

MAKING THINGS SIMPLE

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A central feature of the *Tractatus* is its logical atomism: the world divides into *facts*, and facts consist of configurations of *objects*. Further, the world's being this way is essential for its being pictured or represented. Indeed, any *possible* world must consist of configured objects, facts; only worlds of that sort could be pictured, hence only worlds of that sort could be imagined or described. Against this background, Wittgenstein's claim that objects make up the substance of any possible world may be seen to stem from the requirements of the picture theory rather than, say, from some hidden metaphysical doctrine about substance. A necessary condition of a state of affairs being represented is that the state of affairs exhibit a determinate *structure*, i. e., that it consist of objects arranged in some definite way.

There are many reasons why this is an interesting view. It is clear, for example, that many of those presently engaged in theorizing about perception, memory and the character of representation are committed to something very like the picture theory (and thus, I think, committed to something very like logical atomism). Philosophers and psychologists who regard memory as the storage of information about the past in memory traces often seem to have in mind structural analogues when they envision the storage mechanism.¹ Similarly, theorists of perception sometimes appear to adopt the view that structural counterparts to goings-on in the world are

¹ For a more complete discussion of this point cf. J. Heil, "Traces of Things Past", *Philosophy of Science*, 45, 1978, pp. 60-67.

produced in the heads of perceivers. It would be unreasonable, of course, to saddle all those who think in these ways with the entire mechanism of the picture theory (which probably comes to the *Tractatus* doctrine as a whole). But it is not unreasonable to require such theorists to examine the conception of the world that their views seem to entail.

In what follows I shall not attempt to discuss particular theories of memory or perception, though I shall point out certain logical parallels with the *Tractatus* exhibited by many such theories. I shall argue, however, that the *Tractatus* view of the world defended by Wittgenstein is probably wrong and that this suggests serious difficulties for defenders of logically similar views of perception and memory.

Wittgenstein's proof for simples. I shall discuss the argument which Wittgenstein seems to have in mind in the *Tractatus* in two stages. First, I want to take up the account offered by Griffin² and suggest what appears to be a difficulty for that account. Then I shall offer a slightly different construal of the argument which establishes what I am not certain that Griffin's version does establish.

Wittgenstein, to my knowledge, nowhere offers an explicit and detailed proof for the existence of simple objects. It is doubtful, however, that the *Tractatus* can be faulted for this omission. Wittgenstein felt (I believe justly) that the *Tractatus* ontology was unavoidable once one embraced the picture theory, the theory that states of affairs are represented via structural analogues. It would thus have been redundant in a book not noted for its redundancy to offer a separate argument for the existence of simples. There are probably other reasons why such an argument would violate the tenets of the *Tractatus*, reasons, for example, having to do with the saying-showing dichotomy. I do not mean to deny the importance of such considerations. I want only to suggest that both the doctrine of simple objects and Wittgenstein's omis-

² James Griffin, *Wittgenstein's Logical Atomism*, Seattle: University of Washington Press, 1965.

sion of an explicit and detailed argument for that doctrine make a kind of sense given the requirements of the picture theory.

Now, strictly speaking, it's not true that Wittgenstein offers *no* argument for the existence of simple, elementary objects. The early 2's contain both an account of the character of objects and the following argument:³

2.0211 If the world had no substance, then whether a proposition had sense would depend on whether another proposition were true.

2.0212 In that case we could not sketch out any picture of the world (true or false).

Since 2.021 characterizes objects (*simples* — cf. 2.02) as the substance of the world, we may paraphrase the passages above as follows:

2.0211 If the world did not consist of simple objects, then whether a proposition had a sense would depend on whether another proposition were true.

2.0212 If *that* were so, we couldn't make pictures of the world (true or false).

We can, of course, "make pictures of the world", represent states of affairs; thus it's not the case that the truth of every proposition depends upon the truth of some further proposition and it *is* the case that the world consists of simple objects.

It would be ridiculous to pretend that any of this is very clear or that the two conditional sentences which make up the first two premises of the argument are obviously true. Griffin, however, provides an account of the argument which is at

³ All references of the *Tractatus* are taken from the Pears and McGuinness translation (L. Wittgenstein, *Tractatus Logico-Philosophicus*, Trans. D. F. Pears and B. G. McGuinness, London: Routledge and Kegan Paul, 1961).

once plausible and compelling. Difficulties arise with Griffin's construal of the argument only when one examines the character of the simple objects which it establishes. Less vaguely, Griffin's version of the argument seems to establish the need for objects which are logically simple in the sense that they may be referred to by names, but not the need for objects which are ontologically, as it were, metaphysically, simple. If this is so, then there appears to be a serious problem for Griffin's interpretation. It is pretty clear that Wittgenstein can settle for nothing less than an ontology of genuinely simple (absolutely, ultimately simple) objects, and that mere relative simplicity, simplicity within a conceptual scheme, won't do. In fact, it appears that it is just such a notion of *relative* or linguistic simplicity which Wittgenstein wants to fend off in 2.0211 when he says that the nonexistence of simples would require that, for any proposition to have a sense, some further proposition would have to be true. This obscure claim, rightly construed, contains a key to the understanding of the doctrine of simple objects and, in consequence, a key to the atomistic implications of the picture theory. I am, however, jumping ahead. First, Griffin's account.

Griffin's account of the argument. We might begin by restating the argument as it appears in the *Tractatus* passages cited already.

1. If the world did not consist of simple objects then whether a proposition had a sense would depend on whether another proposition were true.
2. If a proposition's having sense depended on whether another proposition were true then we could not make pictures of the world.
3. We can, however, make pictures of the world.
4. Therefore, the world consists of simple objects.

