thought in question finds its expression in a *whole* sentence. Where

Dummett emphasises the possibility of decomposing sentences into further expressions

containing free variables, Frege, at least in the above passage, appears more clearly to construe

multiple decomposition as consisting in the presentation of a single thought by different

sentences. What is common to both the decomposition of a single sentence into functional

expression and argument(s), and of a Fregean thought into multiple sentences employing, for

instance, either passive or active voice, is that in both cases the products of decomposition are

not conceived of as representing a wholly faithful route to the inner metaphysical structure of

the items into which they have been decomposed[149]. The aim of decomposition is not, in either

case, that of revealing the metaphysical composition of a thing. As we have seen, the value of

decomposition lies in its facilitating the extraction of concepts from sentences, and the

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[148] I am not here claiming that Frege does not conceive of decomposition as applicable to sentences at all, but only that his concerns are clearly otherwise in the passage quoted. Indeed, we will see below that Frege does appear to conceive of sentences as admitting of multiple decomposition.

[149] Frege writes, 'We should mention that, strictly speaking, it is not in itself that a thought is singular, but only with respect to a possible way of analysing it' (1979: 187).

systematisation of logical inferences. The work of unveiling metaphysical structure is, on the present view, carried out by analysis.

Both instances of decomposition, namely that of a single sentence into different expressions containing free variables, and that of a Fregean thought into multiple complete sentences, contribute to our achieving the same ambition. I have already alluded to the necessity of decomposing relational statements into functional expressions of two arguments for the illumination of valid inferences involving those sentences. The decomposition of a thought into more than one complete sentence likewise aids us in the acknowledgment of inferential patterns; for, depending on whether a sentence is voiced passively or actively, we shall be encouraged to decompose it into one functional expression and argument(s) or another. Assume, for example, that both 'Socrates is mortal' and 'Mortality is instantiated by Socrates' express the same Fregean thought. The thought in question possesses both the feature of *being capable of being expressed by the sentence 'Socrates is mortal'*, and that of *being capable of being expressed by the sentence 'Mortality is instantiated by Socrates'*. Vitally, each sentence into which the relevant thought might be decomposed encourages us to view it as the value of a different function for an argument. The sentence 'Socrates is mortal' is naturally conceived of as the value of the first-level function 'ξ is mortal' for the argument 'Socrates'. The sentence 'Mortality is instantiated by Socrates', by comparison, recommends a different treatment; 'Mortality is instantiated by Socrates' suggests its being conceived of as a value of the second-level function 'ζ is instantiated by Socrates' for the (first-level functional) argument 'ξ is mortal'. Conceiving of these two different sentences as values of different functions for different arguments enables us to extract different concepts from them through recognition of their each belonging to classes of sentences of which being the value of one or other of the relevant functions is the defining feature, as well as to acknowledge different inferential

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relations in which each sentence may stand. Frege describes the change of active to passive voice as relevant to our choice of functional analysis in his *Begriffsschrift*:

> The subject [of a proposition] is usually intended by the speaker to be the principal argument; the next most important often appears as the object. Through the choice of [grammatical] forms such as active and passive […] ordinary language has the freedom of allowing whatever part of the proposition it wishes to appear as the principal argument, a freedom, however, that is limited by the paucity of words. (1879: 68)

Although Frege does not, in the *Begriffsschrift*, draw a distinction between the sense and reference of an expression, he does conceive of the shift from active to passive voice as influencing our choice of analysis. Consequently, where Frege later draws the distinction between sense and reference, and where he conceives of thoughts as expressible by distinct sentences employing either active or passive voice, we may conclude that the difference in voice between two sentences expressing the same thought contributes to our choice of decomposition with respect to either sentence. The example of decomposition Frege describes, namely that of a single thought into distinct complete sentences, may therefore be viewed as preparatory for, and contributory to, that described by Dummett, namely that of a single sentence into expressions containing free variables. We may therefore conjoin both examples into a process in which decomposition is performed *twice*; first on a thought in order to produce a sentence expressing it, and second on the sentence in question in order to produce functional expressions containing free variables. Dummett's discussion of the decomposition of a sentence takes place downstream, as it were, of Frege's own example in 'On Concept and Object'.

What the foregoing considerations suggest is that distinguishing between analysis and decomposition does not, in and of itself, determine the items to which those instruments apply. In other words, we need not, merely in virtue of adopting the relevant distinction, proceed under

the impression that we cannot analyse or decompose items other than linguistic ones[150]. In my view we may intelligibly extend application of both analysis and decomposition beyond Dummett's and Frege's examples to items which are neither linguistic entities nor Fregean senses. Analysis, we have seen, constitutes an investigation into the components an item is compounded from; anything with components, therefore, admits of analysis. Similarly, anything which possesses features is thereby capable of being decomposed. Insofar as being the value of $\Phi(x, \ldots x_n)$ for some argument(s) is a feature of any item at all, any item whatsoever admits of decomposition. I will, in later sections, argue that Wittgenstein conceives of facts, including those facts which count as propositions, as capable of being decomposed. Furthermore, I shall claim that the commentators mentioned at the outset of this chapter train their attention on those passages of the *Tractatus* in which Wittgenstein discusses decomposition, to the exclusion of those in which he is more clearly concerned with analysis. Moreover, this partial treatment of the text results in a mistaken characterisation of Tractarian objects.

4.3

Multiple Decomposition

4.3.1

We have just seen that in Frege's view the decomposition of one and the same thought into distinct sentences encourages our decomposing those sentences in ways different from one another. Employing a certain grammatical form may, according to Frege, aid one in the cerebral

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[150] Levine argues that Russell's conception of function-argument analysis, discussed below, constitutes a commitment to decomposition. If Levine is correct, the issue of whether Russellian decomposition operates with linguistic entities or not is thorny indeed. The status of propositional functions in Russell is a question which has engendered great controversy, and I remain neutral on it for present purposes. See Quine (1967: 151-152), in contrast with Stevens (2005: 81-89).

feat of construing a sentence as the value of a particular function for an argument. Frege describes an application of decomposition which is of psychological assistance to the effort of grasping a thought's inferential relations. Through application of greater mental effort, though, we are free to decompose any sentence expressing a thought into functional expression and argument(s) more obviously suggested by an alternative expression of the very same thought. In other words, we may legitimately proceed to ignore the recommendation of surface grammar, and decompose 'Socrates is mortal' into the second-level functional expression 'ζ is instantiated by Socrates' and (first-level functional) argument 'ξ is mortal'. In the *Begriffsschrift* Frege offers the following example:

> Indeterminate functions of several arguments are expressed in a corresponding way.
>
> $\vdash \Phi(A)$
>
> Can be read: 'A has property Φ'
>
> $\vdash \Psi(A,B)$
>
> may be translated as 'B stands in the Ψ-relation to A' or 'B is the result of an application of the procedure Ψ to the object A'
>
> Since the symbol Φ occurs in the expression $\Phi(A)$ and can be thought of as replaced by other symbols Ψ, X, by means of which other functions of the argument A are then expressed, $\Phi(A)$ *can be regarded as a function of the argument* Φ. (1879: 69, emphasis original)

Frege here insists that one and the same sentence, in this case namely '$\Phi(A)$', may be decomposed in different ways, depending on which function the sentence is construed of as a value of. Frege describes an additional example:

> Consider now the example: 'the circumstance that the centre of mass of the solar system has no acceleration, if only internal forces act on the solar system'. Here 'solar system' occurs in two places. We can therefore take this as a function of the argument 'solar system' in different ways, depending on whether we think of 'solar system' as replaceable at its first occurrence or at its second or at both (but in the last case by the same argument both times). These three functions are all different. (1879: 66)

We have, in these two separate examples, quite distinct instances of a sentence being multiply decomposed. In the first example, one and the same sentence is shown to be capable of being decomposed into either: *i*) the functional expression '$\Phi(x)$' and argument 'A', *or*: *ii*) the functional expression '$\Phi(A)$' for argument 'Φ'. In the case of *i*) the functional expression '$\Phi(x)$' may be conceived of as first-level, while in the case of *ii*) the functional expression '$\Phi(A)$' may be conceived of as second-level. The different decompositions of '$\Phi(A)$' therefore involve the construal of that sentence as the value of functions differing in level.

In the second case, namely that of the sentence 'the circumstance that the centre of mass of the solar system has no acceleration, if only internal forces act on the solar system', Frege describes the available options for decomposition differently than in our first example. Here Frege describes the relevant sentence as the value of three different functions, where each of these functions is of the *same* level, though two are functions of one argument and the other is a function of two arguments. In other words, the options Frege describes for decomposing the relevant sentence do not include functional expressions of a level higher than one. Where, in section one, I mentioned the necessity of decomposing relational statements into functions of two arguments rather than one if the validity of certain inferences involving them is to be captured, I was describing options for decomposing relational sentences in a way comparable to that Frege describes in the present case, rather than that discussed in relation to the sentence '$\Phi(A)$'.

Sentences *always* admit of multiple possibilities for decomposition in which they are conceived of as the value of functional expressions of differing level. Whether or not sentences always admit of multiple possibilities for decomposition in which they are conceived of as the

value of functional expressions differing in *adicity* is a separate question. I shall not answer that further question here[151].

Dummett focuses his attention on the case of decomposition in which a sentence is conceived of as the value of distinct functions of different level:

> Now, with respect to an analysis of the second type, it is indeed true that, on Frege's own principles, we must admit not only of the analysis of 'Socrates is wise' as resulting from putting the proper name 'Socrates' in the argument-place of the first-level predicate 'ξ is wise', but also the analysis of it as resulting from putting the first-level predicate 'ξ is wise' in the argument place of the second-level predicate 'Φ (Socrates)'. (1981*a*: 65)

Sentences may, as we have seen, be decomposed in multiple ways. We may decompose 'Socrates is wise' into either the proper name 'Socrates' and the first-level predicate 'ξ is wise', or the first-level predicate 'ξ is wise' and the second-level predicate 'ζ is instantiated by Socrates'[152]. Decomposing the sentence in the first way, but not the second, facilitates our being able to grasp the validity of the inference from 'Socrates is wise' to 'something is wise'. Decomposing the sentence in the second way, but not the first, facilitates our being able to grasp the validity of the inference from 'Socrates is wise' to 'There is something Socrates is'. We may extend this view to the case of facts. Given the fact *that Socrates is mortal*, we might decompose it into the feature *Socrates is φ*, and the first-level feature *ξ is mortal*. We might also decompose the relevant fact into the first-level feature *ξ is mortal*, and the second-level feature *ζ is instantiated by Socrates*. The decomposition of an item may proceed in various ways. Moreover, no one decomposition is privileged over any other. Rather, our choice of

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[151] An answer to this question conceivably involves deciding whether the copula in simple subject-predicate sentences may function as indicating a relation. This question was of continual interest to Russell, though a thorough examination of his views will take us too far from the present issue.

[152] See Bronzo (2017: 4). Hodes (1982, 167–68) has argued that infinitely many decompositions are possible for any given sentence. MacBride (2005*a*: 15-16) points out that, owing to Montague's (1965) demonstration of the reduction of third and higher-order logic to second-order logic, the postulation of an infinite hierarchy need not follow from the mere possibility of more than one decomposition for a given item.

decomposition with respect to a given sentence is determined by which inference involving that sentence we are concerned to shed light on. Our choice of decomposition with respect to any item at all is determined by the features possessed by that item in which we are interested. There are not, by contrast, multiple *analyses* of an item which are all equally accurate. An analysis revealing more of the constituents from which an item is compounded than another is *thereby* more accurate than that which reveals fewer of those constituents; and an analysis revealing all of the constituents from which an item is compounded is necessarily identical to any analysis of equal accuracy.

4.4

Tractarian Analysis

4.4.1

In this section I show that Wittgenstein was committed to a conception of analysis according to which the possibility of analysis presupposes the possession of constituents by the item analysed. I draw the conclusion, therefore, that in Wittgenstein's view propositions do possess constituents and are composite. This conclusion will be important for my discussion of Zalabardo's opposing view, namely that Tractarian propositions are *simple*.

Wittgenstein writes: 'A proposition has one and only one complete analysis' (3.25). Given what has so far been said, what remark 3.25 demonstrates is that Wittgenstein's conception of analysis in remark 3.25 of the *Tractatus* is *not* that of decomposition. This is a crucial detail to notice, for it serves to dispel the impression that Wittgenstein conceived of the analysis of propositions as consisting in the discovery of features, where features are understood as the products of decomposition. Application of decomposition to a proposition cannot secure for it a unique analysis, for any item may, as we have seen, be multiply

decomposed into functional expressions of different levels. We must therefore look elsewhere to identify the conception of analysis Wittgenstein adopts in 3.25. We saw, above, that Dummett describes two different analytical procedures: analysis and decomposition. We have just eliminated decomposition from counting as the analytical procedure employed in 3.25. On the assumption that Dummett's bipartite classification exhausts the plausible available options, the remaining candidate notion with which 3.25 might be claimed to operate is that of analysis. Analysis, recall, consists in an investigation into the constituent items out of which a complex entity is composed. In other words, that the conception of analysis with which 3.25 operates is not that of decomposition suggests that Wittgenstein held that propositions possess constituents. Wittgenstein held that propositions can be analysed, in a sense of the word 'analyse' relevantly similar to that intended by Dummett[153], and *that* Wittgenstein held to this position suffices also to show that he conceived of propositions as composite.

It might at this stage be objected that I have concluded more from 3.25 than the remark in question can support[154]. It has been an implicit assumption of my interpretation that 3.25 concerns elementary, rather than non-elementary, propositions. I have therefore held that what 3.25 asserts is the possibility of analysing elementary propositions into their constituents. Remark 3.25 has, however, been the subject of an alternative interpretation:

> The core tenets of Wittgenstein's logical atomism may be stated as follows: (i) Every proposition has a unique final analysis which reveals it to be a truth-function of elementary propositions (*Tractatus* 3.25 […]) […]. (Proops, 2017*a*)

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[153] Where the relevant issue is the *composite* nature of propositions. In other words, I do not maintain that in each and every possible respect Wittgenstein's conception of analysis is identical to that which Dummett ascribes to Frege. I do maintain, though, that Wittgenstein's conception of analysis, like the Dummettian Frege's, presupposes the complexity of what is analysed.

[154] Thanks to Thomas Smith for bringing this to my attention.

Proops here claims that 3.25 concerns the analysis of a molecular, or non-elementary[155], proposition into a form which reveals its truth-functional structure. If Proops' reading is correct, we need not ascribe to Wittgenstein the view that *elementary* propositions admit of unique analysis, and we need not therefore draw the conclusion that elementary propositions are, in Wittgenstein's view, composite.

In defence of my contention, that 3.25 claims for elementary propositions, rather than molecular ones, a unique analysis, is the following consideration. Immediately following 3.25, in a remark which, according to the numbering system of the *Tractatus*, is a direct comment on 3.25, Wittgenstein writes: 'What a proposition expresses it expresses in a determinate manner, which can be set out clearly […]' (3.251). We must assume, on the basis that 3.251 comments on 3.25, that those propositions which admit of 'one and only one' complete analysis are the same propositions which express what they express in a 'determinate manner'. If it can be established that propositions which express what they express in a determinate manner must be elementary, it will follow that those propositions which admit of a unique analysis are likewise elementary, for 3.25 and 3.251 must discuss the same items.

Wittgenstein makes the connection between 'determinacy' and elementary propositions in 3.23: 'The requirement that simple signs be possible is the requirement that sense be determinate.' The requirement that simple signs be possible is simultaneously the requirement that there be elementary propositions; for elementary propositions are 'concatenations' of simple signs (4.22). Anscombe, in an influential discussion, gives the following description of what it is for something to be 'determinate' in this context: '*Elementary propositions are such that for them there are no two ways of being true or false but only one*' (1959: 34, emphasis

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[155] Here and elsewhere I use the terms 'molecular' and 'non-elementary' interchangeably.

original). Anscombe contrasts elementary propositions with claims involving definite descriptions:

> One kind of indefiniteness in a proposition might be that there was more than one way of its being false: the complex might exist, but what was said of it might not hold; or the complex might not exist. (1959: 34)

A proposition involving a definite description does not 'settle' everything (1959: 34), for knowledge that the proposition in question is false leaves it open just *how* it is false. Elementary propositions contrast with those involving definite descriptions insofar as the former but not the latter may not be true or false in more than one way. An elementary proposition's determinacy[156] consists in its not admitting of multiple ways of being true or false. Wittgenstein, immediately prior to 3.25, describes propositions whose elements signify complex items as indeterminate: 'In such cases we *know* that the proposition leaves something undetermined' (3.24, emphasis original). Propositions whose elements signify complex items are not elementary, in Wittgenstein's view, but molecular[157]. Molecular propositions in general exhibit indeterminacy of the relevant kind, for to know that 'pvq' is true is not in and of itself to know *what is the case*.

A natural question here is that of why, in Wittgenstein's view, there must be determinate propositions. In other words, why must there be propositions of which a grasp of their truth is a *direct* route to a grasp of what is the case? Propositions, Wittgenstein says, *show* what is the case if they are true (4.022). There is nothing more to understanding a proposition than knowing what is the case if it is true (4.024)[158]. Crucially, there must be determinate

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[156] Anscombe, following Ogden, translates '*Unbestimmtheit*' as 'indefiniteness'. I have followed Pears and McGuinness in speaking of 'determinacy' rather than 'definiteness'.

[157] Recalling here that descriptive, quantified propositions reduce to molecular truth-functional combinations, on Wittgenstein's view; see (5.52).

