CHAPTER 1

The Abbreviated Metaphysics of the Tractatus

1. Aims and Significance
3. Wittgenstein’s Logically Atomistic Explanation of Change and Possibility
4. The Hiddenness of the Metaphysically Simple
5. The Logical Independence of Atomic Sentences and Atomic Facts

1. AIMS AND SIGNIFICANCE

Volume 1 of this work ended with an extensive discussion of the version of logical atomism found in Bertrand Russell’s *The Philosophy of Logical Atomism*, originally presented as eight lectures in 1918. There, we observed Russell’s most systematic attempt to use his methods of logical and linguistic analysis, originally deployed in “On Denoting” and *Principia Mathematica*, to craft solutions to what he, along with G. E. Moore, took to be the central problems of philosophy. Moore’s own summary of those problems was presented in the first of a series of lectures given in 1910–11 that ultimately were published as *Some Main Problems of Philosophy* in Moore (1953). There, Moore says that the most important, though not the only, job of philosophy is

to give a general description of the whole Universe, mentioning all the most important things we know to be in it, considering how far it is likely that there are 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. I will call this, for short, ‘Giving a general description of the whole Universe’, and hence will say that the first and most important problem of philosophy is: To give a general description of the whole Universe. [pp. 1–2]
In those lectures, and in the years preceding and following them, Moore showed himself to be highly critical of philosophical descriptions of the universe that contradicted what he took to be his commonsense knowledge of it. Included in that knowledge was his knowledge of space and time, past and present, mind and matter, and of other human beings—their material bodies, their conscious states and experiences, and their commonsense knowledge of the same sorts of things that he took himself to know. Although Moore didn’t rule out philosophical additions to commonsense knowledge, his practice was to subject proposed extensions to relentlessly critical scrutiny—including the Absolute Idealists’ arguments for the essential unity and relatedness of all things, J.M.E. McTaggart’s vision of human immortality, and William James’s insistence on manmade, pragmatic truths. Despite Moore’s emphasis on what we know, he did find it puzzling how, exactly, we know all the things we do know. To his disappointment, he never found a satisfying explanation.

Russell was more ambitious. Sharing Moore’s traditional conception of philosophy, he employed his method of logical and linguistic analysis to produce a general description of a universe capable of being known without philosophical perplexity. In the years preceding the publication of Wittgenstein’s *Tractatus*, the form of analysis Russell used for this purpose in *Our Knowledge of the External World* (1914) and *The Philosophy of Logical Atomism* (1918/19) was the method of logical construction. The idea was to arrive at a description of what reality must be like, if what we take ourselves to know—from both science and ordinary experience—is really capable of being known.

His account of a knowable universe arose from a reductive philosophical analysis of the claims of science and common sense. The aim of the reduction was to show that these claims—which, on their surface, seem to be about entities the existence of which can be known only by philosophically contentious inference—can be interpreted as involving no such questionable entities or inferences. The analysis involved replacing ordinary and scientific claims—the contents of which seem to posit persisting, mind-independent things in “the external world”—with logically complex systems of sentences about epistemically privileged, actual or hypothetical, momentary sensible objects of immediate perception. Just as Russell had earlier attempted to validate our arithmetical knowledge by reducing arithmetical truths to knowably equivalent statements of pure logic—which were (prior to his recognition of the need for the Axiom of Infinity) themselves assumed be transparently knowable—so, in the years immediately preceding the *Tractatus*, he sought to validate our knowledge of

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1 Moore (1919/20).
2 Moore (1901/2).
3 Moore (1922).
the external world by reducing statements about it to knowably equivalent, and themselves transparently knowable, statements about perceptual appearances.