The argument thus stated is valid; the question, however, is whether or not it is sound. If we grant premise 3, we are left with the problem of motivating the conditionals in premises 1 and 2. How might we do this? In the paragraphs which follow I should like to sketch out the line I take Griffin to be following in his construal for the argument.⁴

Unless there were objects, simples, there could be no names, only descriptions. Descriptions, however, are essentially indeterminate. Why (and so what)? Wittgenstein argues that objects alone can be *named*, complexes (configurations of objects) can only be *described*. If we attempt to specify a complex by means of a name, *n*, the name would be nothing more than a "disguised description".

Consider the claim that descriptions are unavoidably indefinite. We may use descriptions to single out particular states of affairs, but we should always realize that any given description might be applied to different particulars on different occasions. Thus, although on a certain occasion I may employ the description "the book lying on the table" to indicate a particular book lying in a particular way on a particular table, the very same description (in one obvious sense of "same") may be used by me or by others on different occasions to call attention to a different book on a different table, etc., some altogether different state of affairs. A name, in contrast, is the sort of thing which stands for a particular object regardless of the occasion of its use. The employment of descriptions, then, to identify particular states of affairs, hinges on the fact that descriptions are (in some sense) analyzable into names: to the extent that we succeed in referring to, e. g., a particular book on a particular table by means of a description shows that, on the occasion on which the description is employed, we are able to construct an appropriate analysis. This is what the *meaning* and the *understanding* of a description come to. Our knowledge of the language of which the description is a part takes us from the description

⁴ Cf. Griffin, Chs. 4 and 11.

to its constituent names; and the names take us to the state of affairs being described. And a state of affairs is always a particular state of affairs, that is, not simply a particular configuration of objects but a configuration of particular objects.⁵

Suppose we were to attempt to say something definite about the world without making use (in the sense described above) of names. A proposition containing a description —“the book is lying on the table”, for example— won’t do as it stands. It won’t do because it is insufficiently definite: “the book” might stand for an enormous number of books than the one the speaker has in mind. Thus, we shall suppose that, on the occasion of its use, the speaker *fits* the sentence (“the book is lying on the table”) onto a more analyzed, hence more definite proposition. It isn’t, of course, that the speaker is in a position to say what the analysis is (cf. 4.002):

Man possesses the ability to construct languages capable of expressing every sense, without having any idea how each word has meaning or what its meaning is —just as people speak without knowing how the individual sounds are produced.

Everyday language is a part of the human organism and is no less complicated than it.

It is not humanly possible to gather immediately from it what the logic of language is.

Language disguises thought. So much so, that from the outward form of the clothing [alone] it is impossible to infer the form of the thought beneath it, because the outward form of the clothing is not designed to reveal the form of the body, but for entirely different purposes.

The tacit conventions on which the understanding of everyday language depends are enormously complicated.

To understand ordinary propositions, then, speakers and

⁵ Cf. Wittgenstein’s *Notebooks 1914-16*, Trans. G. E. M. Anscombe, Oxford: Basil Blackwell, 1969, pp. 67f, 70.

hearers must invoke complicated analyses which serve to convert strings of symbols which are essentially indefinite into concatenations of symbols which are perfectly definite. We need to see, according to Wittgenstein, that definiteness is achieved only at the level of analysis at which names appear.⁶

Wittgenstein notoriously refused to provide any sort of helpful account of what goes on in analysis. In alluding to the Theory of Descriptions, 4.0031 supplies a hint. But Griffin, I think, provides convincing reasons for supposing that Russellian analyses could not be what Wittgenstein has in mind.⁷ The job analysis has to perform is that of making propositions more definite. Since the indefinite propositions we have in mind describe complexes and since descriptions of complexes are indefinite just because they hold of innumerable complexes with the same logical form, we have a right to expect that any analysis will consist in the *refinement* of whatever descriptions we begin with. Parallels in ordinary discourse are not difficult to think of:

“Get me the book, will you?”

“*Which* book, there are dozens of them?”

“The book on the shelf.”

“Well, which one?”

“That heavy one.”

As we refine our description (from “the book” to “the book on the shelf” to “the heavy book on the shelf”), we make it more and more definite and thus applicable to a narrower and narrower range of states of affairs. Of course, we still have not made it utterly definite; there are other heavy books on shelves elsewhere. But in most cases we may rely on the hearer to do whatever other honing down needs to be done.

In using this example of description-refining, I do not mean

⁶ Cf. 4.22, 4.23.

⁷ Cf. pp 42ff.

to suggest that this is very close at all to what Wittgenstein had in mind. The point rather is to suggest the direction which analysis will have to take. Nor do I mean to attribute this account to Griffin. His view is influenced by what Wittgenstein says in another place about analysis.⁸ Thus, “The book is lying on the table” would, in the first instance, be analyzed into the propositions

- (i) the pages are attached to the spine and the spine is attached to the cover
- (ii) the pages are on the table
- (iii) the spine is on the table
- (iv) the cover is on the table

Odd as such an “analysis” sounds, it does appear to satisfy the account cited above. Further, and more importantly, it fits the remarks at 2.0201:

Every statement about complexes can be resolved into a statement about their constituents and into the proposition that describes the complex completely.

In the present case the proposition that “describes the complex completely” would be something like (i); the remaining bit of “analysis” simply furnishes an account of the constituents.