[158] See Wittgenstein (1961*b*: 93-94).

propositions, for if there were not, we should have to go and *find out* what is the case when a given proposition is true through some means which do not appeal to the proposition itself. What could 'finding out' here involve, if appeal to the proposition itself is ruled out on grounds of indeterminacy? On the assumption that 'p' and 'q' are determinate, finding out what is the case if 'pvq' is true involves adverting to what is determinately shown by 'p', and determinately shown by 'q'. It is unclear how it could be established what is the case if a proposition is true, where the proposition itself does not settle the matter, and where no further proposition figuring in an analysis of the original contributes to our settling it. If the sense of a proposition is no guide to what is the case if it is true, it is hard to imagine what else could serve as such a guide. Crucially, in the case of ineliminable indeterminacy the connection between a proposition's sense and what is the case if it is true is severed, for in that case the sense of the proposition doesn't determine what is the case if it is true. Wittgenstein's conception of sense, though, makes essential appeal to the notion of understanding what is the case if a proposition is true. For any proposition of which neither it nor any of the propositions figuring in its analysis is determinate, the sense of that proposition cannot be a route to what is the case if it is true. Sense, though, just is the route to what is the case if a proposition is true, on Wittgenstein's view. Accordingly, we must conclude that no proposition of the kind just described possesses a sense at all. In other words, ineliminable indeterminacy collapses into meaninglessness, on the conception of sense Wittgenstein subscribes to. Indeed, indeterminacy at the molecular level is only possible because there is determinacy at the elementary one. On the assumption that Anscombe is correct in her assessment of what Wittgenstein means by '*Unbestimmtheit*', we must conclude that those propositions described as determinate by 3.251 are elementary, and that therefore 3.25 likewise concerns elementary propositions exclusively.

A further objection which may be raised against the reading of 3.25 I propose is as follows[159]. Elementary propositions are the *end* result of the analysis of non-elementary ones. Consequently, there is nothing left to analyse once we have arrived at elementary propositions. This objection is supported by Wittgenstein's saying that an elementary proposition is 'completely analysed' (3.201). That no further analysis of elementary propositions may take place is, it is argued, further supported by the consideration that elementary propositions are 'concatenations of names' (4.22), and that 'names cannot be dissected any further' (3.26). Winch, for instance, expresses this view where he says, on the basis of an appreciation of Ishiguro's discussion of the context principle, that 'one cannot further analyse an elementary proposition by splitting it up into its names' (1969: 8). One cannot, according to Winch, analyse a proposition by splitting it up into its names for, as Ishiguro (1969: 20-50) argues, there are no such things as names conceived of as capable of treatment independent of the propositions in which they occur. To respond here requires that we identify a kind of analysis which does not entail analysing the names of an elementary proposition, nor 'splitting' a proposition into its names, such that those names appear, as it were, free-floating. Wittgenstein hints at such a conception of analysis in 5.55 and 5.557:

> We now have to answer a priori the question about all the possible forms of elementary propositions.
>   Elementary propositions consist of names. Since, however, we are unable to give the number of names with different meanings, we are also unable to give the composition of elementary propositions. (5.55)

> The application of logic decides what elementary propositions there are. […] (5.557)

Here Wittgenstein talks of the difficulty involved in giving the *form* of elementary propositions, as well as that of giving the *composition* of elementary propositions *a priori*. Wittgenstein says,

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[159] My thanks to an anonymous referee for raising this point.

though, that the *application of logic* decides what elementary propositions there are. Johnston writes:

> Wittgenstein asserts that we can know nothing a priori about the forms of atomic propositions, that the unbiased logician will not be concerned to make any a priori distinction between different types of things. This leaves open the possibility of a posteriori knowledge of atomic forms. Indeed, Wittgenstein's Tractarian claim that what elementary propositions there are is decided by the application of logic ([…] 5.557), and his 1929 claim that "[o]nly when we analyse phenomena logically shall we know what form elementary propositions have" ([Wittgenstein 1979, 42]), would appear to endorse this possibility as genuine. (2009: 158-159)

Johnston interprets 5.557 as suggesting that in Wittgenstein's view the form of an elementary proposition is something discoverable only *a posteriori*. MacBride directs us to the kind of inquiry Wittgenstein felt must be carried out in order that the forms of propositions be revealed:

> What Wittgenstein meant was that only analysis of what we say about the world as we find it will lead us to the logical forms of the elementary propositions, what Wittgenstein later described as 'the logical investigation of the phenomena themselves, i.e. in a certain sense *a posteriori*, and not by conjecturing about *a priori* possibilities'. […] The only epistemological access to the logical forms of elementary propositions available to us is via the analysis of what we say about the world (truly or falsely). (2018: 197)

Discovering an elementary proposition's form constitutes an analysis of that proposition. The form of a proposition is the possibility of its structure (2.15); and the structure of a proposition is, in turn, the 'connexion of its elements' (2.15). Discovering the form of an elementary proposition, therefore, involves grasping the possibility of that proposition's structure through appeal to the combinatorial capabilities possessed by its elements[160]. Such an inquiry neither

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[160] Campbell writes: 'Now, the structure of an elementary proposition is the way in which its elements, names of simple objects, are combined, and so the possibility of its structure is inseparable from the forms of those names, that is, from their respective ranges of possible combination with other names' (2014: 143).

attempts to 'dissect' constituent names into further components, and nor does it attempt to treat those names as capable of appearing independently of propositions. Grasping the combinatorial capabilities of some propositional elements involves unearthing their forms, and doing *this* involves attending to the ways in which those elements may or may not significantly combine with others *in propositions*[161]. Elementary propositions will have a unique analysis, on this reading, for they do not possess more than one form. The form of a proposition depends upon the forms of its constituents; what a proposition is capable of representing depends upon the combinatorial potential of its elements. The possibility of an analysis revealing the form of a proposition, therefore, presupposes the possession of constituents capable of combining with others. What analysis consists in, on this view, is an inquiry into the combinatorial potential possessed by some constituent(s), such that the character of that potential be more explicitly brought into view, and the form of the proposition whose constituents they are be determined. The analysis of a proposition involves, on this conception, commitment to propositional constituents conceived of as prior to the form of the proposition itself, for the latter depends upon the former. Accordingly, we may not construe propositional elements as mere features of propositions, where such a construal serves to withhold from a propositional element the status of a genuine ontological commitment. If propositional elements were nothing more than posterior extractions from propositions, the attempt to grasp a proposition's form *through appeal to* the forms of those items extracted from it would clearly be circular, for those extractions in turn depend entirely upon the character of the whole from which they have been extracted.

In summary, then, we may not construe propositional elements as features for two reasons: *i)* decomposition of a proposition into features cannot secure for propositions the unique analysis Wittgenstein asserts is possible, and *ii)* conceiving of propositional elements

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[161] See Wittgenstein (1961*a*: 70) for an example of just such an exercise.

as features prohibits us from appreciating the way in which the form of a proposition depends upon the forms of its component parts. Note that none of this is to deny that there is a kind of analysis Wittgenstein describes according to which analysis reveals the truth-functional structure of a molecular proposition. Rather, my aim is to draw our attention to a separate activity, the possibility of which presupposes that propositions are composite items.

4.5

Tractarian Decomposition

4.5.1

I have, throughout the preceding discussion, repeatedly claimed that remark 3.25 does not concern the notion of decomposition, and that it must therefore constitute commitment to analysis, where the possibility of analysis presupposes the possession of constituents by propositions. I have concluded from these observations that elementary propositions are composite, rather than indivisible. I have not, however, claimed that *nowhere* in the *Tractatus* does Wittgenstein employ decomposition. Here I shall argue that Wittgenstein did, indeed, operate with that notion, and that Wittgenstein distinguishes between items discovered by decomposition and those revealed through analysis. In the sections which follow I draw the conclusion that those who have inferred from Wittgenstein's remarks concerning items discovered by decomposition claims about the constituent names of a proposition have failed to observe the distinction between analysis and decomposition here described.

Wittgenstein expresses a commitment to the possibility of decomposition in the following remarks:

An expression presupposes the forms of all the propositions in which it can occur. It is the common characteristic mark of a class of propositions. (3.311)

Thus an expression is presented by means of a variable whose values are the propositions that contain the expression.
(In the limiting case the variable becomes a constant, the expression becomes a proposition.)
I call such a variable a 'propositional variable'. (3.313)

If we turn a constituent of a proposition into a variable, there is a class of propositions all of which are values of the resulting variable proposition. In general, this class too will be dependent on the meaning that our arbitrary conventions have given to parts of the original proposition. But if all the signs in it that have arbitrarily determined meanings are turned into variables, we shall still get a class of this kind. This one, however, is not dependent on any convention, but solely on the nature of the proposition. It corresponds to a logical form – a logical prototype. (3.315)

To stipulate values for a propositional variable is *to give the propositions* whose common characteristic the variable is. […] (emphasis original) (3.317)

Propositional variables are arrived at through decomposition. Wittgenstein identifies propositional variables as 'the common characteristic mark of a class of propositions', as well as those things which propositions may share with one another. Wittgenstein here describes propositional variables as 'expressions'. Crucially, 'expression' is a broad term in the *Tractatus* referring to both propositional variables and names (3.31)[162]. Propositional variables are the products of decomposition, while names, on this reading, are those items investigated by analysis.

Given the sentence 'aRb' we may replace the name 'a' with a variable in order to form the propositional variable 'ξRb'. That the propositional variable 'ξRb' is conceived of as functional is shown by Wittgenstein's claiming that it has values, and that those values for appropriate arguments are propositions. We may replace the remaining constants of 'ξRb' through successively exchanging them for variables, arriving at '$\xi R\zeta$', and finally '$\xi \Psi \zeta$', where this last expression corresponds to a logical form. Each variable expression is a 'common

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[162] My thanks to an anonymous referee for clarifying this point.

characteristic mark of a class of propositions' (3.311). By this Wittgenstein cannot mean that each expression containing a free variable is literally a *constituent*, or component, of each proposition which is its value, for what distinguishes these functional expressions from their values is precisely that the former include Greek letters while the latter do not. Wittgenstein cannot therefore hold that the values of propositional variables *contain* those variable expressions, in anything other than a figurative sense of 'contain'. Rather, propositional variables may be more accurately described as features which their values have in common, inasmuch as it is a feature common to both '$30 + 2 = 32$' and '$4 + 2 = 6$' that they are both possible values for the function expressed by '$\xi + 2 = \zeta$'. Wittgenstein says that 'The propositional variable signifies the formal concept' (4.127), and:

> […] The expression for a formal property is a feature of certain symbols.
> So the sign for the characteristic of a formal concept is a distinctive feature of
> all symbols whose meanings fall under the concept. […] (4.126)

Wittgenstein here clearly describes functional expressions as *features* of their values. Of features Wittgenstein says, 'An internal property of a fact can also be called a feature of that fact (in the sense in which we speak of facial features, for example).' (4.1221). Facial features, such as the weight of one's brow, or the luminescence of one's eyes, are not naturally construed as literal *constituents* from which a face is compounded. Rather, facial features are characteristics which may be shared or inherited, in contrast to one's literal components, which are neither shared nor inherited. Functional expressions therefore are features of their values, according to Wittgenstein, without thereby counting as constituents of them. It should be clear that Wittgenstein, throughout these remarks, describes a process satisfying the description of decomposition we saw given by Dummett, above.

That propositional variables and names are not identical can be gathered from Wittgenstein's insistence that names are *simple signs*: 'The simple signs employed in propositions are called names.' (3.202). Wittgenstein, moreover, says 'Names are the simple symbols: I indicate them by single letters ('x', 'y', 'z').' (4.24). Propositional variables produced by replacing elements of propositions with free variables, however, are plainly not simple. The expression '$\xi R \xi$', for instance, contains *two* Greek letters. That '$\xi R \xi$' contains two Greek letters indicates a functional expression which outputs a value for two arguments[163]. Above, I alluded to the importance of this feature of functional expressions for Russell. Recall, it was Russell's view that relational statements must be conceived of as values of functions for two arguments if the validity of inferences involving those statements is to be captured. That the functional expressions into which sentences decompose are not simple is essential if the effort of systematising inferential patterns is to succeed. Furthermore, Wittgenstein says that the limiting case of decomposition is an expression 'corresponding' to a logical form. Expressions composed entirely of free variables do not, however, *name* logical forms, for logical forms cannot, in Wittgenstein's view, be named[164]: 'There is no *thing* which is the *form* of a proposition, and no name which is the name of a form.' (1961*b*: 99, emphasis original). From what I have said so far, it should be clear that expressions containing free variables are not indicated by *single* letters. Rather, functional expressions are indicated by complex symbols, where the complexity of these expressions serves to facilitate recognition of the inferential relations holding between their values.

Wittgenstein stakes out a vital role for propositional variables:

> When a bracketed expression has propositions as its terms—and the order of the terms inside the brackets is indifferent—then I indicate it by a sign of the form '$(\bar{\xi})$'. 'ξ' is a variable whose values are terms of the bracketed expression and the bar over the variable indicates that it is the representative of all its values in the brackets.

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[163] Hence Dummett's description of these expressions as *complex* predicates (1981*a*: 33).
[164] See also (4.12-4.121).

(E.g. if ξ has the three values P, Q, R, then $(\overline{\xi}) = (P, Q, R)$.)

What the values of the variable are is something that is stipulated.

The stipulation is a description of the propositions that have the variable as their representative.

How the description of the terms of the bracketed expression is produced is not essential.

We *can* distinguish three kinds of description: *1.* direct enumeration, in which case we can simply substitute for the variable the constants that are its values; *2.* giving a function fx whose values for all values of x are the propositions to be described; *3.* giving a formal law that governs the construction of the propositions, in which case the bracketed expression has as its members all the terms of a series of forms. (5.501)

Infinitely many operands may potentially be inputted to Wittgenstein's 'operator N' simultaneously; and for instances in which the number of operands exceeds our capacity to enumerate them, they may be described, according to Wittgenstein, through the presentation of a functional expression of which those operands are values[165]. In other words, the presentation of a defining feature of the relevant class of operands may determine the items upon which we should like to perform the N operation. Such functional expressions therefore play an important role in the reduction of propositions involving quantifiers to those whose only 'logical constant' is the N operator.

The decomposition of one and the same proposition into different propositional variables may be carried out in order to make perspicuous certain inferences. Symbolising 'Socrates is mortal' as 'Fa', we may perform decomposition in order to arrive at the propositional variable 'Fx'. The variable 'Fx' may be employed in order to determine a collection of sentences in which mortality is ascribed to an item, such that the N operator be applied to them. The sentence '$N(Fx)$' therefore will, on Wittgenstein's view, be equivalent to '$(\forall x)\sim Fx$', and '$N(N(Fx)$'

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[165] Connelly clarifies Wittgenstein's position: 'The inputs, or arguments, to the operation N would thus be the various distinct outputs, or values, which result when each of these individual constants is independently substituted in for "x" in "fx". Importantly, here already it should be clear that what ultimately ends up as an argument to the N operator is not an open sentence which contains a [free] variable, but rather a proposition which results from *replacing* a variable with an individual constant.' (2017: 3, emphasis original). Connelly's description of Wittgenstein's view concords with my claim, below, that no Tractarian proposition contains free variables.

will be equivalent to '$(\exists x)Fx$'. The inference from 'Socrates is mortal' to 'something is mortal' is therefore capable of expression through use of the propositional variable 'Fx' to determine those operands to which the N operator may be applied. The sentence 'Fa' may also be decomposed into the functional expression 'ξa', which may be translated as 'ξ is true of Socrates'. The expression 'ξa' is a second-level functional expression which determines the collection of sentences in which first-order properties are ascribed to Socrates. The sentence '$N(N(\xi a)$' is equivalent to asserting Socrates' possession of every first-order property. From '$N(N(\xi a)$', 'Fa' follows. It is a *desideratum* on Wittgenstein's formal language that it be at least capable of being employed in such a way as to make the validity of the relevant inference plain. The decomposition of one and the same sentence into different propositional variables is here, as it was in the case of Dummett's Frege, vital to the exercise of illuminating inferences.

That propositional variables are not identical to names may be concluded from the following consideration. Wittgenstein famously remarks that, 'only in the context of a proposition does a name have meaning' (3.3)[166], as well as claiming 'The name occurs in the proposition only in the context of the elementary proposition.' (4.23). The expression '$\xi R\zeta$', though, does *not* appear in any proposition. The expression '$\xi R\zeta$' does not appear in any proposition because it contains free variables, and no proposition, in Wittgenstein's view, contains free variables. That no proposition contains free variables was a point insisted upon by Wittgenstein in criticism of Russell's chosen formulation of the axiom of reducibility:

> Your axiom of reducibility is
>
> $\vdash : (\exists f) : \varphi x \equiv_x f!x;$
>
> now is this not all nonsense as this proposition has only then a meaning if we can turn the φ into an apparent variable. For if we cannot do so no general laws can ever follow from your axiom. The whole axiom seems to me at present a mere juggling trick. Do let me

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[166] Here I quote from the C. K. Ogden translation of the *Tractatus*.

know if there is more in it. The axiom as you have put it is only a schema and the real Pp ought to be

$$\vdash: . (\varphi) : (\exists f) : \varphi(x) \equiv_x f!x,$$

and where would be the use of that? –

Russell's formulation of the axiom of reducibility is, Wittgenstein suggests, merely *schematic*; it does not *say* anything at all because it is an open sentence awaiting either the replacement of a free variable by a constant, or the binding of that variable to a quantifier. The relevant formulation is, consequently, neither true nor false. Indeed, Wittgenstein asks if it is not all nonsense. The expression '$\xi R \zeta$' is not a name because names have meaning only in the context of a proposition, and '$\xi R \zeta$', owing to its containing free variables, is incapable of appearing in a proposition.