In this and succeeding chapters I will present a reading of the *Tractatus* that places Russell’s logical-atomist conception of philosophy midway between Moore’s traditional conception in *Some Main Problems of Philosophy* and Wittgenstein’s radically new conception. In accord with the traditional, but at variance with the tractarian, conception of philosophy, Russell aimed for an all-encompassing theory of the whole universe. In accord with the tractarian, but at variance with the traditional, conception, Russell’s official aim was *not* to produce new knowledge of the world unavailable outside of philosophy. On the contrary, the relationship between his system of logical atomism and our pre-philosophical knowledge of the world was meant to parallel the relationship between his logicized version of arithmetic and our pre-philosophical knowledge of arithmetic. Just as his logicist reduction wasn’t aimed at giving us new arithmetical knowledge, but rather at validating that knowledge and exhibiting its connections with other mathematical knowledge, so his logical atomism wasn’t presented as *adding* to our ordinary and scientific knowledge of the world, but rather as validating it and exhibiting the connections holding among its various parts. It is, at least in part, because Russell thought of his enterprise in this way that he says, in *Our Knowledge of the External World*, that “every philosophical problem, when it is subjected to the necessary analysis and purification, is found to be not really philosophical at all, or else to be, in the sense in which we are using the word, logical.”

Russell’s view of philosophical problems as essentially logical encompasses the idea that although philosophy has a role to play in describing reality, its task is not to formulate testable hypotheses or to subject them to empirical test. Rather its task is to provide conceptual analyses, which he took to be a kind of creative logical analysis. This is what he had in mind in 1914 when he said:

> [P]hilosophical propositions . . . must be *a priori*. A philosophical proposition must be such as can neither be proved nor disproved by empirical evidence. . . . [P]hilosophy is the science of the possible. . . . Philosophy, if what has been said is correct, becomes indistinguishable from logic.

The keys here are the conception of philosophy as a priori and the implicit identification of a priori truths with logical truths, and of a priori connections with logical connections, which it is the task of philosophy to articulate. Since Russell thought that a priori and necessary connections were *logical* connections, he understood the task of revealing and

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4 Russell (1914b), p. 42.
5 Russell (1914a), at p. 111 of the reprinting in Russell (1917).
explaining them to be a search for philosophically motivated definitions, as in the reduction of arithmetic to logic, or decompositional analyses, as in his analysis of statements about the external world in terms of statements about perceptible simples. Although the final form of the resulting general description of reality was to come from philosophical analysis, the raw material for that general description was seen as coming not from philosophy, but from everyday observation, commonsense knowledge, and empirical science. It was, if you will, an exercise in analytic metaphysics. Russell’s atomist system was intended to be an informative description of the world, but its informativeness was supposed to lie in our surprise at appreciating what was present all along in the knowledge expressed by the statements of science and everyday life.

This seemingly modest view of philosophy was, in certain respects, not too far from Wittgenstein’s more thoroughly deflationary conception of philosophy in the *Tractatus*. However, my statement of Russell’s view, which I believe he would have found congenial, is not an entirely accurate statement of his position. As I argued in Volume 1, his “analyses” of ordinary and scientific statements about the world weren’t even approximately equivalent to the statements being analyzed. Hence, his resulting atomist system was less an analysis of what our pre-philosophical worldview amounts to than it was a proposal to replace it with an ambitious and highly revisionary system of metaphysics, driven by an antecedent conviction of what reality must be like if it is to be knowable. As we look at the *Tractatus*, we will see that Wittgenstein’s thought was not free of its own tension of this general sort—not between what we pretheoretically think the world is like and what it must really be like if it is to be known, but between what we pretheoretically think, both about the world and about our own thoughts, and what both the world and our thoughts must really be like if the latter are to represent the former.

If this sounds like the *Tractatus* offers a kind of transcendental metaphysics, there is, I am afraid, no denying that it does. But the tractarian metaphysics is relatively spare, in comparison to the Russelian metaphysics of *The Philosophy of Logical Atomism*, and not intended to be substantively informative in the way that Russell’s atomism aspired to be. Although the *Tractatus* begins with abstruse metaphysics, there is no identification of its basic metaphysical simples and virtually no analyses of the statements of science or commonsense. Consequently, there is no attempt to state an informative worldview in which traditional philosophical problems are solved by recasting our ordinary and scientific knowledge into anything purporting to be their true or ultimate form. Rather, the heart of the *Tractatus* is its conception of how thought, which finds its expression in language, represents reality.