In the case both of the present “analysis” and that discussed earlier (involving the heavy volume on the shelf), we refine a description into what might be regarded as a finer-grained description. Nevertheless, as long as we are left with descriptions —however fine-grained— we shall be stuck with a degree of indefiniteness. A description may apply to *any* complex with the appropriate structure. Only if we can somehow move from descriptions to names will we be

⁸ Namely in *Philosophical Investigations*. Trans. G. E. M. Anscombe, Oxford: Basil Blackwell, 1953, Para. 60.

able to refer to particular states of affairs as distinct from all others.⁹

To see how these remarks fit the argument at 2.0211-2.0212, more specifically how they fit what we have called premise 2 of that argument, notice that in order for the original proposition (“The book is lying on the table”) to be *about* anything, in order for it to have a *sense*, proposition (i) must be true. Proposition (i) describes the complex (book). If there isn’t any such complex, then the proposition “The book is on the table” can’t have a sense, can’t be true *or* false. But now we are faced with a potential regress. For consider proposition (i). For it to be true, *it* must have a sense, i. e., the descriptions contained in (i) must each be refined in such a way that their application is more narrowly specified, just as the description “the book” had to be refined in the original analysis. It takes little imagination to see that this procedure will have to be carried on indefinitely unless one eventually reaches a level of analysis where names completely replace descriptions.¹⁰ For a name to have sense no particular description need to be true: all that is required is an object, an item named by the name. For a description to have sense, in contrast, things must be configured in a certain way (pages, spine and cover must be assembled), thus a proposition describing this configuration must be true. If the latter proposition were not true, the description would lack sense.

Unless, then, there are names —and thus unless there are *objects*— “whether a proposition has a sense would depend on whether another proposition were true”: a proposition containing a description would have a sense only if some other proposition (namely, the proposition asserting that things are configured in the right way) were true.

We might summarize this version of the argument as fol-

⁹ Cf. 3.23: “The requirement that simple signs be possible is the requirement that sense be determinate.”

¹⁰ Cf. the 2.151’s.

lows. A description, no matter how refined, is inevitably indefinite. It can, that is, be used on different occasions, by different people, to refer to different states of affairs (i. e., different, though similarly structured complexes). We may hone down descriptions so as to render them less and less indefinite (this is analysis), but we can never make them completely definite unless we reach a level of names, linguistic elements which attach to *particular* objects in the *particular* complex we happen to be talking about (*this* book lying on *this* table, or whatever). It is this process of analyzing descriptions which connects the sense of certain propositions (those containing descriptions) with the truth of other propositions (those describing the complexes "completely", i. e., those describing the configuration which constitute the complexes). This is what sets up a regress and this is why we must postulate a level of names. The existence of names, in turn, entails the existence of simple objects, the *Bedeutungen* of names.

From logical to ontological simplicity. Does the argument we have been examining establish that objects are genuine metaphysical simples (that they are simple in some nonrelative sense) or merely that they are logically simple (simple relative to the syntax of our language)? The argument, we shall suppose, shows that definiteness of reference requires names, particular states of affairs cannot be alluded to without names. Further, since names stand for objects, the argument commits us to an ontological level of objects (which are, in turn, called the substance of the world, etc.). Even granting all this, however, it is still not clear that Wittgenstein's argument shows that objects must be simple in some ultimate, nonlogical sense. If we grant the existence of simple objects, must we grant the existence of absolutely indivisible, utterly noncomposite entities? Or does the argument show only that there must be a category of objects in any conceptual system which purports to describe the world? If the latter were true, objects would need to be only *relatively*

simple, conventionally simple. Saying that objects existed would amount to saying that linguistic analysis stops somewhere; items referred to at the lowest level would be objects. Thus, on this account, what counts as an elementary objects is specified by the syntax of descriptive discourse: objects are made, not found.

In the *Notebooks*, Wittgenstein took up just this issue.¹¹

It always looks as if there were complex objects functioning as simples, and then also *really* simple ones, like the natural points of physics, etc.

To anyone that sees clearly, it is obvious that a proposition like "This watch is lying on the table" contains a lot of indefiniteness, in spite of its form's being completely clear and simple in outward appearance. So we see that *this* simplicity is only constructed.

In these passages Wittgenstein distinguishes "real" simplicity from simplicity which is merely apparent. The fact that such a contrast can be made *at all* strongly suggests that we are being pointed in the direction of metaphysical simplicity. The same Notebook entry, however, contains remarks which suggest that simplicity may be, after all, merely conventional.

Now when I do this and designate the objects by means of *names*, does that make them simple?

All the same, however, this proposition is a picture of that complex [i. e., "This watch is lying on the table"].

This object is *simple* for *me*!

The name compresses its whole complex reference into one.

What are we to make of these passages? It won't do simply to take them as articulations of Wittgenstein's view in the

¹¹ *Notebooks*, pp. 69-70 (italics added).

Tractatus since it is by no means obvious what the *Notebooks* view is, and, even if it were, one can't be certain that a position entertained in the *Notebooks* is necessarily one sanctioned in the *Tractatus*. What we *can* conclude from such passages, I think, is that Wittgenstein was aware of the importance of the distinction between metaphysical and logical simplicity. Thus, whatever his final view on the matter, he must have intended the *Tractatus* doctrine of simples to reflect one form of simplicity or the other. The difficulty, of course, is to decide which.

Griffin, I think, is right in supposing the *Tractatus* to be committed to the existence of metaphysically simple objects, though, admittedly, most of the passages which bear on the issue seem to allow for both interpretations. Perhaps this is due less to ambiguity on Wittgenstein's part than to the fact that a theory of ontological relativity of the sort at issue must be expressed in terms which would *sound*, anyway, consistent with a nonrelativistic theory. This, together with Wittgenstein's nervousness about attempts to say what can't be said, provides more comfort for a relativistic interpretation of objects than one might otherwise expect. Given the obvious importance of a decision on this matter it is only slightly consoling to note that, in reading through the 2.02's, it is difficult to avoid the *impression* that Wittgenstein intends objects to be simple in some ultimate metaphysical sense.¹²