We have seen that remark 3.25 expresses a commitment to analysis, rather than decomposition, but that Wittgenstein clearly does employ the latter notion elsewhere in the *Tractatus*. Analysis of a proposition consists in discovering the forms of it constituent names, while decomposition delivers functional expressions more accurately characterised as features of their values[167]. Remarks of Wittgenstein's to the effect that we may derive functional expressions from propositions through the replacement of constants with free variables, and that such expressions indicate shared features rather than constituents proper, must not therefore be taken as evidence for the conclusion that the *names* of the *Tractatus* likewise indicate the presence of features. It is a mistake to argue, on the basis of Wittgenstein's remarks concerning propositional variables, that the objects to which names refer are not constituents of facts, and that facts therefore entirely lack constituents. This mistake consists in both

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[167] McGinn fails to appreciate this distinction where she writes 'I suggested earlier that we should understand Wittgenstein as holding that propositions contain two kinds of names: names of the form 'a', 'b', 'c', and so on and functions of these ('Fx', 'xRy', *etc.*).' (2006: 121); see also McGinn (2006: 115). McGuinness, by contrast, denies that functional expressions are names; see (1956/2002: 72-73).

conflating names with propositional variables, and, concomitantly, failing to acknowledge the distinction between analysis and decomposition. A potential challenge to this view, on which propositional variables do not include names, is raised by the following remark: 'An expression has meaning only in a proposition. All variables can be construed as propositional variables. (Even variable names.)' (3.314). The objection to my view consists in the suggestion that names, according to 3.314, *are* propositional variables[168]. In response I would like to point out that Wittgenstein's concern in 3.314 is to insist that every variable may be construed of as *propositional*, even variable names. What it means for a variable to be propositional in this context is for it to determine a range of propositions which it commonly figures in. Propositional functions, the result of replacing a name by a Greek letter, clearly determine a range of propositions which are its values for different arguments. Names may also be viewed as common elements to a number of different propositions. Insofar as a name is a common component of several items, we can view that name as a propositional variable determining a range of propositions. This does not entail, however, that names are to be identified with compound signs which include Greek letters unbound by quantifiers. There is, in other words, a sense in which names may be construed of as propositional variables, but the sense in which they may be so construed does not simultaneously license the identification of functional expressions containing free variables with names. Functional expressions including free variables, unlike names, do not literally occur in propositions. Here I draw from MacBride who expresses the point as follows:

> The expression 'xRb' enables us to collect all the propositions 'aRb', 'bRb', 'cRb', etc. because 'xRb' is the form common to them all. In this way, expressions like 'xRb' enable us to grasp the distinctive range of propositions about which we wish to make an assertion. Of course a name can perform this role too. A name can be used to collect together the range of propositions that result from combining it with other names. But some expressions won't be names because their identification isn't a feature of our picturing practice. By

[168] My thanks to an anonymous referee for raising this point.

contrast to names, we don't rely upon expressions to picture or model the logical multiplicity of facts; expressions are merely the rest of a proposition in which a name occurs. The expression 'xRb' is the result of a semantic subtraction, (e.g.) the propositional sign 'aRb' minus the name 'a'. We don't identify 'xRb' as a constituent of 'aRb' when we make use of this propositional sign to model the fact that aRb—rather we identify 'a', 'b' and the relation we make between 'a' and 'b' by writing 'aRb'. (2018: 214)

There is, MacBride points out, a role which names can perform which is relevantly similar to that capable of being performed by expressions including free variables; both types of expression can be used to determine ranges of propositions. There is, though, a role capable of being performed by names which is not capable of being performed by expressions involving free variables. Names can occur in pictures, but expressions involving free variables cannot, for, as we have seen, no item which includes a free variable possesses a truth-value. Moreover, names remain, once 3.314 is accounted for, genuine constituents of propositions, while expressions containing free variables are better conceived of as *features* of their values. While names can be construed of as determining a range of propositions in which they figure, their capacity to do so is limited relative to the parallel capacity for functional expressions to determine ranges of propositions. Assume that all of the available propositions are: 'abc', 'adc', 'aec', and '$abdec$'. If we want an expression(s) to determine only 'abc', 'adc', and 'aec', no name or collection of names will do. What is required in order that the relevant list of propositions be determined is the expression '$a\xi c$'; this functional expression is therefore indispensable, and its work may not be contracted out to mere names. In what follows I use 'propositional variable' to mean an expression including a free variable, with my explanation of remark 3.314 as an borne in mind.

We will see below that several commentators, where they infer from certain remarks in the 3's which concern propositional variables, conclusions about the ontological status of those items to which names refer, are in error. We must not expect the behaviour of propositional

variables to reveal the character of Tractarian objects, for, as Wittgenstein says, 'Objects can only be *named*.' (3.221, emphasis original).

4.6

Objects and Inference

4.6.1

Ishiguro writes

> Grasping the logical syntax of a name in no way tells us the identity of the object that the name designates. This is a question of particular conventional assignment, and is a question of semantics.
>
> There is indeed a specially close connection between syntax and semantics in Wittgenstein, since he was well aware that there is no fool proof formal characteristic of a sentence of natural language that tells us that it is well-formed, and shows us what its logical syntax is. "Frege says every well-formed, sentence must have sense, and I say: every possible proposition is well-formed, and if it has no sense, this can only be because we have given no reference (Bedeutung) to some of its constituent parts." (5.4733) *We see the logical syntax only by grasping the semantics, which in turn is often revealed through the patterns of inference.* (1990: 23-24, emphasis added)

Ishiguro here suggests that the identity of an object designated by a name may be revealed to us through observation of the inferential relations in which the proposition containing that name stands to other propositions. According to this view, the syntactic category of a name is capable of being appreciated only by grasping the name's semantic value. The semantic value of a name is, in turn, rendered graspable through our establishing patterns of inference involving the sentence to which the name belongs. These claims may be better understood once placed in the broader context of Ishiguro's views. Ishiguro writes

> It is *not* part of the *Tractatus* theory that if a symbol is logically simple and cannot be further analysed then it can be secured a reference independently of and prior to its occurrence in a proposition […] (1969: 24, emphasis original)

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> [T]he identity of the object referred to by a name cannot be settled prior to or independently of the sense of the propositions in which they are used, and agreement about the truth of some of these propositions. […] The *Tractatus* view entails that it is the use of the Name which gives you the identity of the object rather than vice versa. (34)
>
> [T]he notions of 'Bedeutung' (reference) and 'bedeuten' (refer) are intensional ones in the *Tractatus*, and, therefore, […] the simple objects whose existence was posited were not so much a kind of metaphysical entity conjured up to support a logical theory as something whose existence adds no extra content to the logical theory. (40)
>
> [A]lthough [Wittgenstein] was not articulate about this, he had already realised that talk about reference of names is not like talk about the bearers of ordinary names. 'Reference' is a semantic category with its peculiar logic. (40)

Ishiguro claims that the meaning of a name is posterior in order of explanation to the sense of propositions in which it occurs, and that it is the *use* of a name in propositions which determines the name's referent. This by way of contrast with the claim that names achieve their meaning through association with an item available independently of language. The referent of a Tractarian name is, according to this view, exhausted by the semantic content necessary for an item to possess in order that it contribute to the sense of propositions. That names refer does not, on this view, imply a fund of 'metaphysical entities' waiting in the wings for designation. In other words, the notion of reference is separable, and separated, from metaphysical considerations for Ishiguro's Wittgenstein. McGuinness, who cites Ishiguro approvingly, says, '[I]n the long run I wish to explain the object as an entity definable in terms of semantic equivalence.' (1981/2002: 88). We do not, according to this view, define the semantic equivalence of two names through a description of those names' bearing a relation of reference to one and the same object. Rather, the notion of an object is a notion explicable wholly in terms of semantic equivalence. The notion of an object, therefore, does not play an explanatory role in the account of semantics given in the *Tractatus*. Since the postulation of objects does not contribute to the view of semantics Wittgenstein adopts, it may be jettisoned entirely, according to McGuinness, without injury to Wittgenstein's view. Of the passages in the *Tractatus* which appear to advance ontological theses, McGuinness writes, 'It is a kind of

ontological myth that he wants to give us to show us the nature of language' (1981/2002: 85), and 'I have previously called it a myth, but I might equally call it rhetoric' (1981/2002: 94). Talk of objects is, on this view, merely a rhetorical device or shorthand for expressing what would more accurately be articulated in terms of linguistic substitutivity.

We do not, on the interpretation of Wittgenstein given by Ishiguro and McGuinness, understand the meaning of a name through the identification of an object to which the name refers. Insofar as talk of objects is employed at all, and both Ishiguro and McGuinness are clear that the utility of such talk is exceptionally limited, the referent of a name may be identified with the contribution that name makes to the determination of a proposition's sense. That a name's reference is wholly determined by the use of that name in propositions plausibly contributes to Ishiguro's claim that semantics is 'often revealed through patterns of inference'. On Ishiguro's view it is by tracing the relations of inference in which propositions stand to one another that we achieve a grasp of their inner character, and thereby gain purchase on the contribution made by names to the senses of propositions containing them.

The view that inferential relations serve as a guide to the semantic value of names, however, is a view rooted in the conflation of functional expressions with names. Patterns of inference are, as I have emphasised, revealed through our decomposing propositions into functional expressions of which those propositions are values. The functional expressions into which propositions may be decomposed are not constituents of those propositions; they are not names. Moreover, and as we have seen, sentences admit of multiple decomposition. Acknowledging patterns of inference does not, therefore, provide us with a route of access to the semantic values of names; we may not, through the construal of a proposition as the value of a function, draw conclusions about the semantic values of the names occurring in the proposition so construed. Replacing constants with free variables reveals the *form* of a propositional variable's values: 'Every variable is the sign for a formal concept. For every

variable represents a constant form that all its values possess, and this can be regarded as a formal property of those values' (4.1271). That propositional variables indicate the forms of their values, though, is not a sufficient basis upon which to draw semantic conclusions with respect to those values, for, as Ishiguro says 'unless we allow words that designate different things, or words that ascribe different properties to have the same syntax, then every non-synonymous word would have a different syntax, and syntax would become a thin concept' (1990: 23). Ishiguro, moreover, denies that she had ever identified syntax with semantics where she agrees with Malcolm's criticism of that position: 'Thus Malcolm and others are quite right to criticize anyone (if there were such a person) who claims that settling the syntax gives one the identity of the object' (1990: 24). Ishiguro would surely therefore agree that a propositional variable's enabling us to grasp the form of its values does not, in and of itself, endow us with semantic knowledge.

The grasp of inferential relations holding between propositions, then, does not simultaneously impart to us an understanding of the contribution a name makes to the sense of a proposition in which it occurs. Ishiguro's assertion to the contrary is a consequence of her having identified names with propositional variables. This route to a name's semantic value is therefore closed off. I do not here claim to have entirely dismantled Ishiguro's case for holding that the semantic value of a name is exhausted by its contribution to the determination of a proposition's sense. What I have aimed to show is that Ishiguro's conception of the use of a name is mistaken. To conceive of Tractarian objects as reducible to the contributions made by names, while illegitimately conceiving of those contributions as extending, in the manner described, to the province of inference, distorts Wittgenstein's conception of an object. We shall now see that more recent commentators have similarly held that Wittgenstein's ontological views follow from remarks in which the operative notion is that of decomposition, rather than that of analysis.

4.7

Unity

4.7.1

We are now at last in a position to assess the claims made by Linsky, Palmer, and Zalabardo with respect to Wittgenstein's treatment of the problem of the unity of the proposition. It will be worth our while to briefly describe the relevant problem, and to establish the fact that Wittgenstein was aware of it.

The so-called problem of unity is that of explaining how the constituents of a composite item are capable of combining such that the product of their combination counts as one rather than many. It has been widely argued that Wittgenstein, like Russell[169], was concerned with the problem of unity, and that the *Tractatus* contains resources designed either to solve or avoid it[170]. In what follows I am chiefly interested in the unity of *propositions*. Portions of the ensuing discussion, however, involve remarks of Wittgenstein's more expressly aimed at facts. I take it that my drawing conclusions about Tractarian propositions on the basis of remarks of Wittgenstein's directed at facts is justified on the grounds that Wittgenstein conceived of propositions as facts, and that it is partially due to this characteristic of propositions that they are capable of representing. Zalabardo sets a precedent here[171]: '[W]hat goes for facts in general goes, in particular, for the facts that play the role of propositions' (2015: 108).

Evidence that Wittgenstein was aware of the problem of unity can be seen in the following passages: 'That is why the point in the above cases is to say how propositions hang together internally. How the *propositional bond* comes into existence. (1961*a*: 5, emphasis

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[169] See for instance Russell (1899: 146; 1903: §53; 1910; 1924: 137-145; 1927: 263-264).
[170] See Candlish and Damnjanovic (2012), Gaskin (2008: 318; 327-328), Gibson (2004), Johnston (2007), Linsky (1992: 264-267), MacBride (2018: 195), Morris (2008: 118), Potter (2008: 109), Spinney (2018), and Zalabardo (2015; 2018).
[171] See also Linksy (1992: 266) for the view that Wittgenstein's remarks pitched at an ontological level may be legitimately employed in order to interpret those more clearly aimed at describing linguistic items.

original), and 'It is obvious that the analysis of propositions must bring us to elementary propositions which consist of names in immediate combination. This raises the question how such combination into propositions comes about' (4.221). It is unclear to what extent Wittgenstein engaged with Bradley's own work. Hacker remarks that he 'should be surprised if Wittgenstein ever read Bradley' (1982: 67, no. 12). That Wittgenstein did read Bradley, though, is confirmed by M. O. C. Drury:

> I wrote to Wittgenstein that, being anxious to read something in philosophy, I had managed to get hold of a copy of Bradley's *Essays on Truth and Reality* in a shop in Cairo. To my surprise I had found them very stimulating and they had given me much to think about. In reply Wittgenstein wrote that he was not at all surprised that I found Bradley to my liking. He had once looked into something of Bradley's (he didn't say what), expecting to find it very dull, and found him distinctively 'lively'. (Drury, 1984: 146)

It remains, though, a safer supposition that Wittgenstein inherited an interest in issues of unity from Russell.

According to Linsky, Wittgenstein discharges himself of the obligation to offer an explanation of what the unity of a proposition consists in by conceiving of propositions as prior to their constituents[172]:

> […] Wittgenstein, in the *Tractatus*, following Frege, reverses the order of explanation. The constituents of the proposition, names, are only arrived at by extraction from the unified proposition, just as the various organs of an animal body can be extracted from it. These organs only perform their function in the whole healthy animal body, and not in separation from it. Just so, a name has a meaning only in the context of a proposition. A bit of mechanism is a break only provided the rest of the mechanism is in place. It is only in the 'unity' of the whole mechanism that a part functions as a break. The unity of the mechanism – the animal body, the proposition – is not derivative. Rather the parts are the parts they are only in the functioning whole containing them. (269)

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[172] See also Spinney (2018) for an extended defence of Linsky's proposal.

According to this view, unities are prior to their constituents insofar as constituents are essentially *extractions* from the unities in which they figure. Wittgenstein, Linsky claims, need not provide an explanation of how independently available items possess the capacity to combine with one another, for he is not committed to any such items, and does not conceive of propositions as having resulted from a process of combination. Rather, we arrive at constituents only through an understanding of the role they play in unities. Unities are prior on Wittgenstein's position, according to Linsky, because they are fundamental postulates whose existence is not explained in terms of the combination of constituents. Instead, the existence of constituents is explained through reference to their occurrence in unities. On this position, the difficulty of explaining how propositional constituents combine with one another is exchanged for that of explaining criteria of identity for constituents, where those constituents are conceived of as essentially dependent upon the items from which they have been extracted. Linsky claims that Wittgenstein's holding to this position is supported by the fact that Frege adopted a similar strategy, and that Wittgenstein was influenced by Frege in this respect.

The vital section of the just-quoted passage for our purposes is: 'The constituents of the proposition, names, are only arrived at by extraction from the unified proposition'. In order to appraise Linsky's proposal we must understand what is meant here by the word 'extraction'. A clue may be found earlier in the same paragraph as that including the quoted passage. Linksy, immediately prior to his description of the constituents of propositions as arrived at *via* extraction, approvingly discusses Dummett's conception of Fregean decomposition:

> Dummett explains in this way why isolated function symbols are not to be employed. A function symbol 'cannot literally be removed from a sentence and […], displayed on its own: we can only indicate the common feature of various sentences which we have in mind by the use, together with words or symbols belonging to the language, of the Greek letters which represent argument-places. And it is, in turn, just because the complex predicate is thus not really an expression - a bit of language - in its own right, that we are compelled to regard it as formed from a sentence rather than as built up of its components.' Dummett here both gives a quite unproblematic account of Frege's metaphors of

> completeness, unsaturatedness, *Unselbständigkeit*, as applied to function symbols, and indicates how we can connect this to Frege's account of functions by the context principle. By taking the context principle seriously, Wittgenstein, in the *Tractatus*, following Frege, reverses the order of explanation. (Linsky, 1992: 269)

Linsky here clearly holds that Wittgenstein's reversing the explanatory order of proposition and constituent(s) such that propositions are explanatorily prior to their constituents is a view inherited from Frege. Moreover, Linsky suggests, through his employment of Dummett's interpretation of Frege, that Wittgenstein's adoption of the relevant view constitutes a position in which Frege's conceiving of complex predicates as formed *from* whole sentences figures as the chief influence on Wittgenstein's position. From what we have seen, above, it should be clear that Dummett, in the passages Linsky cites, describes decomposition, rather than analysis. Linsky therefore argues, in effect, that Wittgenstein's conception of propositional constituents as posterior to propositions is a conception modelled on Frege's conception of complex predicates as posterior to judgeable contents. In other words, Wittgenstein, according to Linsky, conceives of *names* as extracted *via* decomposition. I have shown, though, that Wittgenstein did not conceive of names as extracted *via* decomposition. Rather, Wittgenstein conceived of propositional variables as extracted *via* decomposition. Linsky here fails to appreciate the distinct roles played by analysis and decomposition in the *Tractatus*. Insofar as Linksy's description of Wittgenstein's conception of explanatory priority with respect to propositions and constituents depends upon the conclusion that names are the products of decomposition, his interpretation is mistaken. Absent some further argument to the effect that the names which figure in *analyses* are explanatorily posterior to the items in which they figure, Linsky's account of how Wittgenstein treats the problem of unity in the *Tractatus* fails to be persuasive.

Zalabardo, while making a proposal in keeping with the spirit of Linsky's suggestion, argues for a more extreme conclusion:

> [T]he *Tractatus* puts forward an account of facts according to which they are not composite items. They are ultimate indivisible units, not the result of a process of composition. Hence Wittgenstein doesn't face the need to explain their unity. And what goes for facts in general goes, in particular, for the facts that play the role of propositions. I am going to argue that, on this point, Wittgenstein was following Frege's lead. Wittgenstein's account of the relationship between states of affairs and objects, and between propositions and names, is an extension of Frege's account of the relationship between judgments and concepts. (2015: 108)

Zalabardo's suggestion clearly shares characteristics with that of Linsky, insofar as Wittgenstein is interpreted by both as avoiding the requirement that the unity of propositions be explained by his taking propositions as ontologically fundamental. Unlike Linksy however, who holds that constituents are extractions from unities, Zalabardo argues that Tractarian propositions do *not* possess constituents; Tractarian propositions are not unities. Wittgenstein, according to Zalabardo, therefore faces no explanatory task which might be described as a 'problem' of unity. Wittgenstein need not provide an explanation of how propositional constituents combine, for he conceives of propositions as entirely *without* constituents. Recalcitrant remarks concerning the composition of constituents[173] constitute 'vulgar talk', according to Zalabardo, which we ought to translate into 'learned thought' in order to faithfully represent Wittgenstein's position (Zalabardo, 2015: 124). The translation of vulgar talk into learned thought consists, on this view, in our conceiving of the constituents of propositions as *features* which they have in common with other propositions, rather than independent ontological commitments:

> On this view, propositions are not produced by the combination of expressions. Just as people share heights, incomes, hobbies, and character traits without being compounded from these items, propositions share characteristic marks without being compounded from them. (2015: 112)

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[173] *E.g.*, (2-2.01; 2.011).

Support for this view can be found, it is argued, in the following remarks:

> An expression presupposes the forms of all the propositions in which it can occur. It is the common characteristic mark of a class of propositions. (3.311)

> Like Frege and Russell I construe a proposition as a function of the expressions contained in it. (3.318)

It is claimed that the conception of a function Wittgenstein employs in remark 3.318 is essentially that of a propositional function in Russell's *Principia Mathematica* (Russell and Whitehead, 1910). Russell there conceived of propositional functions as parasitic on their values:

> [T]he values of a function are presupposed by the function, not vice versa. It is sufficiently obvious, in any particular case, that a value of a function does not presuppose the function. Thus for example the proposition "Socrates is human" can be perfectly apprehended without regarding it as a value of the function "x is human". (42)

In Russell's view propositions must not, on pain of circularity, contain the propositional functions they are the values of as constituents. Russell's description of propositional functions as epistemologically posterior to propositions clearly echoes the account we saw given by Dummett of Fregean decomposition. On the assumption that Wittgenstein's conception of a function was also that of Russell, the claim that propositions are functions of expressions is, according to Zalabardo's reading, tantamount to the claim that *names* are not constituents of propositions. Just as any two numbers share the feature of *being the value of $\xi + \xi$* without containing that function as a constituent, names, in Zalabardo's view, are features of propositions which they share with other propositions, without thereby counting as constituents of the propositions they are features of. These remarks concerning the relationship between

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propositions, names, and function-argument analysis may be generalised, on Zalabardo's view, to facts and objects more broadly. Facts, on the present proposal, are construed of as a function of their features; these features constitute the objects of the *Tractatus*. Features, on this view, are *not* ontological commitments; there are, according to Zalabardo, no objects in the ontology of the *Tractatus* (Zalabardo, 2015: 116). Wittgenstein's claiming that 'The world is the totality of facts, *not of things*.' (*TLP*: 1.1, emphasis added) constitutes the primary evidence cited in favour of this view.

Zalabardo, like Linsky, argues that Frege's position with respect to the priority of judgements over concepts constitutes the chief source of influence on Wittgenstein's view. Unlike Linsky, Zalabardo conceives of Tractarian propositions as simple items, entirely lacking in constituents. Zalabardo's view, that names are not constituents of Tractarian propositions, and that Tractarian names are to be conceived of as analogous to Russellian propositional functions, is a view which results from the failure to recognise in Wittgenstein's position a distinction between analysis and decomposition. Wittgenstein does indeed conceive of propositions as the value of a function for some argument(s). Moreover, it is plausible to suppose that Wittgenstein's conception of a propositional function was relevantly similar to Russell's insofar as Tractarian propositions do not contain the functions they are values of as constituents. It does not follow, though, that Tractarian *names* are not constituents of propositions; for, as we have seen, the functional expressions into which Tractarian propositions decompose are not, on Wittgenstein's view, names. It has been the aim of the preceding discussion to show that we must not infer from Wittgenstein's remarks concerning the products of decomposition conclusions about the character of names. Zalabardo commits just this error where he attributes to Wittgenstein the view that Tractarian propositions are not unities.

Zalabardo is not the first Wittgenstein scholar to claim that Wittgenstein's approach to the problem of the unity of the proposition consists in his denying that propositions are unities. Palmer writes

> The opening sections of the *Tractatus* should have made it clear that in Wittgenstein's view this problem [of unity] is only overcome when we cease to think of propositions as having, in any ordinary sense of the word, constituents at all. (1988: 49)

We have already seen that remark 3.25 employs a conception of analysis according to which propositions do possess constituents. That 3.25 does not employ the notion of decomposition, we saw, strongly suggests that it concerns a conception of analysis on which the items from which propositions are compounded are investigated such that their combinatorial potential be revealed. Having established that decomposition is inappropriate to serve as the conception of analysis employed in remark 3.25, any motivation for construing constituent talk as 'vulgar' rather than learned, and relatedly for treating Tractarian names as features rather than constituents, dissolves. To put the point slightly differently, since we have established that 3.25 provides us with a strong reason to conceive of propositions as possessing constituents, we are at liberty to treat Wittgenstein's remarks concerning the complexity of propositions at face value. Our examination of remark 3.25 has, as it were, performed the decisive role, and our finding textual evidence to the effect that Wittgenstein conceived of propositions as complex is, while compelling, essentially supplementary. We could not have relied solely on such evidence without begging the question against Zalabardo and Palmer with the respect to the issue of propositional complexity, but having already established my view, we may now avail ourselves of the relevant evidence.

Wittgenstein's commitment to propositions as composed of constituents is expressed in a 1919 letter to Russell:

> […] "… But a *Gedanke* is a *Tatsache*: what are its constituents and components, and what is their relation to those of the pictured *Tatsache*?" I don't know *what* the constituents of a thought are but I know *that* it must have such constituents which correspond to the words of Language. […] "Does a *Gedanke* consist of words" No! But of psychical constituents that have the same sort of relation to reality as words. What those constituents are I don't know. (1961*c*: 130, emphasis original)

It is implausible to suggest that Wittgenstein here takes himself to be speaking with the vulgar, as Zalabardo suggests, while withholding his 'real' views. On the contrary, Wittgenstein, throughout this letter, is quick to correct what he evidently feels are misapprehensions of his position. Wittgenstein, in his *Notebooks*, describes the analysis of a proposition as complete when that proposition is as complex as the item which exists if it is true: 'When the proposition is just as complex as its reference, then it is *completely* analysed.' (1961*a*: 46, emphasis original). This remark is echoed in the *Tractatus*: 'In a proposition there are exactly as many distinguishable parts as in the situation that it represents. The two must possess the same logical (mathematical) multiplicity' (4.04). The same commitment to propositions as possessing constituents is voiced in remarks 2.011, 2.0201, 3.24, 3.315, 3.4, 4.024, 4.025, and 5.5423[174]. It is my contention that these remarks should be interpreted as representing Wittgenstein's considered views, rather than vulgar expressions which obscure a contrary doctrine.

4.8

Conclusion

I have applied a conceptual distinction derived from Dummett's reading of Frege to the *Tractatus*. I have argued that Wittgenstein employs both analysis and decomposition in the *Tractatus*, to separate effect, and that he adopts a terminological distinction reflecting those

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[174] Proops (2017*b*) observes the poor textual basis for Zalabardo's reading.

divergent interests. I have further argued that partial readings of the *Tractatus* which do not acknowledge in that work the presence of the relevant distinction, and which subsequently draw the conclusion, from remarks in which decomposition is the operative notion, that Tractarian names are not constituents of propositions, are for that reason mistaken. I have identified this error in the work of Ishiguro, Linsky, Zalabardo, and Palmer. I have also shown the relevance of this mistaken interpretation to the issue of whether or not Wittgenstein discharges himself of the obligation to explain the unity of propositions by construing propositions as prior to names. I concluded that such a claim exploits remarks of Wittgenstein's concerning the products of decomposition to the exclusion of those in which the notion of analysis is described.

Chapter Five

Logical Form and Logical Space in Wittgenstein's *Tractatus*

Introduction

In the preceding chapter I argued that one influential approach to interpreting Wittgenstein's treatment of the problem of unity is mistaken. According to that approach, Wittgenstein conceived of both propositions and facts generally as simple items. In this chapter I provide my own interpretation of Wittgenstein's views with respect to the problem of explaining what the unity of a proposition consists in. I argue that Wittgenstein considered both formulations of, and answers to, the relevant problem to be specimens of *nonsense*. I show, in what follows, precisely why Wittgenstein held to this view.

Wittgenstein describes 'form' as 'the possibility of structure'. Structures, in the *Tractatus*, are unities. Any discussion of the possibility of unity, therefore, involves essential reference to the notion of form. The form of a proposition or fact, though, is incapable of being sensibly discussed, according to Wittgenstein. I offer a novel explanation of Wittgenstein's claim, in the *Tractatus*, that to represent the logical form of a proposition would require our being positioned outside of logic. The account here presented aims to exploit a connection, widely noticed, between the logical forms of objects and those of the propositions in which the names of those objects figure. I show that the logical forms of propositions may, on Wittgenstein's view, be identified with places in logical space, and that places in logical space

are reducible to the forms of both objects and their names. I argue, though, that according to Wittgenstein the representation of a proposition's logical form would require the existence of a place in logical space not so reducible. I conclude that on Wittgenstein's position, the attempt to represent logical forms cannot, therefore, succeed. It is on this basis that Wittgenstein draws the conclusion that form is not a sensible notion. Consequently, I shall argue that, insofar as any question concerning propositional unity must appeal to the notion of form, the problem of unity can, in Wittgenstein's view, be neither sensibly raised nor responded to. Lastly, I shall extend my interpretation of Wittgenstein's treatment of the problem of the unity of propositions to that of the unity of facts generally.

5.1

Unity, Form, and Structure

5.1.1

Recall, in September 1914 Wittgenstein writes, 'That is why the point in the above cases is to say how propositions hang together internally. How the *propositional bond* comes into existence' (1961: 5, emphasis original)'. In the *Tractatus* we find, 'It is obvious that the analysis of propositions must bring us to elementary propositions which consists of names in immediate combination. This raises the question how such a combination into propositions comes about' (4.221).

> Frege, in a letter from July 1919, asks Wittgenstein

> Is every combination of objects an atomic fact? Isn't it of importance by what means these combinations are produced? What is the thing that binds? Can this perhaps be gravitation, as with the system of planets? (Floyd, 2011: 53)

Frege's queries are framed in terms of facts, rather than propositions. Propositions, according to the *Tractatus*, are propositional signs in their 'projective relation to the world' (3.12). The method of projecting a propositional sign is to 'think the sense of the proposition' (3.11). Propositional signs are facts (3.14). Propositions 'with a sense' are propositional signs 'applied and thought out' (3.5; 4). Questions regarding the composition of propositions, therefore, *are* questions regarding the composition of facts, insofar as propositions are facts which have been 'applied and thought out' and thereby 'projected'. Furthermore, 'only facts can express a sense' (3.142); propositions can express a sense (3.341), *ergo* propositions are facts[175].

Wittgenstein, then, asks both how the 'propositional bond' comes into existence and how the combination of names into propositions comes about. These queries are echoed by Frege, who asks by what means the combinations of objects into facts are produced. Both Frege's and Wittgenstein's questions are plausibly construed as concerns to account for the *unity* of facts. Frege's query is aimed at facts generally, while Wittgenstein focuses his attention on the subset of facts which count as propositions. The question of how the combination of propositional elements comes about is pressing on Wittgenstein's view, because it is, as I have argued in the preceding chapter, an essential feature of propositions, as opposed to their elements, that they are composite. While names, and the objects they stand for, are essentially simple (2.02; 2.021; 3.201; 3.202), propositions, the situations they represent, and the facts they depict, are essentially complex. That propositions are essentially complex is clear from several of Wittgenstein's remarks. In his *Notebooks* Wittgenstein says 'The proposition is a picture of a situation only in *so far* as it is logically articulated. (A simple – non-articulated –

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[175] Candlish and Damnjanovic write: 'Although propositions as such are not unities, propositional signs are—they are facts. (We should notice that in the 3.14s, Wittgenstein repeatedly says that propositional signs are facts, without ever saying, despite ample opportunity to do so, that propositions are facts.)' (2012: 84). In my view Candlish's and Damnjanovic's interpretation is mistaken. I insist on the point that propositions are propositional signs 'applied and thought out' in order to emphasise, contra Candlish and Damnjanovic, that propositions *are* facts, and that they therefore are unities. Wittgenstein writes, in the *Notes on Logic*, that 'Propositions, which are symbols having reference to facts, are themselves facts' (1961*a*: 98). See also Price (2015: 10-11).

sign can be neither true nor false.)' (1961: 8, emphasis original). Wittgenstein emphasises the same point where he writes

> Logic is interested only in reality. And thus in sentences ONLY in so far as they are *pictures* of reality.
>
> But how CAN a SINGLE *word* be true or false? At any rate it cannot express the *thought* that agrees or does not agree with reality. That *must* be articulated.
>
> A single word cannot be true or false in *this* sense: it cannot agree with reality, or the opposite. (1961: 9, emphasis original)

The final assertion here enjoys strong intuitive support. It is, arguably, simply a category error to ask of any word taken individually whether it is true or false. Wittgenstein reiterates the sentiment again where he writes '"Complex sign" and "proposition" are *equivalent*' (1961: 52, emphasis original). In the *Tractatus* Wittgenstein repeats his commitment to the essential complexity of propositions[176]:

> It is only in so far as a proposition is logically articulated that it is a picture of a situation.
>
> (Even the proposition, 'Ambulo', is composite: for its stem with a different ending yields a different sense, and so does its ending with a different stem.) (4.032)

Propositions, then, are essentially complex. In order that a proposition be capable of picturing, that which it depicts must share an identical logical form with the proposition in question (2.161; 2.17). It follows, therefore, that if propositions are essentially complex, that which they depict is also essentially complex.

Propositions, though, are not *merely* complex. Propositions are not, on Wittgenstein's view, mere sets of names. Wittgenstein writes, 'Only facts can express a sense, a set of names

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[176] See also (3.141).

cannot' (3.142)[177]. Sets of propositional constituents are complex; they may be divided into sub-sets. Sets also possess a kind of unity insofar as their members are members of the *same* set. The unity possessed by a set, however, is not, in Wittgenstein's view, sufficient for the set's being capable of expressing a sense[178]. The difficulty is not merely that the members of a set of propositional constituents may permute in multiple ways to determine more than one set of truth-conditions; Wittgenstein's concern is not that mere sets of propositional constituents may underdetermine truth-conditions. Rather, Wittgenstein claims that *no* set is capable of expressing a sense, irrespective, therefore, of the capacities of its members to permute in different sensible combinations. Propositional constituents are, on the Tractarian view, names of simple objects (2.02; 3.202-3.203). The semantic value of a name is exhausted by the object which is its referent. Names function as labels; their phonological and orthographic characteristics are irrelevant to their capacity for labelling the object that they do[179]. We have not, though, having merely identified a set of labels, succeeded in *saying* anything with those labels, even where those labels comprise the ingredients for a sensible proposition. This much seems, intuitively, to be true. 'Names', Wittgenstein says, are 'like points; propositions like arrows – they have sense' (3.144). Wittgenstein's simile here is illuminative. Arrows, unlike points, possess the distinctive feature of *direction*. The possession of direction enables arrows to be compared with other items; arrows are useful precisely because we may compare the direction of our movement with theirs. Propositions, like arrows, may, in Wittgenstein's view, be usefully compared with other items. Where arrows are compared with items for sameness or difference of direction, propositions are, in Wittgenstein's view, compared with reality[180]. Wittgenstein writes, 'In order to tell whether a proposition is true or false we must compare it

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[177] See also (1961*a*: 98; 105).
[178] See Gaskin (2008: 2-6) for a discussion of unity which falls short of sentential unity.
[179] Wittgenstein insists on several occasions that the labelling relation is arbitrary; see (1961: 2; 17; 25; 1961*a*: 104; 1963: 5.473).
[180] See also (1961: 23; 1961*b*: 111; 1963: 4.05).

with reality.' (2.223). Propositions are compared with reality in order that the proposition's truth or falsity be determined. A point, unlike an arrow, does not possess direction. A point, therefore, may not be usefully compared with our movements in order that we orientate ourselves accordingly. Moreover, our identifying multiple points does not, in and of itself, provide a direction for the relevant comparison; it remains for an arrow to be drawn between them. Similarly, our identifying a set of names does not, in and of itself, enable us to make a comparison with reality. What is required in order that these names contribute to our making a comparison with reality is, in Wittgenstein's view, that they inhabit a *structure*:

> The fact that the elements of a picture are related to one another in a determinate way represents that things are related to one another in the same way
> Let us call the connexion of its elements the structure of the picture […] (2.15)

That the constituents of a proposition stand in a determinate relation to one another constitutes the structure of the proposition. Importantly, structure is not, in the *Tractatus*, a modal notion, it is not a matter of how propositional elements *may* be related, but how they *are* related. It is the structure of a proposition, the way that its elements stand in a determinate relation to one another, that differentiates a proposition which says something from a mere set of propositional constituents[181]. Furthermore, it is the structure of a proposition which differentiates it from some other compound which is not truth-apt. Wittgenstein writes, 'Instead of, 'The complex sign "aRb" says that a stands to b in the relation R', we ought to put, '*That* "a" stands to "b" in a certain relation says *that aRb*.'' (3.1432, emphasis original). It is not the bare unity of a complex propositional sign, in virtue of which it is *a* sign as opposed to many, which confers upon it truth-aptness. Rather, it is the particular species of unity exhibited by a fact *about* the sign's constituents which enables that sign to say something.

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[181] See Winch (1969: 8).