If this is not Wittgenstein's view, then I think there are reasons why it ought to have been (see below). But supposing for the moment that he did want to hold a doctrine of metaphysical simplicity, there remains the question of whether or not the argument at 2.0211f. supports such a doctrine, more specifically, whether or not Griffin's construal of the argument provides such support. We are granting that the argument put the way Griffin wants it put does establish logical

¹² Wittgenstein's insistence (at 3.144, 3.221 and in the surrounding passages) that simples alone can be named while complexes can only be described *sounds* decidedly unrelativistic. If objects were stipulated or conventional, these assertions would not be false, but would, I think, be utterly pointless.

simplicity. We may also grant for the moment, anyway, that Wittgenstein intends the simples he has established to be *really*, i. e., metaphysically, simple. The question we must now face, then, is whether the apparent gap between the establishment of logically simple objects and the establishment of metaphysically simple objects can be bridged. Of course, if we can show that Wittgenstein has (in some way not fully appreciated by Griffin) established the necessity of nonlogical simplicity, we will have shown that there is no gap to be bridged: an object which is simple in a nonlogical (absolute) sense is also logically simple (given that it is named by a name).

One way to arrive at a decision about the necessary character of simple objects would be to determine what sorts of things such objects would have to be in order to function as the *Bedeutungen* of names. Such a determination would, of course, require more than Wittgenstein provides in 2.0211 and the surrounding passages. At any rate, if it could somehow be shown that only a metaphysically simple object can satisfy the requirements of the theory of names, then it would also be possible to see why Wittgenstein felt metaphysical simplicity to be an obvious consequence of logical simplicity. Could, that is, names which denote (metaphysical) complexes do the job that names are introduced to do in the first place? If they *can't*, then the connection we are seeking between logical and nonlogical simplicity will have been established.

Names, it may be recalled, are introduced in order to account for the fact that propositions may be used to refer to particular states of affairs. So long as there are only descriptions ("the book", "the table", "the pages", etc.) there is no definiteness.¹³ Descriptions, we have seen, may apply to many different states of affairs —to all states of affairs, in fact, which have a structure identical to that contained in the description. There are many books, many tables, many pages, i.e., many structures to which these descriptions may

¹³ Cf. 3.23. (quoted in note 9 above).

be correctly applied. Names, in contrast, attach to particular elements of particular configurations and thus enable us to refer to definite states of affairs.

Now the relation between names and the descriptions which contain them is rather more complex than one might expect at first glance. That is, we can't say (for example) that "the book" simply analyzes down into a level of names which (in virtue of their more or less direct connection to states of affairs —cf. 2.1515) enable "the book" to be used referentially. For, if that were the case, "the book" would stand for just *one* state of affairs, *one* book, the book, namely, composed of the objects named by the names comprising the analyzed version of "the book". Let us suppose, then, following Griffin, that descriptions analyze not into names, but into name variables, *dummy* names. The latter are turned into full-fledged names when the description is *used*,¹⁴ when we think out the sense of the proposition containing them (cf. 3.11 *et seq*). Dummy names would be like toy automobiles in a police model. Just as the toy autos might be used to stand for different vehicles on different occasions and thus depict different accidents, so dummy names might be correlated with different particulars on different occasions. The process of "thinking the sense of a proposition" involves the projecting of reality (more precisely, the logical form of reality) into a propositional sign (cf. 3.11). A name is given a sense, a sign *becomes* a name, when it is correlated with an object in such a way that the logical form of the object is mirrored by the syntax of the name.

As long as we can attach names to objects, why must we assume that objects are utterly simple? Or must we? Suppose we attach a name, *a* to an object, *A*, which happens to be complex, i. e., *A* consists of parts, P_1, P_2, \dots, P_n , configured

¹⁴ Cf. 4.23: "It is only in the nexus of an elementary proposition that a name occurs in a proposition", i. e., names appear only at the final stage of analysis. If we regard propositions ("Sätze") as including not simply sentences but also the occasions of their employment (cf. Griffin, Ch. 10), names appear only in the *application* of language.

in some definite way. Since A is complex, it can be described: we need only specify its parts and indicate how they are configured. If, however, A can be described, then a is really nothing more than a disguised description. It is like “Brooklyn Bridge”, a putative name which is, in fact, replaceable by a description which characterizes the Brooklyn Bridge as a complex of a certain sort (cf. 3.144, 3.24).

We might distinguish two sorts of names as follows:

- (i) *Pseudo-names*, expressions like “Brooklyn Bridge” which may be replaced by descriptions (descriptions, namely, of the complexes to which they are used to refer).
- (ii) *Genuine names*, expressions which are not replaceable by a description.

From what has been said already, it should be clear that a genuine name can only denote something noncomplex (a complex can always be described in the manner illustrated above). Further, it appears from this that what Wittgenstein’s argument for the necessity of names requires is an ultimate level of genuine names. Only genuine names enable us to avoid a regress of the sort depicted in 2.0211-2.0212. If this way of viewing the matter is correct, it certainly helps to explain Wittgenstein’s insistence that “. . . situations can be described but not *given names*” (3.144); “. . . objects can only be *named*” (3.221); “. . . a complex can be given only by its description” (3.24).

Wittgenstein, in reflecting on the notion of naming elsewhere, seems to provide support for the Griffin sort of account.