Wittgenstein, we saw, asks how the 'propositional bond' comes into existence, as well as how the combination of names into a proposition comes about. In both of these cases, I submit, Wittgenstein is concerned to find out how the *structure* of a proposition arises. Insofar as Wittgenstein's explanation of what truth-aptness consists in makes essential appeal to the notion of structure, it is, it seems, incumbent upon him to give an explanation of the possibility of a structured item. In asking the questions that he does regarding propositional unity Wittgenstein displays a recognition of the fact that the position he endorses incurs an explanatory burden. In what follows I shall argue that any answer to the question of how structure is possible will, in Wittgenstein's view, necessarily appeal to the notion of logical form. We will see that, according to the conception of logical form Wittgenstein subscribes to, both formulations and answers to the question of how structure is possible fail to count as sensible. In the next two sections I shall outline my interpretation of Wittgenstein's argument to the effect that the notion of form is not one capable of being sensibly discussed. Following these sections I shall address the competing views of other commentators, before examining Wittgenstein's response to the questions we have seen him raise with respect to the issue of propositional unity.

5.2

Logical Form

5.2.1

Wittgenstein writes

> Propositions can represent the whole of reality, but they cannot represent what they must
> have in common with reality in order to be able to represent it – logical form.
> In order to be able to represent logical form, we should have to be able to station

ourselves with propositions somewhere outside logic, that is to say outside the world. (4.12)

In the sections which follow I aim to provide an explanation of precisely why, in order that logical form be represented, we should have to station ourselves, *per impossibile*, 'somewhere outside logic'. It is important at the outset that I qualify the following discussion with the *proviso* that I do not take my interpretation of Wittgenstein's use of the word 'form' to wholly exclude the possibility of identifying alternative usages. Indeed, it is eminently possible that Wittgenstein employs the relevant word in more than one way. I have located one such use in order to interpret 4.12. Furthermore, I do not take the following interpretation of remark 4.12 to exhaust Wittgenstein's reasons for asserting the relevant remark. I therefore endorse Roger White's claim that 'Wittgenstein is convinced of his key positions not so much because there is a single argument that establishes them as because several different elements in his thinking converge on them' (2006: 39). Consequently, I do not aim to suggest that the route I describe towards understanding remark 4.12 excludes the possibility of other such routes[182].

Central to my explanation will be the conclusion that the logical form of a proposition is not an object and may not therefore be named. It is vital then that we begin with an investigation into Wittgenstein's conception of an object. Specifically, I am concerned to describe the relationship between the forms of objects and their names. Of objects, Wittgenstein says 'The possibility of its occurring in states of affairs is the form of an object' (2.0141). Furthermore, 'It is essential to things that they should be possible constituents of states of affairs' (2.011). The form of an object is, therefore, the possibility of its occurring in a state of affairs. Wittgenstein says that 'A state of affairs (a state of things) is a combination of objects (things)' (2.01); states of affairs are combinations of objects. For an object to occur in a state of affairs

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[182] See, for instance, Sullivan (2001: 110).

is, therefore, for it to occur in a state of affairs *as combined* with other objects. The form of an object is, we may conclude, its combinatorial potential. In other words, the form of an object is its potential for combining with other objects in states of affairs.

In the *Tractatus* Wittgenstein is clear that names mean, or serve as representatives of, objects (3.203; 3.22). In the *Notebooks* Wittgenstein stakes out the following relationship between the forms of objects and their names:

> If, e. g., I call some rod "A", and a ball "B", I can say that A is leaning against the wall, but not B. Here the internal nature of A and B comes into view.
>
> A name designating an object thereby stands in a relation to it which is wholly determined by the logical kind of the object and which signalises that logical kind. (1961*a*: 70)

Where '*A*' stands for a rod, and '*B*' stands for a ball, it makes sense to say, '*A* is leaning against the wall', but not to say, '*B* is leaning against the wall', according to Wittgenstein. Wittgenstein says that this consideration brings the 'internal nature' of *A* and *B* into view. Where Wittgenstein, in the *Notebooks*, describes the internal nature of *A* and *B* as coming into view, he is chiefly concerned with their form or combinatorial potential[183]. In other words, by observing the difference in significance between the two statements mentioned, we arrive at a firmer understanding of the combinatorial capabilities possessed by the objects named. The sentence '*B* is leaning against a wall' commits a category error because *B* is not the right sort of thing to do any leaning[184]. *B* may not stand in the relation of leaning to a wall, and the sign '*B*' may not stand in a significant relation to the words 'leaning against the wall'. This

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[183] This entry presents a challenge to McGuinness' claim that Wittgenstein construes type differences principally in terms of adicity: 'All [Wittgenstein's] examples of type-differences, of differences of logical form, are of the order of the difference between n-placed predicates and $n + 1$-placed predicates, or between propositions, facts and things' (2002*a*: 74). Wittgenstein clearly does recognise that ordinary language begets confusion through its employment of words sharing grammatical categories while differing with respect to the combinatorial potential of the items they refer to.

[184] See Malcolm (1986: 1).

combinatorial limitation of both *B* and '*B*' is, in Wittgenstein's view, made clear to us through our recognition of the relevant category error. An object and its name, then, share combinatorial capabilities as well as limitations[185]. This sharing of combinatorial possibilities constitutes a relation in which the object and its name stand to one another. This relation, Wittgenstein says, 'signalises' the 'logical kind' of the object; the logical kind of an object is 'signalled' by a relation of shared combinatorial possibilities in which it stands to its name. The logical kind of an object is very plausibly its form[186]; consequently, we may draw the conclusion that the form of an object is signalled by the relation of shared combinatorial possibilities in which it stands to its name. In other words, the relation of sharing combinatorial possibilities, in which names and objects stand to one another, signals the logical kind of objects, on Wittgenstein's view.

Earlier in the *Notebooks* Wittgenstein remarks that 'Names signalise what is common to a single form and a single content. – Only *together with* their syntactical use do they signalise *one particular* logical form' (1961*a*: 53, emphasis original). Our grasp of the logical form of an object is achieved through our attending to the 'syntactical use' of that object's name. Elsewhere Wittgenstein describes syntax as 'rules for manipulation of symbols' (1961*b*: 116). Attending to the syntactical use of a name, then, involves grasping the ways in which that name may be 'manipulated' according to certain rules. We have seen, above, Wittgenstein emphasise the importance of appreciating category errors for grasping the form of objects. Wittgenstein includes, it seems, in his conception of attending to the syntactical use of a name, that of attending to the syntactical *misuse* of a name. We must observe both legitimate and illegitimate manipulations in order that the form of an object be revealed to us. We achieve a grip on the combinatorial possibilities an object shares with its name, and therefore the form of the object, through our appreciating the ways in which that name may or may not significantly combine

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[185] See Malcolm (1986: 4; 14).
[186] See Hacker (1986: 19-20).

with others. The 'signalling' relation of shared combinatorial potential, in which objects and names stand to one another, is grasped through our attending to the possibilities for combination possessed by names. Our epistemic route to the form of an object is, on this position, 'language first'[187], for our purchase on the forms of objects is arrived at, in the first instance, through our understanding of syntax.

Wittgenstein emphasises the relationship between names, their syntactical application, and the form of objects where he says, 'We have become clear, then, that names may and do stand for the most various forms, and that it is only the syntactical application that signalises the form that is to be presented' (1961: 59). This sentiment is repeated in the *Tractatus*: 'A sign does not determine a logical form unless it is taken together with its logico-syntactic employment' (3.327). The view, first presented in the *Notebooks*, that the form of an object may be gleaned through attending to the syntactical application of the object's name, is, then, clearly maintained in the *Tractatus*. I am not here claiming that Wittgenstein, in the *Tractatus*, holds that the form of an object is wholly derived from the syntax of its name. Rather, the form of a sign is only determinate when its 'logico-syntactic employment' is considered, where what ultimately governs the syntactic features a sign possesses remains a further question. Whether the relation of priority with respect to the determination of an item's form runs from language to the world or *vice versa* is a much-disputed subject; I intend to remain neutral on this issue. My claim is that we may come to appreciate the form of an object through attending to the form of that object's name, where the form of the name is grasped through observation of its

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[187] In the *Notebooks* Wittgenstein suggests that the object 'wholly determines' the relation in which it stands to its name (1961*a*: 70). Although our epistemic route is, as I say, 'language first', the nature of language is determined by the form that is common to all possible worlds, on this early view. In other words, the route of epistemic access to an object's form runs in the opposite direction to the relation of priority an object's form has over its name's combinatorial potential in the *Notebooks*. Both Malcolm (1986: 14) and Pears (1987: 8) have maintained that Wittgenstein's view in the *Tractatus* does not change from that of the *Notebooks* in this respect. Winch (1987: 9-10), Ishiguro (1969: 20-21), and McGuinness (2002*b*: 82-94) have argued differently. To decide on this matter, however, lies outside of the scope of the current article, and I therefore remain neutral on it for present purposes. See also Johnston (2007: 385-389).

syntactic features. This leaves it open that the form of the object may be determined by that of its name, or *vice versa*.

5.1.2

The forms of objects, we have seen, are mirrored in the combinatorial capabilities possessed by the names which deputise for them. The form of an object, moreover, is the possibility of its occurring in a state of affairs. Wittgenstein says, 'The determinate way in which objects are connected in a state of affairs is the structure of the state of affairs' (2.032). Wittgenstein also says that 'Form is the possibility of structure' (2.033). The form of an object is 'the possibility of structure' because an object's form is its potential for combining with other objects, and the structure of a state of affairs is the way in which its constituent objects are combined with one another. The form or combinatorial potential of an object is the possibility of structure, for there can be no structure without a combination of objects. There can be no *way* in which objects are combined without objects' being *capable* of combination; the possibility of structure *is* the potential for objects to combine with one another.

It might be argued[188] here that the word 'form' in 2.033 refers not to the form of an object, but to the form of a state of affairs, and that it is therefore rash to assume that the sentence 'Form is the possibility of structure' straightforwardly applies to objects. This objection is supported by the consideration that remark 2.033 occurs at the beginning of a series of remarks concerned more squarely with states of affairs than with objects. In my view remark 2.033 is deliberately neutral with respect to its application, and it therefore may be used to describe the forms of objects as well as those of states of affairs. Several considerations join to support this view. Firstly, the wording of the phrase itself is neutral with respect to application; this offers

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[188] My thanks to an anonymous referee for raising this issue.

prima facie evidence for the neutral reading. Secondly, 2.033 occurs shortly after Wittgenstein has identified objects with form (2.025). This identification will be explored in further detail, below. Given this identification, though, it would seem that any clear statement as to what form *is* must be applicable to objects, for objects *are* 'form and content'. Lastly, Wittgenstein's other, non-neutral, descriptions of 'form'[189] may each be very naturally understood as instances of this more general characterisation. That Wittgenstein's other descriptions of form are easily assimilable to instances of 2.033 read as a general claim supports our reading that remark as application neutral. I have just explained how 2.033 applies to objects; we shall now see how 2.033 applies to propositions.

Wittgenstein writes:

> The fact that the elements of a picture are related to one another in a determinate way represents that things are related to one another in the same way.
>
> Let us call the connexion of its elements the structure of the picture, and let us call the possibility of this structure the pictorial form of the picture. (2.15)

Wittgenstein describes propositions as pictures (4.01). Where the form of an object is the possibility of it combining with others such that the combination in question exhibits a structure, the form of a picture, according to 2.15, is the possibility of *its* structure. A picture's structure is 'the connexion of its elements' (2.15). Given that Wittgenstein describes propositions as pictures, we may, on the basis of 2.15, draw the following conclusion. The form of a proposition is the possibility that its elements stand in relation to one another in the way they do in fact stand, and as the objects for which they deputize must stand if the proposition in question is true. A proposition must share a form with that which it represents in order that it be capable of representing. The form of a proposition is therefore a possibility which is

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[189] See (2.0141; 2.15-2.151).

actualised if what it represents exists. Form, as remark 2.033 makes clear, is a modal notion. Form concerns possibilities. Structure, by contrast, is not a modal notion. Structure concerns the way in which things are related, rather than merely the way they might be[190]. At this stage the following objection may be made to the understanding of structure here presented. States of affairs may either obtain or not. Moreover, states of affairs exhibit a structure. Consequently, structure must, in opposition to what I have said, be understood in a sense which does not imply that structures are necessarily actual[191]. Only states of affairs which do in fact obtain, though, exhibit a structure. That obtaining states of affairs exhibit a structure while non-obtaining states of affairs do not follows from Wittgenstein's description of the structure of a state of affairs: 'The determinate way in which objects are connected in a state of affairs is the structure of the state of affairs' (2.032). It is a mistake to suggest that objects may *be connected*, and that the connection may exhibit a structure, while the state of affairs of which those objects are constituents fails to obtain. There are, accordingly, no non-obtaining states of affairs which exhibit structure.

The form of a proposition is, we have just seen, the possibility of its structure. The form of a proposition is identical with the form of that which it represents. The form of a proposition is the possibility that what it represents obtains, for form is the possibility of structure, and represented items must obtain in order that they exhibit a structure. Wittgenstein writes, 'A picture contains the possibility of the situation that it represents' (2.203). One might characterise the form of a proposition, then, as the possibility of a situation's *existing*, on the basis that only an existent situation, or obtaining state of affairs, may exhibit a structure. In other words, the possibility of structure *involves* the possibility of something's existing, for the

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[190] This difference in the modal character of form versus the non-modal character of structure is a difference which Black fails to appreciate: 'Wittgenstein's distinction between 'structure' and 'form' has troubled commentators as able as Ramsey. It is doubtful whether it is needed.' (1964: 66). Ramsey, despite Black's accusation, appears to be in full command of the distinction between form and structure I have emphasised; see Ramsey (1931: 271).
[191] My thanks to an anonymous referee for raising this issue.

exhibition of structure demands that the structured item exist. Wittgenstein adopts the terminology of 'existing' and 'non-existing' representations in the following remark: 'If an elementary proposition is true, the state of affairs exists: if an elementary proposition is false, the state of affairs does not exist' (4.25). In the *Notebooks* Wittgenstein says, 'spatial and logical place agree in both being the possibility of an existence' (1961*a*: 27). Here Wittgenstein identifies the possibility of something existing with a *place* in either physical or logical space. In the *Tractatus* Wittgenstein reaffirms this claim: 'In geometry and logic alike *a place is a possibility: something can exist in it*' (3.411, emphasis added). The form of a proposition is the possibility of something's existing, for form is the possibility of structure, and only existents exhibit a structure. Wittgenstein writes: 'The propositional sign with logical co-ordinates – that is the logical place' (3.41). The propositional sign with its logical co-ordinates *is* a logical place, according to Wittgenstein. A logical place is the possibility of something's existing in that place, and the form of a proposition is the possibility of something's existing such that the thing in question exhibits a structure. Given these claims, and given that Wittgenstein squarely locates 'the logical place' in the propositional sign with 'logical co-ordinates', it is plausible that the form of a proposition be identified with a place in logical space. We shall examine Wittgenstein's notion of 'logical co-ordinates' in further detail, below.

Wittgenstein writes

What any picture, of whatever form, must have in common with reality, in order to be able to depict it – correctly or incorrectly – in any way at all, is logical form, *i.e.* the form of reality. (2.18)

Pictures, then, must have an identical logical form to that which they depict in order that they be capable of depiction at all. Given that the form of a proposition is both a place in logical space and identical to the form of the fact it depicts, it follows that the form of the depicted fact

is likewise a place in logical space. What is common to a proposition and the fact it depicts is a certain place in logical space.

Wittgenstein says, 'The logical form of the proposition must already be given by the forms of its component parts' (1961*a*: 23). In the *Tractatus* Wittgenstein writes

> A proposition determines a place in logical space. The existence of this logical place is guaranteed by the mere existence of the constituents - by the existence of the proposition with a sense. (3.4)

The logical form of a proposition is 'given', according to Wittgenstein, by the forms of its component names. The logical form of a proposition is, we have seen, the possibility that what it represents exists. I have, on the basis of remark 3.41 and 3.411, identified such a possibility with a place in logical space. That Wittgenstein says a logical form is given by its components, as well as that a logical place is guaranteed by the existence of constituents, lends further support for this identification. The existence of this place is, Wittgenstein claims, *guaranteed* by the 'mere existence' of the constituents. It is Wittgenstein's view that we do not require anything over and above the constituents of a proposition in order that the place in logical space determined by that proposition be guaranteed to exist. The form of a proposition, in other words, *reduces* to its constituents. We must return to Wittgenstein's conception of objectual form in order to see why, in his view, this should be so.

The form of an object, I have emphasised, is the 'possibility of structure' because an object's form is its combinatorial potential, and the exhibition of structure depends upon a combination of objects into the entity whose structure it is. Wittgenstein remarks that, 'If all objects are given, then at the same time all *possible* states of affairs are given' (2.0124, emphasis original). If some objects are given then their combinatorial potentialities are,

necessarily, also given, for their combinatorial potentialities are, we have established, their form. Vitally, combinatorial potentialities *are* possibilities of structure[192]. Consequently, as soon as objects are given, possibilities of structure are also given. Wittgenstein says that 'Objects contain the possibility of all situations' (2.014). Places in logical space, being possible situations, are therefore 'contained' in the objects whose combination constitutes the occupation of such a space. Places in logical space, being the forms both of propositions and the items they depict, are contained in objects. The forms of propositions and the items they depict may, consequently, be reduced to the forms of objects.

That Wittgenstein identified the possibilities of combination common to all possible worlds with objects is demonstrated by his saying,

> It is obvious that an imagined world, however different it may be from the real one, must have *something* – a form – in common with it. (2.022, emphasis original)
>
> Objects are just what constitute this unalterable form. (2.023)

Here it will be worthwhile to pause briefly to motivate this reductive approach before describing its character in further detail, for the relevant approach will become important in the final section. It is one of Wittgenstein's most well-known commitments that there are, in the world, simple objects, and that these objects serve as referents for the names of propositions. Just why Wittgenstein held to this view is one of the most controversial areas of *Tractatus* commentary. Here I shall sketch a rationale for Wittgenstein's commitment to simple objects, and to the reduction of propositional form to those of simple objects. My aim is not to develop

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[192] Where this claim is not to be understood as implying that combinations of objects are identical to structures, but only that the potential for objects to combine is the potential for items, such as states of affairs, to exist and thereby exhibit structure.

a detailed justification for Wittgenstein's commitment to 'substance'[193], but rather to provide the minimal background required for the reader to accept that Wittgenstein did hold to the relevant view. We shall then be free to explore those characteristics of Wittgenstein's reductive approach which are relevant to the interpretation given below. To clarify, my aim is not to provide a novel contribution to the much-discussed debate concerning Wittgenstein's argument for simples, but to give some indication of why he might have adopted a view, the characteristics of which are relevant to an understanding of remark 4.12.

Wittgenstein writes:

Objects make up the substance of the world. That is why they cannot be composite. (2.021)

If the world had no substance, then whether a proposition had sense would depend on whether another proposition was true. (2.0211)

In that case we could not sketch any picture of the world (true or false). (2.0212)

Wittgenstein holds to the following two assumptions: language derives its meaningfulness from a relation with the world (2.1511); a fundamental language-world relation is that of reference (2.1514-2.1515). Wittgenstein terms the referents of names 'objects'. These objects, though, cannot be complex, for if they were, it would be a contingent matter whether or not their components are related to one another as would be required for the existence of the objects in question, and consequently a contingent matter whether or not the *names* of such complex objects are meaningful. If the meaningfulness of a name depends upon the configuration of a given set of entities, then the meaningfulness of sentences employing that name depend, in an objectionable fashion, on whether or not it is *true* that such a configuration obtains. What is

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[193] More detailed treatments, including some which expressly deny the correctness of that which I present, may be found in Anscombe (1959: 29), Black (1964: 60-61), Carruthers (1990: Ch's 9 & 10), Hart (1971: 279-281), MacBride (2018: 188-190), Morris (2008: 39-50; 355-364; 2016), Proops (2004), Sluga (2012), Tejedor (2003), White (1973; 2006: 38-44), and Zalabardo (2012; 2015: 243-254).

controversial amongst *Tractatus* commentators is the precise character of Wittgenstein's objection to this view. Glossing over very many details, we may summarise Wittgenstein's objection as turning on the claim that what we can *say* is surely independent of what is the case. If the names of our language were threatened with reference-failure in cases where the entities whose combination constitutes the existence of their referents are not combined in the desired manner, then our ability to make claims would be beholden to the contingencies of the world. What we can say *isn't* beholden in that fashion. Our ability to make claims, whether right or wrong, is not impinged upon by certain other claims' being false. Those referents identified at the terminus of analysis cannot be complex, on pain of depending upon the fortuitous arrangement of their constituent parts in order that they exist. Wittgenstein, in the *Philosophical Investigations*, presents a summary of the argument for simples in line with that which I have just described[194]:

> But why does it occur to one to want to make precisely this word into a name, when it is evidently not a name? —That is just the reason. For one is tempted to make an objection against what is ordinarily called a name. It may be put like this: *a name ought really to signify a simple*. And for this one might perhaps give the following reasons: The word "Excalibur", say, is a proper name in the ordinary sense. The sword Excalibur consists of parts combined in a particular way. If they are combined differently Excalibur does not exist. But it is clear that the sentence "Excalibur has a sharp blade" makes *sense* whether Excalibur is still whole or is broken up. (§39)

It is a necessary condition on a proposition's making sense that it share a form with that which it represents. That the form of a proposition reduces to the forms of simple objects constitutes an explanation of how that proposition remains meaningful throughout variations in circumstance. In other words, the construal of propositional form as entirely reducible to the

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[194] See also (§46), and Wittgenstein (1975: 72). Indeed, one may cite the similarity between the reading I give and Wittgenstein's later summary as a reason to *reject* my reading as inaccurate; see, e.g., Mounce (1981: 33), and Zalabardo (2015: 253-254).

forms of simple items guarantees the result that the meaningfulness of a proposition be unaffected by which configurations of objects obtain. This is at least one plausible motivation for the reduction of propositional form to the forms of their elements and to the objects those elements name.
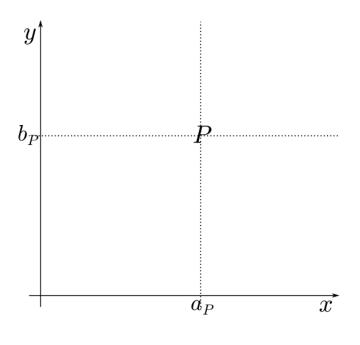
Objects, Wittgenstein emphasises, *are* the form of the world (2.023). The form of the world is what it has in common with every other possible world. What is common to all possible worlds is the existence of certain places in logical space; the very same places in logical space are common to all possible worlds. In other words, each and every possible world, irrespective of which of its places in logical space are in fact occupied by combinations of objects, contains the same possibilities for objectual combination. Vitally, the same places in logical space are common to all possible worlds because they contain the same objects, and, as we have seen, places in logical space are reducible to the combinatorial potential of objects. The form of the world, indeed of every world, is 'given' by the objects it contains insofar as the form of all worlds is reducible to the combinatorial potential of objects. Anscombe reminds us that 'the original seat of form is the objects themselves […]' (1959: 111). Merrill Hintikka and Jaakko Hintikka similarly write 'One of the most striking doctrines of the *Tractatus* is that all logical forms can be built up of the forms of simple objects' (1986: 9). The totality of places in logical space is reducible to the totality of objects. *A* place in logical space is reducible to the forms of the objects whose combination constitutes the occupation of that place.

We are now in a position to examine Wittgenstein's claim that 'the logical form of a proposition must already be given by the forms of its component parts' and 'guaranteed by the mere existence' of those parts. The logical form of a proposition is a place in logical space. The place in logical space determined by a proposition is identical to that occupied by the fact it depicts. The place in logical space occupied by a fact is reducible to, or 'given by' the forms of the objects whose combination constitutes that fact. We have seen that the forms of objects

are mirrored by their names. Form, I have emphasised, is combinatorial potential, or the 'possibility of structure' (2.033). Objects and their names share combinatorial potential, and the relation of shared combinatorial potential in which they stand is grasped through our attending to the 'logico-syntactic employment' of the names. Importantly, objects and their names, in virtue of their sharing combinatorial potential, share form. The place in logical space determined by a proposition is reducible to the forms of objects whose combination constitutes the occupation of that place. The forms of objects are mirrored in their names. Consequently, the place in logical space determined by a proposition is reducible to the forms of its component names. This is why Wittgenstein says that the logical form of a proposition must already be given by the forms of its component parts, or else the 'mere existence' of its constituents. The logical form of a proposition is reducible to the forms of its component parts, because the forms of its component parts are shared by the objects they name, and the logical form of the proposition in question is reducible to the forms of the relevant objects. My view here echoes that of Sullivan: 'So to talk of the pictorial *form* of a proposition is to draw attention to the fact that any particular propositional structure is an actualization of possibilities of use built into the forms of its constituent expressions' (2001: 103, emphasis original).

The same point may be re-stated by employing the terminology of *co-ordinates*, a terminology with which Wittgenstein extends the spatial metaphor so far deployed. Wittgenstein says that 'The propositional sign with logical co-ordinates, that is the logical place' (3.41). The constituents of a proposition may be usefully construed of as 'logical co-ordinates', according to Wittgenstein. In his *Notebooks* Wittgenstein offers the following example: 'We might conceive two co-ordinates a_P and b_P as a proposition stating that the material point P is to be found in the place (ab)' (1961a: 20). An adaptation of Wittgenstein's

example[195] may be visualised with the aid of a simple plot. It will be necessary to supplement the example with further details as we proceed, and to bear in mind that the language here constructed is both idiosyncratic as well as deficient in certain important ways which will shortly be discussed.
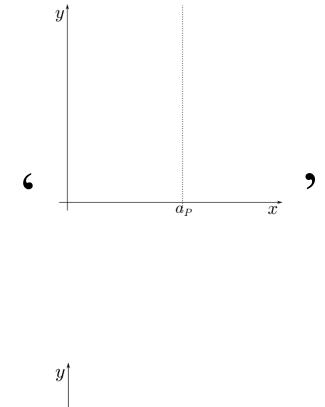

[*Figure 1*]

Let us treat this plot as an object-language proposition which asserts the occupation of the place (a_P, b_P); the plot, in other words, says that (a_P, b_P) is occupied by P. The intersection of dotted lines constitutes an assertion. As David Pears says
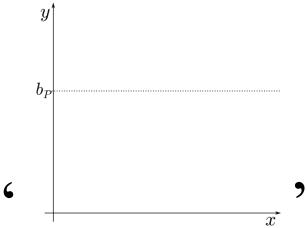
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[195] What follows is an adaptation, diverging from the example suggested by Wittgenstein's own remarks, in the following sense. In the case I describe it is the *plot* which says that a state of affairs obtains at *place* (a_p, b_p). Wittgenstein, by contrast, describes '(a_P, b_P)' as a proposition which says that *place* (a, b) is occupied by P. My proposal involves a specification of a place which includes reference to an occupant P, whereas Wittgenstein's specification is, as it were, 'occupant-neutral'. A non-neutral specification here serves to emphasise the relationship between the place and the potential occupant of that place. A place in logical space is not a *mere* place, it is a place *for* something; and what a place is *for* is, in turn, determined by the forms of the objects to which the place in question *reduces*. It is, as well shall see, an unavoidable deficiency of the conception of object *as* co-ordinate that given two objects one is given no more than one mode of combination; the specification of an occupant here is therefore a determinate specification. My thanks to an anonymous referee for urging greater clarity here.

Names are like co-ordinates and what corresponds to uttering a sentence is giving the co-ordinates of a point in space; for example two co-ordinates are needed to fix a point on a map and giving them is like saying 'φa'. (1987: 119)

Let us further assume that the place (a_P, b_P) is occupied by P if and only if two objects, namely a_P and b_P, are combined with one another in a certain way. The names of a_P and b_P are *not*, though, 'a_P' and 'b_P', respectively. Rather, the name of a_P, as it appears in the relevant proposition is

The name of b_P is

Conceiving of these names as including the axes allows us to more easily treat them as *essentially* possessing their combinatorial potential, such that two names possessing different capacities for intersection may not count as referring to the same object[196]. The combining of these names consists, in theory, in *superimposing* one onto the other, such that both axes of each name align with those of the other name. In practice, combining the names consists simply in adding to the one that which doesn't figure in the other. We may stipulate that no well-formed formula of this two-dimensional language may be constructed in any way other than those two just described. The *form*, or combinatorial potential, of a name is exhibited through its having the capacity to be intersected by that of another name. The form of a name is perspicuously exhibited in this co-ordinate language, for the points at which a name may be intersected are clearly visible. The entirety of a given name's modal profile is, so to speak, open to view; both its combinatorial potential and its combinatorial limits are easily gleaned. The names of our co-ordinate language wear their forms, as it were, on their sleeves. We need not, for instance, observe category errors in order to see that the name of a_P cannot be intersected by itself. Indeed, no proposition representing the intersection of a_P by itself is even formulable[197] in this language. The analogue of a category error in English for our co-ordinate language consists in the concatenation of two names not capable of intersecting one another. A translation of the sentence '4 is heavier than 5' into a co-ordinate language might, for instance, be represented by two names whose dotted lines run parallel to one another. Since only intersections effect an assertion, the relevant translation will be seen straightaway to misfire. Natural languages by contrast do not display the inappropriateness of category errors in as transparent a fashion as does the co-ordinate language.

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[196] It follows that these names are, in at least one sense, not simple. Hintikka and Hintikka (1986: 39-41) argue that Tractarian names need not be conceived of entirely without complexity. It is not necessary though, for my purposes, that I defend Hintikka and Hintikka's position. The co-ordinate language here devised is certainly not adequate for the project of Tractarian analysis, and further shortcomings will be examined below.
[197] See Pears (1987: 121).

The possibility of a name's intersecting another is what the existence of a place in logical space comes to. It should be clear, then, that given two suitably combinable names, one is *thereby* given the potential for two dotted lines to intersect one another, and consequently one is thereby given a place in logical space. Indeed, whenever two or more names are concatenated with one another in a way which effects an assertion, parts of them do intersect one another. The existence of a place in logical space is not an item over and above the potential for linear intersection. Given the two names so far discussed, the place which our example plot claims to be occupied is *guaranteed* to exist, for the dotted lines figuring in those names are *essentially* capable of intersecting one another at (b_P, a_P). Wittgenstein says 'If a point in space does not exist, then its co-ordinates do not exist either, and if the co-ordinates exist then the point exists too. That is how it is in logic' (1961*a*: 69). If two meaningful names of our co-ordinate language exist, a place in logical space exists, for a place in logical space just is the potential for two names to intersect one another, and the names in question essentially possess this potential. Winch has remarked that

> A name and the object to which it refers exist in the same 'logical space'; the name also exists in the same logical space as the other names with which it may significantly combine in propositions; and the object exists in the same logical space as the other objects with which it may combine in facts. Logical space determines what combinations of names (i.e. what propositions) are possible and also what combinations of objects (i.e. what facts) are possible. (1969: 5)

This conception of Tractarian logical space is a substantivalist one in which space determines the behaviour of those items which inhabit it. Logical space, on this view, is prior in order of explanation to the combinatorial potential of Tractarian objects and their names. On Wittgenstein's position as I have presented it, by contrast, a 'place in logical space' is nothing over and above the combinatorial potential of the items whose combination constitutes the

occupation of that place. There is not a logical aether, *in which* the objects of the *Tractatus* find themselves, and from which they derive their form. Rather, the notion of logical space is parasitic on that of objectual form.

Wittgenstein says that the logical form of a proposition is 'given' by the forms of its component parts. Importantly, though, he does not, in the *Tractatus*, say that the logical form of a proposition is *determined* by those of its components. Put simply, this is because the forms of the components of a proposition may well 'contain' in their combinatorial potential the possibility of more than one structure. Take, for example the sentence 'abc' composed of the name 'a' of object a, 'b' of b, and 'c' of c. Assume that every permutation of these names constitutes a proposition capable of being true and capable of being false. Given the names 'a', 'b', and 'c' a total of six places in logical space are given; six possible combinations are essentially contained in the objects for which the names stand. The proposition 'abc' determines *one* of these places. Wittgenstein, in the *Notebooks*, asks 'How does the proposition determine the logical place? How does the picture present a situation?' (1961*a*: 26). Revealingly, Wittgenstein takes these two questions to be equivalent. In answer he writes

> One name is representative of one thing, another of another thing, and they themselves are connected; in this way the whole images the situation – like a *tableau vivant*.
>   The logical connexion must, of course, be one that is possible as between the things that the names are representative of, and this will always be the case if the names really are representative of the things. […] (1961*a*: 26)

This second sentence echoes what we have already observed, namely the impossibility of names possessing a different combinatorial potential to the items they are names of. The first sentence is, roughly, the 'picture theory' of propositions. Propositions determine *a* place in logical space through their exhibiting component names as related to one another in the way in which the objects they stand for would be related if the place in question was occupied. In other

words, propositions determine a place in logical space through their possession of a *structure*. The place in logical space determined by '*abc*' is determined through the structure of the proposition's identifying *it* as opposed to the other five possibilities contained in '*a*', '*b*', and '*c*'. The logical form of a proposition, then, is a place in logical space contained in the combinatorial potential of its names. The structure of a proposition contributes to the *determination* of this place. The possession of a structure is what enables a proposition to *say* something because it enables the proposition to identify, from the variety of places in logical space contained in the essential combinatorial potential of its constituent names, which of these places it concerns. Gaskin writes
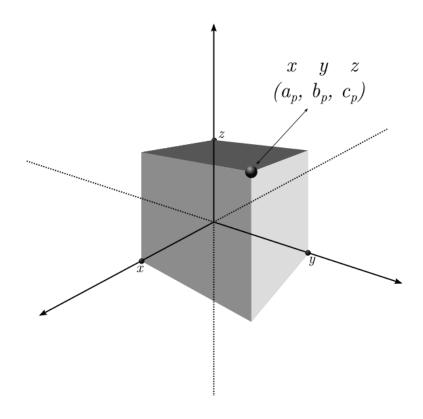
> [L]ogical form must be that in virtue of which a sentence manages to say something – is prevented from degenerating into a list of names. [...] For the form of a sentence consists in the fact that its names are configured in a certain way. (2008: 327-328).

Candlish and Damnjanovic likewise suggest that 'The form of a propositional sign is the way in which its names are combined' (2012: 87). From what I have said, it should be clear that Candlish and Damnjanovic's, as well as Gaskin's claims here are mistaken. The *structure* of a proposition, rather than the form, is the way in which its elements are combined[198]. The form of a proposition consists in the fact that its names can be so configured, but this possibility is not itself sufficient for the existence of a proposition which says something.

Just here a deficiency in our co-ordinate language is brought into view. In order to depict facts consisting of three objects in combination, we should have to extend our co-

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[198]Zalabardo commits the same error; see (2015: 72). Morris observes this feature of Zalabardo's interpretation; see (2017: 125).

ordinate language to include a third axis. Take, by way of example, the following proposition of this language asserting that the place (a_P, b_P, c_P) is occupied:

$$x \quad y \quad z$$
$$(a_p, b_p, c_p)$$

[*Figure 2*]

Given our three co-ordinates, only one point in space is determined by them. The expressive power of this language is therefore extremely limited[199]; no provision is made for the representation of different places in logical space being occupied by facts composed of identical objects. What our co-ordinate language achieves by way of the perspicuous exhibition

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[199] Our co-ordinate language so conceived raises a further difficulty insofar as the representation of places in logical space as occupied by facts consisting of N objects requires the availability of N axes. Wittgenstein was agnostic with respect to the issue of how many objects may combine to form a given fact, and countenances the possibility of facts consisting of infinitely many objects where he says 'Even if the world is infinitely complex, so that every fact consists of infinitely many states of affairs and every state of affairs is composed of infinitely many objects, there would still have to be objects and states of affairs' (4.2211). The representation of places in logical space as occupied by facts composed of infinitely many objects requires the availability of infinitely many axes. Mathematicians are familiar with models involving the Nth dimension; our co-ordinate language, though, is incapable of being extended in the way required to capture the full gamut of logical space.

of objectual form, and concomitantly the making visible of category errors, is offset by a restricted and myopic conception of logical space. White writes

> We may then think of a state of affairs as the existence of a Newtonian point mass at a certain position in space-time: we may specify such a position by Cartesian co-ordinates - (x, y, z, t). If we take the objects of the *Tractatus*, then, to be the planes of space and time instants, we may construe a state of affairs as consisting in the fact that three planes at a certain time intersect at a point mass.
> [...] Of course, the actual structure of logical space would be much more complicated than that envisaged in this simple model, but I suggest that it would be simply a far more complicated version of this model that would be required if we were to satisfy all the requirements Wittgenstein is arguing for [...]. (2006: 46)

White here suggests that a model substantially different from a simple co-ordinate language in degree, but *not* in kind, is in principle capable of representing the entirety of Tractarian logical space as occupied by facts. White here employs the co-ordinate model of objects in an excessively literal fashion, and consequently his conception of a Tractarian object involves items whose characteristics betray the influence of an analogy whose incidental features have been mistaken for essential ones. It is a consequence of White's view that for any set of objects there is only one possible combination of them, for given any set of co-ordinates, only one point is determined by them; moreover this consequence is obviously not removed by extending our co-ordinate language to the *N*th dimension. This conception of an object, though, is unduly restrictive. My contention is not that Wittgenstein's remarks show conclusively that he conceived of objects as capable of combining with one another in more than one way. Rather, it was Wittgenstein's view that the form, or combinatorial potential, of an object may not be settled *a priori*:

> We now have to answer *a priori* the question about all the possible forms of elementary propositions.