. . . One is tempted to make an objection against what is ordinarily called a name. It can be put like this: *a name really ought 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 broken up. But if "Excalibur" is the name of an object, this object no longer exists when Excalibur is broken in pieces; and as no object would then correspond to the name it would have no meaning. But then the sentence "Excalibur has a sharp blade" would contain a word that had no meaning, and hence the sentence would be nonsense. But it does make sense; so there must always be something corresponding to the words of which it consists. So the word "Excalibur" must disappear when the sense is analyzed and its place taken by words which name simples. It will be reasonable to call these words the real names.¹⁵

"What the names in language signify must be indestructible; for it must be possible to describe the state of affairs in which everything destructible is destroyed. And this description will contain words; and what corresponds to these cannot then be destroyed, for otherwise the words would have no meaning." I must not saw off the branch on which I am sitting.¹⁶

These passages exhibit the same line of reasoning we have been following in discussing the sort of account provided by Griffin of the argument to simple objects. It is worth pointing out that in the first passage quoted above, ordinary (in our jargon, pseudo-) names are rejected not because they are too crude but because they stand for complexes. And this, surely, supports the view that the objects named by names in the *Tractatus* are simple in some ultimate, non-logical sense.

One might, of course, question the legitimacy of analyzing *Tractatus* arguments *via* passages taken from the *Investiga-*

¹⁵ *Philosophical Investigations*, Para. 39.

¹⁶ *Philosophical Investigations*, Para. 55.

tions. Nevertheless, to the extent that the latter contains accounts and criticisms of views developed in the *Tractatus*, it is probably as good a guide as any to the intentions of the author of the *Tractatus*.¹⁷ And those intentions seem to include the development of a proof for the existence of simple— ontologically simple— objects.

We move, then, from the notion of definiteness of sense, the capacity of an expression to represent a *particular* state of affairs, to the necessity of postulating a level of genuine names. Pseudo-names (including names in the ordinary sense) are no more definite than the descriptions with which they may be replaced. And genuine names attach only to genuinely simple objects.

One mustn't be bothered by the fact that we can succeed in using a pseudo-name to refer to a particular state of affairs. This is no more remarkable than the fact that we can employ descriptions to single out definite complexes: pseudo-names are, after all, really descriptions. Wittgenstein's point is that our ability to apply any such descriptions is explicable only on the postulation of genuine names which attach to particular simple objects.

Some difficulties with this account. I have been arguing that it is correct to suppose that Wittgenstein regards simple objects as something *more* than the denotata of syntactically elementary names. "Simple" in the *Tractatus* means something like "absolutely simple". It also seems reasonably clear that Wittgenstein supposed his argument for the necessity of simples at 2.0211-2.0212 established the necessity of ontologically simple objects (and not simply the need for a syntactic level of names). The question remains, however, whether these intentions are realized in the way we have supposed in the above discussion. I have attributed that account to Griffin because I think it is at least close to what Griffin wants to say. At any rate, the account seems interesting enough in its own right to merit examination.

¹⁷ As Griffin (p. 77) remarks, Wittgenstein's views are often "clearer in the recanting than in the asserting".

What is disturbing about the argument as we have discussed it is that it seem to provide no really convincing reason for holding the view that names cannot name things which are, as it happens, ontologically complex. One can appreciate Wittgenstein's reasons for *wanting* to say this without being moved by his arguments. Thus, even granting the soundness of the argument for simples, it just does *not* seem to follow (from that argument) that simples can't be composed of parts. One might say that the existence of simples is established and, further, that a variety of claims are made about simples (they are, e. g., nondivisible, noncomplex, eternal) but that these latter claims about the nonlogical characteristics of simples are not established by the argument we have agreed to accept. If simples *are* really elementary, this fact is not shown by the argument at 2.0211-2.0212.

It thus seems that our initial worries about the move from logical simplicity to ontological simplicity were indeed well founded. We know that Wittgenstein *wanted* to make such a move, that he probably regarded it as justified by the argument we have been discussing. But, given what has been said about the argument thus far, the conclusion sought does not seem to follow. It is simply too easy to think of cases in which complex states of affairs *are* given names ("the Brooklyn Bridge") in an entirely unproblematic way. What the argument shows is that such "names" can be replaced by descriptions (which are, in turn, analyzable into names). What it does not show is that they *must* be so replaced in order to achieve definiteness of reference. Why can't we name a complex? If Wittgenstein wants to insist that the name we have chosen is analyzable into more elementary names (which name parts of the complex we have "named"), we might grant him that without committing ourselves either to the view that such analysis is necessary for definiteness of reference *or* to the view that the names appearing in the analysis need be tied to genuinely simple objects for *their* reference to be secured.

An alternative approach to the argument. The intriguing thing about Wittgenstein's argument for simples, as well as the source of the difficulty of bridging the gap between logical and ontological simplicity, is the fact that it is based, not, as one might suppose, on a worked out metaphysical doctrine, but on the requirements deemed necessary for picturing. The argument moves from the claim that we *can* make pictures of the world to the claim that the world must, in consequence, consist of simple objects. In order to determine, then, what sorts of simples we must have if picturing is to occur (and thus whether Wittgenstein has, after all, provided grounds for the doctrine of ontological simplicity), we need to examine in a bit more detail the requirements of the picture theory.

I shall not attempt to provide more than a simplified account of picturing here. This, nevertheless, should be enough to enable us to see why Wittgenstein felt it necessary to postulate simples. More to the point, it will be possible to see, as Wittgenstein did, why *any* sort of picture theory is committed to a strong form of metaphysical atomism. I say "any sort of picture theory" rather than "the picture theory" because I want to emphasize my earlier claim that many philosophers and psychologists are committed to something very like the picture theory and, in consequence, committed to something very like logical atomism. My brief account of picturing is intended to be neutral in this regard. That is, I would like to call any view which accepts the simplified doctrine set out here a version of the picture theory. In saying this I shall mean only that the doctrines in question accept the essential features of the picture theory as it is characterized in the *Tractatus*.