> Elementary propositions consist of names. Since, however, we are unable to give the number of names with different meanings, we are also unable to give the composition of elementary propositions. (5.55)

Given what we have seen, namely that the form of a proposition is nothing over and above the forms of its constituent names, our being unable, in Wittgenstein's view, to give the forms of propositions *a priori* constitutes also the inability to give the forms of a proposition's names *a priori*. As Johnston says[200],

> There is no saying a priori what forms of elementary propositions there are, and so no saying a priori what types (forms) of names, and so again of objects there are. A demand for an exposition of the logical categories of entity, insofar as that is a request for something to be given a priori, is misguided. (2009: 153)

Insofar as White's conception of a Tractarian object rules out *a priori* the possibility of an object combining with others in more than one way, it represents an interpretation in tension with Wittgenstein's holding that the combinatorial potential of objects is discoverable only *a posteriori*. The analogy Wittgenstein draws between co-ordinates and names makes the relationship between places in logical space and names perspicuous. A proposition of our co-ordinate language displays clearly how the mere existence of meaningful names suffices for the possibility of their intersecting one another, and consequently how the form of a proposition depends wholly upon the forms of the names whose combination constitutes that proposition. Our co-ordinate language, though, unavoidably exhibits features which we should not impute to Wittgenstein's conception of the relationship between the forms of names, the objects they refer to, and places in logical space. Wittgenstein's employing the terminology of co-ordinates

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[200] See also MacBride (2005: 102-103; 2018: 197-202).

must be treated cautiously if we are not to draw conclusions about the character of Tractarian objects at odds with certain other Tractarian commitments.

5.2

Inexpressibility

5.2.1

Take the following example. Assume that a and b constitute all of the objects there are. The form of a fact or proposition is reducible to the combinatorial potential of its constituents taken severally, rather than to any one constituent in particular. This conclusion is a re-statement of the characterisation of logical form I have been advancing throughout the preceding discussion. The form of a fact or proposition is, as we have seen, a place in logical space reducible to the potential for some items to combine with one another. No single item though, considered wholly in isolation from others, possesses such a potential. In other words, it is bound up with the very notion of *combinatorial* potential that such a capacity lies not in the existence of a single thing but in several. The combinatorial potential of some items is necessarily dependent upon the existence and character of a plurality. Neither a nor b, therefore, may be identified with the form of a fact or proposition. To put the point in linguistic, rather than ontological terms, we might say that the phrase 'logical form' is an incomplete symbol. No *thing* answers to the phrase, though we may come to understand its meaning through translating statements in which it appears into statements which illustrate the combinatorial potential of several items[201]. Illustrating the combinatorial potential of several items consists in constructing

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[201] Such statements will not, though, be of the form 'such and such a circumstance is possible'. Rather, they will be ordinary assertions concerning the relatedness of objects. That this was Wittgenstein's view may be seen from the following remark: 'The certainty, possibility, or impossibility of a situation is not expressed by a proposition, but by an expression's being a tautology, a proposition with a sense, or a contradiction' (5.525). Wittgenstein here describes a situation's possibility as something incapable of being 'expressed by a proposition', though expressed by *an expression's being* a proposition with a sense. In other words, that a proposition possesses a sense *itself*

propositions which make *sense*, for, as I mentioned at the outset, understanding the ways in which items may or may not combine involves distinguishing sensible assertions from category errors. To attempt the identification of a fact or proposition's constituent with its logical form is to misunderstand the way in which 'logical form' functions as an incomplete symbol. Given that no single constituent of any fact may be identified with its logical form, and given that all objects are essentially possible constituents of facts[202], it follows that no object may be identified with the logical form of a fact. Neither a, nor b, therefore, is the logical form of a fact or proposition.

Assume further that a and b are each capable of combining with one another in exactly two ways: ab and ba. The two possibilities of combination just mentioned constitute the *whole* of logical space, for they constitute all of the possibilities of combination which there are. Crucially, all possible elementary propositions are determined as soon as these combinatorial possibilities are determined, because elementary propositions must share a form with what they represent in order that they be capable of representing, and forms *are* combinatorial possibilities. Given the possibilities for objectual combination ab and ba, therefore, we are thereby given all of the available elementary propositions there are. The available elementary propositions might be formulated as 'ab' and 'ba'. We must ask, of these propositions: what is their subject matter? If, within the subject matter of these propositions, the form of a fact or proposition is not included, it follows that there is no such thing as making a claim about the form of a fact or proposition through the use of any available elementary propositions.

Wittgenstein says, of what it is for a proposition to represent something, that, '[…] Instead of, 'This proposition has such and such a sense', we can simply say, 'This

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expresses the possibility of the situation it represents. Hence the absence of modal operators in a language adequate to Tractarian analysis.
[202] See (2 – 2.0121).

proposition represents such and such a situation'' (4.031). For a proposition to *represent* (*dar*) a situation is for it to have a *sense*. Wittgenstein, in 4.031, allows that talk of a proposition's having a sense may be legitimately exchanged for a proposition's representing a situation. Wittgenstein says, 'A proposition *shows* its sense. A proposition *shows* how things stand *if* it is true' (4.022, emphasis original). We have just seen that Wittgenstein, in 4.031, identifies the representation (*dar*) of a situation with the possession of a sense. In 4.022 Wittgenstein identifies a sense with *how things stand* if a proposition is true. Things are identical with objects (2.01). The sense of a proposition, then, may be identified with *how the objects for which the proposition's names go proxy stand* if the proposition in question is true. By 4.031, to represent (*dar*, cognates of which featuring in the text are *darstellen* and *dargestellte*) a situation is to have a sense. For a proposition to have, or to show, its sense is for it to show how some particular objects stand if it is true. Wittgenstein says, 'A proposition *shows* how things stand *if* it is true. And it *says that* they do so stand' (4.022, emphasis original). What a proposition says is that certain 'things' – which we have already seen Wittgenstein identify with objects – stand to one another. What a proposition *says*, then, is that what it shows (to wit: its *sense*, or the situation which it represents) obtains.

At 4.12 Wittgenstein claims that no proposition may represent (*darstellen*) a logical form. No proposition may represent a logical form because representation, in this context[203], may be identified with the possession of a sense, where the possession of a sense is in turn characterised in terms of showing how certain *objects* stand to one another. It is the objects

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[203] A context in which *dar* and its cognates *darstellen* and *dargestellte* constitute the relevant operative notions. A separate argument for the conclusion that the subject matter of propositions is the objects named might appeal to remark 2.15. Remark 2.15, though, employs the term '*vor*' rather than '*dar*', where 4.12 employs '*darstellen*'. An anonymous reviewer points out that the relevance of 2.15 to 4.12 may not, therefore, be assumed without further argument. Above, I avoid taking a stand on the issue of whether *vor*, *vorstellen*, *vorstellung*, and *vorstellende* are interchangeable with *dar*, *darstellen*, and *dargestellte*. See Black (1964: 76), Frascolla (2007: 20-21), Phillips (2011: endnote 12), Plourde (2016: 197, no. 18; 2017: endnote 5), and Simons (1985: 333) for the view that the relevant terms are interchangeable. See Bartunek (forth.: endnote 10) for an opposing view.

named which constitute the subject matter of a proposition, for it is the showing of those objects' relatedness which constitutes possession of a sense. Wittgenstein writes, of substance, that 'It is form and content' (2.025). Objects are form, for the places in logical space constitutive of the 'fixed form' (2.026) of any possible world reduce to their combinatorial potentialities. Objects are content because they are what propositions are *about*[204]. That objects may not be identified with the forms of facts or propositions, combined with the claim that it is objects which constitute the subject matter of propositions, explains why forms are not capable of being sensibly discussed through the use of either '*ab*' or '*ba*'. Since '*ab*' and '*ba*' constitute all of the available elementary propositions, we may conclude that the logical form of a fact or proposition may not be discussed by any elementary proposition, on Wittgenstein's view.

Where no elementary proposition succeeds in effecting an assertion about a logical form, neither may a compound one. Wittgenstein remarks, in his 'Notes on Logic', that 'what corresponds in reality to compound propositions must not be more than what corresponds to their several atomic propositions. Molecular propositions contain nothing beyond what is contained in their atoms; they add no material information above that contained in their atoms' (1961b: 100). This reductive approach to truth-functionality is also made explicit in the *Tractatus*[205]:

> A proposition is an expression of agreement and disagreement with truth-possibilities of elementary propositions. (4.4)
>
> Truth-possibilities of elementary propositions are the conditions of the truth and falsity of propositions. (4.41)
>
> It immediately strikes one as probable that the introduction of elementary propositions provides the basis for understanding all other kinds of proposition. Indeed the

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[204] See also 4.122.
[205] For discussions of why Wittgenstein adopted this view see MacBride (2018: 215), as well as Sullivan and Johnston (2018: 163-164).

understanding of general propositions *palpably* depends on the understanding of elementary propositions. (4.411, emphasis original)

As is well-known, quantified propositions may, in Wittgenstein's view, be reduced to truth-functional combinations of elementary ones[206]. A proposition employing a quantifier cannot, therefore, achieve an expressive feat greater than does the collective effort of those propositions figuring in the truth-functional combination to which the quantificational proposition is reducible. In turn, truth-functionally complex propositions do not express more content than is expressed by those elementary ones occurring as operands. Given that no elementary proposition makes a claim about a logical form, then, we may conclude that no proposition whatever makes such a claim.

What has not yet been explained, however, is Wittgenstein's claim that to represent logical form would require that we 'station ourselves outside logic, that is to say outside the world' (4.12). We have so far identified the forms of propositions with places in logical space. Consequently, we may interpret remark 4.12 as saying that in order to represent places in logical space, we should have to station ourselves outside of logic. A natural query is this: what is logic, such that our ordinary position is *inside* of it? Early in the *Tractatus* Wittgenstein says, '[…] Logic deals with every possibility and all possibilities are its facts' (2.0121). Logic in this context, I submit, is equivalent to the whole of logical space. The whole of logical space consists of all the places in logical space. These places, in turn, are reducible to the forms of objects. What it means to be stationed 'inside' logic is for our position to be inside logical space, where to be positioned inside logical space is simply to be in a position to represent those things and only those things that are possible. To be positioned outside of logical space is, therefore, to be in a position to represent things that are not possible. Given the

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[206] See remark 5.52.

characterisation just given of what it is to be positioned outside of logical space, we may

conclude that there is no such position; we cannot be stationed outside of logic. Wittgenstein

takes this line where he says,

> It used to be said that God could create anything except what would be contrary to the laws of logic. – The truth is that we could not *say* what an 'illogical' world would look like. (3.031, emphasis original)

We could not say what an illogical world looked like because we are not, in Wittgenstein's

view, in a position to determine, through the use of propositions, places outside of logical space.

This is simply because there are no places outside of logical space; logical space by definition

consists of all the places there are.

The puzzle which now confronts us is that of understanding precisely why we should

have to be positioned 'outside of logic' in order to *say* things about the logical forms of facts

or propositions. The question is this: why should our being able to represent the forms of

propositions require that we be in a position, *per impossibile*, to represent that which lies

outside of the totality of logical space? The totality of logical space consists entirely of places

in logical space reducible to possibilities for objectual combination. Moreover, what an

elementary proposition represents is just such a possible combination of objects, and what it

says is that the possibility it represents obtains. In order to say something about the logical form

of a fact or proposition, we should have to determine, through the use of a proposition, a place

in logical space *not* reducible to the combinatorial potential of some objects. To see why, we

must re-deploy our example of a world in which a and b exhaust the objects, ab and ba exhaust

the possibilities for objectual combination, and 'ab' and 'ba' exhaust the available elementary

propositions. We have seen that what the propositions 'ab' and 'ba' represent are that the

relevant objects are combined in certain ways. It follows, then, that amongst the *available* elementary propositions, none makes a claim about either of those combinatorial potentialities which jointly comprise the totality of logical space. Rather, what each of the available elementary propositions say is something about the objects a and b. Moreover, and as I have mentioned, no compound proposition contributes any content over and above that expressed by 'ab' and 'ba'. Any proposition, then, which says something about a logical form can be neither 'ab' nor 'ba', nor a compound thereof, for neither of these propositions make a claim of the relevant kind. Any proposition must, if it is to represent anything at all, share a logical form with that which it represents. The only logical forms available, though, are those reducible to the combinatorial potentialities possessed by both a and b. Moreover, both of the logical forms available are *already* in use, as it were, by propositions which do not themselves make claims about logical forms. Consequently, any proposition which does assert a claim about a logical form must itself possess a logical form not reducible to the combinatorial potential of the objects a and b. Vitally, there are no combinatorial potentialities not so reducible, for, as Wittgenstein says, 'objects contain the possibility of *all* situations' (2.014, emphasis added). There are no possibilities to be found in the totality of logical space which are not 'contained' in the combinatorial potential of objects. This is because possibilities, or places in logical space, are reducible to those objects whose combination constitutes the realisation of the relevant possibilities. A proposition which said something about the logical form of a fact or proposition would have to share its form with what it depicts in order that it made sense, and, moreover, its form should have to be a combinatorial possibility not found in logical space. Such a proposition, therefore, would be one which is 'outside of logic', for its form may not be identified with any combinatorial potentiality found 'within' logical space. There is, in other words, no provision for the representation of a logical form to be found in those possibilities

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reducible to the combinatorial potential of objects. The attempt to say something about logical forms, therefore, must fail. Wittgenstein says,

> It is as impossible to represent in language anything that 'contradicts logic' as it is in geometry to represent by its co-ordinates a figure that contradicts the laws of space, or to give the co-ordinates of a point that does not exist. (3.032)

The space of possibilities, or the 'points' of our grid, are determined by the objects a and b. The attempt to represent a place in logical space which is not determined by those objects, in order to say that such a place is occupied, is therefore tantamount to giving the co-ordinates 'of a point that does not exist'.

I have described this argument through the use of an example in which logical space consists of possibilities reducible to the combinatorial potential of just two objects. The argument, though, is clearly generalisable. Nothing was assumed of either a or b to distinguish them from any other objects. All that was stated of the relevant objects was that neither a nor b themselves count as the logical form of a fact or proposition. This was not a mere stipulation but followed from the conception of logical form I have been advancing throughout this chapter.

I have aimed to give an interpretation of Wittgenstein's conception of propositional form which contributes to an understanding of remark 4.12. I have described propositional forms as places in logical space reducible to the combinatorial potential of the objects serving as referents of the proposition's names, and determined by a proposition's exhibiting a structure. This understanding of propositional form makes clear the relationship between the forms of objects and the forms of propositions, as well as providing us with the resources to understand 4.12. Remark 4.12, I have shown, constitutes an argument to the effect that the

representation of propositional forms would require the determination of a place in logical space not reducible to the combinatorial potential of some objects. There are no such places in logical space not so reducible, and consequently we cannot, according to Wittgenstein, represent propositional forms.

5.4

Competing Views

5.4.1

Wittgenstein's holding that the form of a proposition may not be represented has been subject to numerous other treatments, some of which I shall now discuss. I shall argue that each of these interpretations is mistaken, and I shall distinguish my own view from those I describe.

Russell, in his introduction to the *Tractatus*, discusses what he takes to be Wittgenstein's claim that certain things cannot be said *in* a language:

> These difficulties suggest to my mind some such possibility as this: that every language has, as Mr Wittgenstein says, a structure concerning which, in the language, nothing can be said, but that there may be another language dealing with the structure of the first language, and having itself a new structure, and that to this hierarchy of languages there may be no limit. (*xxiv*)

Pears says

> Why is it impossible for factual language to express the fundamental condition of its own existence?
>
> This is a difficult question. It sends us to the theory of language of the *Tractatus*. A short answer to it would go like this: if factual language could contain an analysis of the conditions of its own application, the language in which it analysed them would itself depend on further conditions, which would still remain unanalysed, and so on to infinity. […] Factual sentences, like pictures, present a view of the world, but they do not present

a view of what made the original view possible, and, if they did start doing that, they could never finish the task. (1987: 7)

Russell argues that although a proposition could not, on Wittgenstein's view, represent certain features of itself, a higher-order proposition could represent those features. Pears likewise suggests that propositions *can* 'express the fundamental conditions' of some other proposition's existence, but that the chain of such an analysis must necessarily evade termination. Pears argues that sentences cannot depict the conditions of their own possibility, or their form, on the grounds that such a task could never be completed. A proposition depicting the conditions of possibility of another would itself require a further proposition to depict its form, and so on *ad infinitum*. In effect both Russell and Pears present a non-vicious regress in which propositions of a given order may represent the forms of those lower in order. Pears takes the regress to be problematic precisely on account of its infinitude, whereas Russell takes it to counter Wittgenstein's assertion that certain features of propositions cannot be sensibly discussed. Both of these views, however, rest on a mistaken interpretation of Wittgenstein's position. It should be clear, from what I have said above, that Wittgenstein did not believe that the form of a proposition is capable of being discussed by *any* proposition, for propositional forms are not *things*, or objects, capable of being named. In other words, remark 4.12 rules out the possibility of a proposition's representing either its own form, *or* the form of another fact. Wittgenstein draws this conclusion, I have argued, on the grounds that forms simply do not figure as objects in the ontology of the *Tractatus*. We must ask then why both Pears and Russell felt that it was consistent with either Wittgenstein's view or an improvement upon that view that a proposition might be capable of depicting the form of another[207], if not its own.

Two remarks in particular demonstrate that in Wittgenstein's view propositions may not represent their own forms. Wittgenstein says, 'A picture cannot, however, depict its

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[207] I here assume that where Russell, in the passage quoted, talks of 'structure' he implicitly conflates form with structure, and that therefore we might, without injury to his proposal, replace 'structure' with 'form'.

pictorial form: it displays it' (2.172), as well as 'A picture cannot place itself outside its representational form' (2.174). In both remark 2.172 and 2.174 Wittgenstein clearly emphasises the impossibility of a proposition representing its *own* form[208]. There is in these remarks the expression of a very natural thought about pictures. Wittgenstein's own example is illuminative. In the *Notebooks* Wittgenstein presents a drawing of two stick figures fencing and says, 'It must be possible to demonstrate everything essential by considering this case' (1961: 7). The lines of each figure stand for feet, legs, torsos, arms, and weapons variously. The drawing represents the combatants as fighting with one another. The drawing does not, however, represent that which enables it to carry out the relevant representation. What enables the drawing to represent the scene is, at least in part, the fact that the elements of the drawing stand for the items just listed. The drawing, however, does not, as well as representing the figures as fencing, represent *the fact that it may do so*. The drawing does not, for instance, represent the fact that two lines in particular stand for arms, while simultaneously representing those arms as carrying weapons. That the elements of a picture stand for certain items is presupposed by the picture's representing what it does; the picture does not represent the presuppositions of its own possibility. On this interpretation[209] of remarks 2.172 and 2.174, it is possible that a proposition, while incapable of representing its own form, could represent the form of another. The elements of a proposition p may, for instance, stand for those of q, in order that something be said of q's composition. Remarks 2.172 and 2.174 then serve to rule

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[208] Wittgenstein also says, 'No proposition can make a statement about itself, because a propositional sign cannot be contained in itself (that is the whole of the 'theory of types')' (3.332). Remark 3.332, in my view, represents a line of thought separate to 2.172 and 2.174, and consequently I do not explore it in detail here. See Ruffino (1994) for an extended discussion.

[209] See Kenny (1973: 53) for an alternative reading. According to Kenny, Wittgenstein held that a proposition could not represent its own form because such an item's sense would determine its truth-value. Wittgenstein certainly did hold that one cannot, merely through grasping the sense of a proposition, determine its truth-value; see (1961: 23; 1961*b*: 111; *TLP*: 2.223; 4.05). Kenny's interpretation then is consistent with Wittgenstein's views. This interpretation, however, exchanges the intuitive appeal of remarks 2.172 and 2.174 for an argument relying on a controversial and notorious Tractarian doctrine. Consequently, I hold that an application of the principle of charity favours my approach, on which the notion of a picture representing its own form is considered, intuitively speaking, barely intelligible.

out the possibility of *self-referential* pictures. Remark 4.12, by contrast, rules out the possibility of representing any propositional form whatsoever; in other words, 4.12 makes a far stronger claim than does either 2.172 or 2.174. The infinite regress which both Russell and Pears describe is a regress which only launches on the assumption that 4.12 is *false*. Russell's proposed corrective to Wittgenstein's position therefore assumes exactly what Wittgenstein denies, namely that the form of a proposition is capable of being represented by another proposition. Pears evidently makes the same assumption. Russell and Pears, I submit, both interpret Wittgenstein's claim that certain features of language cannot be sensibly expressed by tacit appeal to remarks 2.172 and 2.174 to the *exclusion* of 4.12. Insofar as both Russell's and Pears' understanding of Wittgenstein involves commitment to an assumption flatly denied by 4.12, we must reject their views as inadequate if intended to capture either Wittgenstein's position or some unobjectionable improvement upon it.

Insofar as remarks 2.172 and 2.174 express a weaker claim than does 4.12, we ought not look to those earlier remarks for an explanation of the latter. This much should be clear from my interpretation of the respective remarks; I do not, for instance, appeal to either 2.172 or 2.174 in my interpretation of 4.12. Remark 4.12 does not, in my view, merely constitute the continuation of a line of thought first argued for in 2.172 and 2.174, though taken to its natural conclusion. Morris has argued differently:

> What the general theory of representation tells us is that no representation can represent its own form; but that seems to leave it open for the form of one representation to be represented by another representation. Accordingly, we might think that, although no sentence could represent its *own* form — state its *own* sense — it might be possible for the form of one sentence to be represented by another. But this possibility is what is explicitly ruled out by 4.1212: no sentence can state the form of any sentence. *This claim is only legitimate if every sentence has the same form*. (2008: 151, emphasis added)

Wittgenstein, where he argues that no propositional form may be represented, is, according to Morris, continuing the line of thought present at 2.172 and 2.174[210]. Wittgenstein, on Morris' view, holds that no propositional form may be represented because no proposition can represent its own form and, crucially, every proposition has the *same* form. Morris[211] derives support for this interpretation from Wittgenstein's claim that there is a general form of the proposition, something every proposition has in common. Wittgenstein's claim that no propositional form may be represented is *only legitimate*, according to Morris, if every proposition has the same form. Morris here assumes that the only way in which support for 4.12 could be found is through an extension of the line of thought present in Wittgenstein's denial of self-referential pictures. This, it should be clear, is mistaken. I have, above, shown why Wittgenstein held that the representation of forms would require our being positioned 'outside logic'. Moreover, my interpretation did not appeal to Wittgenstein's denying the possibility of self-referential pictures. It is in fact important that the case for 4.12 be re-constructed without appeal to the intuition at work in remarks 2.172 and 2.174, for that intuition is readily contested by the counter-intuition that sentences can and do refer to themselves. It would diminish the strength of 4.12 to construe it as rooted in an intuition concerning the inability of pictures to represent the presuppositions of their own existence, where that intuition is matched by another concerning self-referential sentences such as 'this sentence is composed of words'[212].

Morris, because of remark 6, interprets Wittgenstein as holding that propositions do not differ in form. It not obvious though, in my view, why the existence of a general propositional form should render propositions incapable of possessing distinct forms. Morris

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[210] Black also writes, of remark 4.12, that 'The main argument, that a proposition cannot get 'outside' logic, is reminiscent of what has already been said at 2.174' (1964: 188). It should be clear, from what I have said, that I take Black to be mistaken where he interprets 4.12 as rehearsing 2.174.

[211] See Morris (2008: 231). It is clear that Wittgenstein does hold that there is a general form of the proposition; see (1961: 45; 75; 76; 89; 1961*b*: 112; 117; 118; 1963: 4.5; 5.47-5.471; 6).

[212] In fact, it is a live option to interpret 2.172 and 2.174 as expressing claims which follow from 4.12, rather than vice versa. This strategy involves a commitment to the explanatory priority of certain later passages over earlier ones. I shall not pursue this line of thought further here.

argues that sentences each possess the same form because they are all capable of standing in the same truth-functional combinations with one another:

> If a whole sentence can be placed in a certain position within a sentence, then any other sentence can be placed in the same position. Every sentence has the same possibilities of combination with other sentences as every other. (2008: 231)

Propositions, according to Morris' reading, possess exactly the same combinatorial potential, and therefore possess the same form. Morris here assumes that a proposition's form is the potential for it to combine with others. The form of a proposition is 'the possibility of structure', on this view because propositions, like objects, essentially contain the potential for combining with others in structures[213]. This is a conception of propositional form according to which propositions possess form in a fashion precisely analogous to that of objects; according to this suggestion a proposition's form is its combinatorial potential. Recall:

> The fact that the elements of a picture are related to one another in a determinate way represents that things are related to one another in the same way.
>   Let us call this connexion of its elements the structure of the picture, and let us call the possibility of this structure the pictorial form of the picture. (2.15)

Here Wittgenstein characterises the form of a picture *not* as the possibility of it combining with others in a molecular structure, but the possibility of *its* structure. The structures of different pictures are different, and consequently we must conclude that the possibilities of these structures are similarly different. According to the conception of propositional form at work in 2.15, propositions need not possess identical forms. That propositions possess different forms is required by Wittgenstein's conception of inference, according to which 'If the truth of one

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[213] See also (4.1241), in which it is strongly indicated that there such things as different forms, but that they cannot be sensibly distinguished from one another in language.

proposition follows from the truth of others, this finds expression in relations in which the forms of the propositions stand to one another […].' (5.131). It is extremely difficult to understand this conception of inference on the view that all propositions possess the same form. We may conclude, then, that Wittgenstein did indeed hold that propositions possess forms distinct from one another. This conclusion concords with the conception of propositional form described by 2.15. That Wittgenstein describes a feature common to all propositions ought not lead us, therefore, to presume that they do not also exhibit different forms. There appears to be room in the Tractarian position for *both* the general form of a proposition and the particular forms of propositions[214]. That the *Tractaus* contains room for both uses of the word 'form' accords well with the proviso made at the beginning of this chapter, namely that we should not expect Wittgenstein to have used the same word across different contexts without variation in meaning. Contrary to Morris' claim, it is not the case that 4.12 is only understandable by appeal to the view that propositions cannot represent their own forms, combined with the claim that propositions all share the same form. I have, above, demonstrated how Wittgenstein arrives at 4.12 without appealing to the earlier remarks Morris cites.

McGuinness writes

> Wittgenstein says of *Form* that the logical form of reality cannot be represented in or expressed by a proposition, but is exhibited or shown by a proposition (4.12's passim, 6.124). A rough paraphrase of this for our purposes would be: the logical form of a proposition and of the fact that it states is perceived *eo ipso* by anyone who understands the proposition: but since, in order to understand any proposition Pn about proposition p, you must already understand p, therefore the proposition Pk ascribing a certain logical form to p is bound to be otiose. (2002*b*: 68)

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[214] The relationship between the general form of a proposition and the particular forms exhibited by propositions lies beyond the scope of the present discussion. The connection between the possibility of truth-functional combination and the forms of propositions has been explored by Daniele Mezzadri in his (2013). See also Winch (1969: 7-8).

McGuinness evidently holds that the representation of a proposition's form would be 'otiose', or redundant, on the grounds that grasping the form of p is a prerequisite for understanding a proposition representing that form. Consequently, the representation of a proposition's logical form by another will never count as informative; and it is precisely this failure to inform which, according to McGuinness, remark 4.12 concerns. In my view though, McGuinness here misses the force of Wittgenstein's complaint. On Wittgenstein's view, McGuinness argues, the representation of a proposition's form by another will be necessarily superfluous to requirements, for what information is transmitted by a proposition representing the form of another is just that which a competent speaker must grasp in order to understand the target proposition. This reading, however, does not illuminate Wittgenstein's claim that the representation of a proposition's form requires what is impossible, that a place outside of logical space exists. In fact, and as I have argued above, Wittgenstein seeks to undermine the intelligibility of a proposition transmitting information of the relevant kind at all. Wittgenstein does not hold that *what* is transmitted is otiose, but rather that there is *no such thing* as the transmission of information concerning form which bears a factual character. McGuinness' argument from redundancy therefore involves a commitment to the possibility of precisely that which Wittgenstein argues is impossible, namely the representation of propositional form.

I have distinguished my understanding of Wittgenstein's claim that certain features of propositions cannot be represented in language from a variety of interpretations offered by other commentators. Interpretations of the relevant claim which appeal in large part to remarks 2.172 and 2.174 are, I have shown, inadequate. Moreover, arguments from the redundancy of propositions representing propositional forms fail to capture the full force of the claim that such propositions are *not* possible.

5.5

Unity and Nonsense

5.5.1

Having offered my own view of Wittgenstein's argument to the effect that the form of a proposition cannot be represented, as well as having distinguished that view from those of other Wittgenstein scholars, we are now in a position to examine the bearing of 4.12 on the subject of propositional unity.

The claim that a given proposition is unified is tantamount, in Wittgenstein's view, to the claim that a given proposition exhibits a *structure*. The question of how the unity of a proposition arises is therefore a question about the *possibility of structure*. We have seen that in Wittgenstein's view form *is* the possibility of structure. Questions concerning the possibility of unity are, therefore, questions which concern the forms of propositions. In other words, to ask how the structure of a proposition is possible is to ask after the nature of its form, for the form of a proposition just is the possibility of its structure. Crucially, and as should by now be clear, Wittgenstein did not think that it was possible to sensibly inquire after the nature of a proposition's form. The form of a proposition is not itself capable of being represented, on Wittgenstein's view.

Wittgenstein, we saw, twice asks questions plausibly interpreted as concerning the unity of propositions. On neither occasion of his asking such a question, though, does Wittgenstein attempt to formulate an answer. It is in my view significant that Wittgenstein does not attempt to answer the questions he raises. Wittgenstein writes

> When the answer cannot be put into words, neither can the question be put into words.
> The *riddle* does not exist.

If a question can be framed at all, it is also *possible* to answer it. (6.5, emphasis original)

Wittgenstein claims that it is a necessary condition on a question's being sensible that it is, in principle, possible to answer it. We have seen that in Wittgenstein's view questions concerning the possibility of structure, or form, are not capable of being answered. No statement purporting to describe the form of a proposition, or the possibility of a proposition's structure, is sensible:

It is impossible to distinguish forms from one another by saying that one has this property and another that property: for this presupposes that it makes sense to ascribe either property to either form. (4.1241)

I have shown, above, precisely why it does not make sense in Wittgenstein's view to ascribe properties to forms. Forms, as I have emphasised, may not figure as the subject matter of propositions, for they may not, according to Wittgenstein, be represented. To the question of how the names of a proposition come to be combined into a structure, then, nothing may be *said* in answer. It follows, given remark 6.5, that any question the answer to which must involve the notion of form is, by Wittgenstein's lights, itself a specimen of nonsense.

Wittgenstein writes

The correct method in philosophy would really be the following: to say nothing except what can be said, i.e. propositions of natural science – i.e. something that has nothing to do with philosophy – and then, whenever someone else wanted to say something metaphysical, to demonstrate to him that he had failed to give a meaning to certain signs in his propositions. Although it would not be satisfying to the other person – he would not have the feeling that we were teaching him philosophy – *this* method would be the only strictly correct one. (6.53, emphasis original)

With respect to the question of how propositions come to have a structure, we might, given remark 2.033, be tempted to investigate the notion of form in pursuit of an answer.

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Wittgenstein's advice, however, is not to proceed along these lines. Rather, when confronted with metaphysical quandaries, we ought to identify which of the signs we have attempted to employ fails to possess a meaning. Succeeding in the exercise just described is bound not to satisfy us, but it is nonetheless correct. In the case of the problem of the unity of the proposition, the offending sign is: 'form'. Wittgenstein does not, in the *Tractatus*, attempt to answer the question he raises at remark 4.221. Wittgenstein says, of the problems of philosophy,

> I am, therefore, of the opinion that the problems have in essentials been finally solved. And if I am not mistaken in this, then the value of this work secondly consists in the fact that it shows how little has been done when these problems have been solved.

Wittgenstein's failure to answer the question of propositional unity, having explicitly raised it, and having claimed to solve the problems of philosophy, would appear rather an egregious omission on the assumption that an answer *could* be formulated. Wittgenstein's not providing such an answer then is good evidence that he did not feel that an answer could be provided. We must conclude that on Wittgenstein's view, the problem of the unity of the proposition dissolves upon inspection, for its putative subject matter, namely the forms of propositions, are not capable of being sensibly discussed.

At the beginning of chapter four I said that I would focus my attention on the problem of the unity of propositions, and only having completed that discussion would I extend my interpretation to the problem of the unity of facts more generally. To carry out the relevant extension it is only necessary to acknowledge that in Wittgenstein's view the forms of propositions are identical to the forms of those facts they depict. If the forms of propositions are not capable of being sensibly discussed, then neither are the forms of facts capable of being depicted by propositions. On the assumption that the problem of the unity of facts involves, in a manner analogous to that of the unity of propositions, asking after the possibility of factual

structure, we may conclude that Wittgenstein's response to each difficulty is identical. In other words, the possibility of factual structure is a notion identical to that of form. Forms, whether of facts or propositions, cannot be sensibly discussed; *ergo*, the problem of the unity of facts is, in Wittgenstein's view, a spurious one.

Conclusion

What I have attempted to demonstrate is the extent to which several of the earliest analytic philosophers were able to refuse the monistic view of Bradley, without, in their view, having to have answered Bradley's challenges on their own terms. The demand for a reductive analysis of those complex phenomena encountered in science, logic, and the realm of common sense, is a demand whose force was resisted in the first part of the twentieth century. Both Russell and Moore took themselves to have been absolved of the requirement that they satisfy Bradley's methodological requirements. The novel methodologies adopted by Russell and Moore served, in their view, to remove certain explanatory obligations rooted in an idealist tradition from which they had been released.

The step from feeling immune to Bradley's methodological demands, to viewing the philosophical problems associated with those demands as meaningless, was a step taken by Wittgenstein. Wittgenstein was led, from an investigation into the logic of language, to the conclusion that metaphysical queries of the kind voiced by Bradley were not sensible at all. I have argued that those who have claimed for Wittgenstein a metaphysics of propositions which was designed to circumvent Bradley's concerns are in error. What unites Russell, Moore, and Wittgenstein, then, is that their responses did not consist in formulating metaphysical analyses aimed at satisfying Bradley's demands. One may query whether or not Russell's, Moore's, or Wittgenstein's position is satisfactory. What I hope to have shown is beyond dispute, though, is the extent to which these respective approaches promise to deliver one from an explanatory obligation, the demands of which are sufficiently strict to ensure that their acceptance involves entangling oneself in a metaphysical web difficult, once spun, to unspin.

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