What essential features? Well, what is crucial to picturing is the construction of a picture, *p*, which is structurally isomorphic to the state of affairs being pictured, *s*. Both *p* and *s* are structures and thus formally analogous to one another. The construction of a picture may involve *Tractatus*-

like acts of correlation, or it may not. In any case, a necessary feature of picturing is the construction in some medium or other of a structural analogue of the state of affairs being depicted. Thus a picture in this technical sense need not *look* anything at all like the bit of reality that it pictures. Examples of pictures are: musical scores, deflections in the grooves of phonograph records, maps, schematic diagrams of toasters, written descriptions, hieroglyphics, spoken descriptions, memory traces and schemata, and paintings. In each case, there is a "mapping" between some state of affairs and a structurally isomorphic counterpart of that state of affairs.

A complete account of picturing would have to include a discussion of the intentional dimension of picturing. Thus two structures s_1 and s_2 might be isomorphic without the one's being a picture of the other. What is needed is an agent who projects s_2 , say, into s_1 , thus *making* s_1 a picture of s_2 (cf. 2.1). The argument for simples, however, requires only the acceptance of the necessity of structural isomorphism, so I shall omit discussion of the mechanics of the *process* of picture-construction.

Picturing, then, consists *inter alia* in the construction of a structure which matches the structure of the state of affairs being pictured. From this it follows that if a state of affairs is to be pictured, it must have a structure, more specifically, if the world is to be pictured, the world must have a structure. Thus, from the assumption that we can make pictures of the world, it follows that the world has a structure.

But what exactly is a structure? In a passage quoted already, Wittgenstein claims that

Every statement about complexes can be resolved into a statement about their constituents and into the propositions that describe the complexes completely (2.0201).

Since structures *are* complexes, the same description applies to them. A structure consists of parts arranged in a certain definite way. To construct an *analogous* structure, one need

only devise a complex with the same number of parts and with the parts related to one another in formally analogous ways. To paraphrase the *Tractatus* passage just quoted, to specify a structure, A , (or the structure of a complex), A is to (i) specify the parts of A and (ii) provide an account of the relations among those parts. If we combine this characterization of structure with the claim that the world has a structure (a consequence, as we have seen already, of the picture theory), we shall have to conclude that the world consists of parts configured in a certain way. These parts are Wittgenstein's objects. We now need to determine whether such parts must be ontologically simple in order to do the job required by the picture theory, or whether logical simplicity will suffice; whether, that is, the picture theory entails ontological simples or whether it entails merely some sort of conventional or logical simplicity. I shall argue that ontological simplicity is required and thus the argument at 2.0211-2.0212 establishes the necessity of simple objects of the sort Wittgenstein discusses elsewhere in the *Tractatus*, namely, genuinely *simple* objects.

I should like to begin by examining in more detail the notion of structural similarity which is required by the picture theory. A useful account of this notion is contained in a paper by McLendon.¹⁸ I want to discuss both McLendon's characterization of structure-matching and his claim that the possibility of matching structures with one another is one which can be satisfied by any two complexes whatever and thus is utterly useless. I think McLendon is right about both of these matters and that the only way of patching up a theory which includes structural similarities as an essential ingredient is by invoking some form of ontological atomism, postulating metaphysically elementary objects.

According to McLendon, then, two complexes, α and β , may be said to have the same structure just in case

¹⁸ H. J. McLendon, "Uses of Similarity in Contemporary Philosophy", *Mind* 64 (1955), 79-95.

- (i) Members of α are related to one another by a relation, P .
- (ii) Members of β are related to one another by a relation, Q .
- (iii) Each member of α corresponds to one and only one member of β and *vice versa*.
- (iv) Whenever two terms, a_1 and a_2 in α have to each other the relation P , then the two corresponding members of β , b_1 and b_2 , have to each other the relation Q , and *vice versa*.¹⁹

The first two conditions, in effect, characterize α and β as structures. The third condition plots a one-one correspondence between the parts of the two structures. The final condition is satisfied whenever "the structured classes are so related that from a knowledge of the relation of two terms in either complex, one can infer the relation of their correlates in the other complex".²⁰ There is nothing, I think, very controversial in any of this. The question is, where does it lead us?

According to McLendon, it leads nowhere very interesting. In the first place, it may be shown that *any* two complexes with the same number of parts will trivially satisfy the conditions for structural similarity. More significantly, it turns out that complexes themselves, states of affairs, may be divided into parts in any way we choose. As a result it is not difficult to show that any two arbitrary complexes satisfy the conditions for similarity of structure and thus that the notion is a decidedly unhelpful one. The only way to stave off the consequences of triviality is to introduce (what McLendon calls) an empirical limitation,²¹ namely, to advance the doctrine that states of affairs do consist of definite, non-logical, nonconventional *parts*. And this we should immediately recognize as the thesis of the *Tractatus*.

First, consider the case of a pair of complexes with the same number of agreed upon parts.

¹⁹ Cf. McLendon, pp. 83f.

²⁰ McLendon, p. 84.

²¹ McLendon, pp. 89ff.

One may go into a parking lot, haphazardly label a dozen automobiles, and leaving them in their positions, regard them as a class of elements with a structure. The structure of this class could be defined in many ways; the simplest would be to indicate the relative spatial relations of cars selected. Suppose now that one, going home and seeing a child's box of a dozen building blocks, haphazardly tosses them one at a time upon the floor of the playroom. One may then, as in the case of the automobiles chosen at random, regard these scattered blocks as a class of elements whose structure is to be defined. Similarly, one way of defining one set of relations constituting a structure for this class consists in describing the various spatial relations among the various blocks.²²

... what is interesting, though at first surprising, is that these two classes of elements haphazardly scattered satisfy all four of the conditions contained in [the] definition of similarity of structure. First of all, it is obvious that the members of the class of cars, class α , have to one another specifiably spatial relations. It is also obvious that the same is true of the class of [blocks], class β . In the third place, there is any one of many one-one relations enabling one to correlate one and only one member of α with one and only one member of β , the simplest of which would be to assign a natural number from 1 to 12 to each class. In the fourth place, it is obvious that whenever, for example, a_1 has its spatial relation to a_{12} , whatever that relation be, b_1 has its corresponding relation to b_{12} , whatever that relation be; and the same holds for any two members of either class and their correlates in the other class. Consequently, this class of haphazardly arranged automobiles and this similar class of haphazardly scattered blocks are similar with respect to structure...²³

It is not difficult to see how this line of reasoning might be

²² McLendon, p. 90.

²³ McLendon, p. 90.

extended to *any* two complexes with the same number of elements.

More serious problems arise when one ceases to talk about classes (the elements of which are specified *via* a defining property) and begins to speak of less tidy complexes (“wholes”, McLendon calls them). In such cases, it is possible to divide things

into whatever number of parts one may wish to demarcate. This elementary fact is well known to any mother who has baked a pie for her family but then made it do for desert for unexpected guests as well.²⁴

This fact, “easily overlooked by philosophers” (presumably no philosophers are mothers), proves devastating for theories relying on the notion of structural similarity.

. . . If any whole can be divided into any number of parts, it is equally obvious that any two or more objects be divided into the same number of parts. The Prime Minister’s desk at No. 10 Downing Street and the desk of the Vice-Chancellor of Hong Kong University in Hong Kong, for example, can be exhibited as having the same number of parts. Moreover, we know that this is the case without any observation of either desk and regardless of the characteristics of both desks. We know it because we know that any two wholes whatsoever can be divided into the same number of parts.²⁵

Since “wholes” or complexes may be divided into parts in any way we choose, *any* two complexes may be said to have the same number of parts: the claim that two complexes C_1 and C_2 have the same number of parts must be trivially true, hence unrevealing.

²⁴ McLendon, p. 91.

²⁵ McLendon, p. 91.

Now, from these two considerations, that any two wholes may be exhibited as two similar classes and that any two similar classes satisfy the conditions of . . . “similarity of structure”, the third step of the argument follows, namely, that *any two wholes whatsoever can be made to satisfy the conditions of . . . [the] concept of similarity of structure.*²⁶

Any two states of affairs may be said to have the same structure provided they consist of the same number of parts. But the number of parts composing any particular state of affairs depends simply on how we elect to divide up the state of affairs; we may have as many or as few parts as we like. The question, “How many parts does this state of affairs have *really?*” is as nonsensical as the question, “How many things are on this page *really?*” In both cases, we may count parts or things differently on different occasions for different purposes.²⁷

The upshot is that

. . . from the knowledge that two entities are similar in structure and that one of them has some specifiable empirical characteristic, nothing whatsoever can be inferred concerning the empirical characteristic of the other. For example, no matter how intimately I may know the qualitative and relational features of my percept of my table, and no matter how assured I may be that my percept of my table and my table are similar in structure . . . , still there is nothing peculiar in this assertion of similarity of structure which enables me to infer any empirical feature of my table, since it is equally the case that my percept of my table is similar in structure to the Vice-Chancellor’s

²⁶ McLendon, p. 91.

²⁷ Cf. Wittgenstein’s remarks in the *Philosophical Investigations* (Para. 47): “... what are the simple constituent parts of which reality is composed?— What are the simple constituent parts of a chair?— The bits of wood of which it is made? Or the molecules, or the atoms?— ‘Simple’ means: not composite. And here the point is: in what sense ‘composite’? It makes no sense at all to speak absolutely of the ‘simple parts of a chair.’”

table in Hong Kong, to the Prime Minister's table in London, and to a cherry pie baked for the First Lady in Washington.²⁸

It isn't of course, that things don't have structures. The point, rather, is that complexes may be said to be structured in many different ways. Thus, to say of two complexes that they have the same structure is, in the absence of a good deal of additional explanation, perfectly empty. The ascription of structure is not something that may sensibly be carried out, as it were, pretheoretically. The specification of a structure must include a specification of the parts into which the structured whole is being divided.²⁹

Wittgenstein was, I believe, aware of something like this latter point in his argument for simples. Consider again 2.0211:

If the world had no substance [i. e., did not consist of simples], then whether a proposition had sense would depend on whether another proposition was true.

What other proposition? Suppose that complexes don't divide up into an ultimate category of simples, suppose that the division of wholes were, as we've imagined it, purely conventional. In that case, the characterization of a structure would necessarily include a specification of the parts of the structure, the structured elements. And if nothing were a

²⁸ McLendon, pp. 92-93.

²⁹ A similar point is made by Malcolm [N. Malcolm, "Memory and Representation", *Nous* 4 (1970), p. 63.]: "If something has a structure, then it is composed of elements, parts or units. What are the parts of my hand? Different decisions are possible. We could decide that fingers, knuckles, palm and back are the parts. Or that the parts are skin, bone, flesh and fingernails. It is meaningless to ask whether *A* and *B* have some structure until we are prepared to specify the elements of *A* and of *B*; and are ready to specify a definite relation as holding between the elements of *A*, and a definite relation as holding between the elements of *B*; and have a method of correlating the two groups of elements and relations. The specifications and correlations could be made differently. According to one set of specifications, my hand and the ceiling have the same structure; according to another, not."

structure *simpliciter* but only a structure relative to some prior specification of elementary parts, then the characterization of a state of affairs *via* the specification of its structure would necessarily involve the *prior* specification of the constituents of the state of affairs. But *that* would require that we will be able to refer to the state of affairs somehow independently of its structure, an impossibility if the picture theory is right. We should, in other words, have to refer to the state of affairs (in specifying its constituent parts) *before* we could refer to it (*via* a picture, a matching structure).

If picturing is possible, then, structure must be nonlogical. If it is possible to make pictures of states of affairs by constructing matching structures, the structures of pictured states of affairs must be logically independent of the propositions which picture them. Finally, if states of affairs are to have structures in some such nonlogical sense, the states of affairs must consist of elementary parts, constituents which *are* constituents in some nonlogical sense. Such constituents would be (so far as I can tell, would *have* to be) ontologically simple objects. Given such objects, the notion that states of affairs have unique, intrinsic structures begins to make sense. Without simples, in contrast, talk about *the* structure of a state of affairs makes *no* sense.

We are led, then, from the notion that representation of states of affairs is accomplished by means of pictures, structural analogues of states of affairs, to the claim that every state of affairs (and thus the world) consists of simple objects. Without the latter, talk about structure loses its significance, or rather such talk presupposes some independent way of singling out states of affairs. Since, however, it is precisely this singling out of states of affairs which the picture theory is supposed to explain, this line of reasoning is not open to a picture theorist. Picturing requires simples, ontological simples. This is the conclusion, I have been arguing, Wittgenstein's claims about picturing entitle him to. Nonultimate, merely logical, simples won't do the job simples

are required to do; this, really, is the point of the argument at 2.0211–2.0212. Thus, if our representation of states of affairs is accomplished by means of pictures, structural analogues (and of course many people other than Wittgenstein seem to have held some such view), the world must consist of simple objects.

All characterization of simples is notoriously left out of the *Tractatus* discussion of objects and states of affairs. Are simples supposed to be sensible minima of some sort? Or are they, perhaps, tiny pieces of things (the atomic particles of physicists)? In light of what has been said above, Wittgenstein's claim that the exhibiting of simples was an empirical rather than a logical matter seems just.³⁰ The existence of simples is necessitated by the possibility of picturing. But the claim that there must be simples, on the one hand, and the claim that simples are a certain sort of things (points in visual fields, electrons, whatever) on the other hand, are independent claims. Though the situation is not quite parallel, one might point to Mendel who knew there must be genes without having any idea what sorts of things genes might turn out to be.

A further note on structure. If it is true, as I have argued, that picturing entails the existence of simples, it is also true that the nonexistence of simples entails the impossibility of picturing (in Wittgenstein's special sense of picturing, of course). And it is this line of reasoning that Wittgenstein pursues in his later writings. The world doesn't contain nonlogical simples, thus some other account of representation, some other account of the connection between language and the world must be given.

Indeed, one would be hard pressed nowadays to find anyone willing to defend the notion that the world *must* consist of simple elements. Or to the extent that people do believe such things, they do so for reasons properly associated with

³⁰ Cf. N. Malcolm, *Ludwig Wittgenstein: A Memoir*, London: Oxford University Press, 1958, p. 86; also discussed by Griffin, p. 141.

physical theories rather than for reasons dictated by a theory of language. We might distinguish, however, between those willing to espouse an atomistic metaphysics and those *in fact* committed to the latter via, say, some theory of reference. I have said already that many theorists of language, and perception, and memory may be, beneath the surface, picture theorists. This seemingly implausible suggestion was based on the observation that many people want to explain various cognitive goings on by means of postulated structural analogues harbored, presumably, in the brain. The notion that such analogues can explain our linguistic commerce with the world appears to be decidedly picture theoretic. But if that is so then, I have argued, the world must consist of simple objects. Thus, if there is something wrong with the notion of simple objects (and there surely seems to be) then theories which require their postulation contain a fatal defect.

One might attempt to circumvent this difficulty by admitting that talk about states of affairs as having a unique and intrinsic structure is wrong but allowing that the same “cognitive mechanisms” which create internal structural models of external goings on *bestow* a structure on the latter. Perception, for example, might be explained by devising a theory whereby we create structural analogues of states of affairs inside our heads (as a result, perhaps, of a causal interaction of the state of affairs and a sensory receptor). The represented state of affairs, further, might be said to have a structure *assigned* it by the same mechanisms which produce the internal copy or counterpart. Thus, it might be thought, we needn’t suppose structure to be an intrinsic feature of items in the world at all, needn’t be saddled with the atomistic metaphysics of the *Tractatus*.

It isn’t clear whether or not this sort of theory avoids the circularity Wittgenstein foresaw in his argument for simples.³¹ If reference hinges in some sense on the matching of structures, one can’t then introduce covert references which *stipu-*

³¹ For a detailed examination of this view, cf. Heil, “Traces of Things Past.”

late structure. But even if this difficulty can somehow be avoided in the present account, it will hardly help. For if structures are assigned in a nonarbitrary way by “cognitive processing devices” to states of affairs, they must be determined *inter alia* by features of those states of affairs. But what features? Well, one wants to say, those features which provide for *this* sort of structuring. This move, however, seems merely to smuggle in the notion that states of affairs have a structure after all; they have features, at any rate, which *determine* particular structures. And this, surely, is just to endow them with structures by way of the back door.

RESUMEN

Una característica central del *Tractatus* es su atomismo lógico: el mundo se divide en hechos y los hechos se componen de objetos simples. Es esencial que el mundo sea de esta manera para que sea pintado, representado o, lo que es igual, pensado. Propongo que la afirmación de Wittgenstein de que el mundo debe consistir de configuraciones de objetos simples se deriva, no de una doctrina metafísica independiente de la substancia sino, directamente, de los requerimientos de la teoría pictórica. Visto a esta luz, el problemático argumento sobre la existencia de simples en 2.0211-2.0212 comienza a tener sentido. Finalmente, arguyo que la teoría pictórica entraña, ciertamente, la existencia de objetos simples y, además, que los objetos en cuestión deben ser metafísicamente simples (simples en algún sentido absoluto) y no sólo lógicamente simples.

[J. H.]