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Its organizing premise is Wittgenstein’s rejection of the conception of propositions found in Frege, the early Russell, and the early Moore, and his replacement of that conception with a new analysis of meaningful, representational language. That Wittgenstein himself saw this as the single great problem of philosophy, to be addressed in the Tractatus, is suggested by the following passages from the Notebooks 1914–1916, which he kept when producing that work.\(^7\)

My whole task consists in explaining the nature of the proposition. (p. 39)

The problem of negation, of conjunction, of true and false, are only reflections of the one great problem in the variously placed great and small mirrors of philosophy. (p. 40)

Don’t get involved in partial problems, but always take flight to where there is a free view over the whole of the single great problem. (p. 23)

The single great problem, explaining the nature of the proposition, was, as Wittgenstein then saw it, the problem of explaining meaning, which, in turn, was the problem of finding the essence of representational thought and language. This was both the task of the Tractatus and, he believed, the only real task for philosophy.\(^8\)

He took this to be crucial for philosophy because (i) he believed that finding the scope and limits of intelligibility was part and parcel of finding the essence of thought, and (ii) he assumed that in order for a thought (the function of which is to represent the world) to tell us anything intelligible about the world, it must tell us something about which state—among all the possible states the world could conceivably be in—the world really is in. He took it to follow from this that all genuinely intelligible thoughts must be contingent and a posteriori. Since, like Russell, he believed that philosophical propositions are never either contingent or a posteriori, he concluded that there are no genuine philosophical propositions.\(^9\) Since, also like Russell, he believed that all necessary and a priori connections were logical connections, he could, even then, have attempted to offer substantively illuminating logico-linguistic analyses of both scientific and everyday statements, had he shared Russell’s belief that the fundamental metaphysical simples that ground all analysis could be informatively identified. But he didn’t. On the contrary, he was convinced that it is impossible to informatively identify such objects. Given all this, he had to view his task not as solving the traditional problems of philosophy, but as disposing of them.

\(^7\) Wittgenstein (1914–16).

\(^8\) These themes are illuminatingly discussed in chapter 1 of Marie McGinn (2006).

\(^9\) It could be argued that Wittgenstein recognized a single necessary, a priori truth that was empty of content, and so not really representational. But such a vacuous truth could hardly save the conception of philosophy as the search for philosophical truths.
Why then do the first few pages of the *Tractatus* consist of metaphysical pronouncements, which, by the end of the work, are seen as problematic? The mundane, but correct, answer is that Wittgenstein simply saw no way of enunciating, and in his mind establishing, the limits of intelligibility that are the heart of the work without violating those limits in the process. This predicament was not limited to his explicitly metaphysical pronouncements. The *Tractatus* is full of tractarian transgressions. The meager metaphysical sketch with which the work begins was the reflex of his views about how propositions, thought of as (uses of) meaningful sentences of a certain sort, represent the world.10 His intention was not really to do metaphysics, but to end it by revealing how it violates what is essential to all intelligible, representational thought and language.

2. MODAL METAPHYSICS: FACTS, OBJECTS, AND SIMPLES

1. The world is everything that is the case.
   1.1 The world is the totality of facts, not of things.
   1.12 The totality of facts determines both what is the case, and also all that is not the case.11

What is the case is what is, or rather what determines what is, true; while what is not the case is what is, or rather what determines what is, false. Thus the earliest passages in the *Tractatus* purport to identify the basic elements of reality needed for thought and language to represent it, elements that somehow determine the truth or falsity of all propositions. These elements are identified with atomic facts.

1.13 The facts in logical space are the world.
1.2 The world divides into facts.
1.21 Any one can either be the case or not the case, and everything else remain the same.

2. What is the case, the fact, is the existence of atomic facts.
2.01 An atomic fact is a combination of objects (entities, things).

Here we learn that the facts, the totality of which is the world, are independent of one another, which guarantees that they do not include conjunctive, disjunctive, or negative facts. Rather they must be combinations of objects that somehow suffice to determine which conjunctions,

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10 According to Max Black (1964, p. 27), the initial metaphysical section of the *Tractatus* “was probably the last part to be composed,” while being “logically independent” of his “great contributions to philosophical insight” (all of which had to do with logic and language), but “inexorably suggested by Wittgenstein’s detailed investigations of the essence of language.”

11 All citations will be from Ludwig Wittgenstein (1922 [1999]), translated by C. K. Ogden. In some cases I will add the Pears-McGuiness translation of the passage (Wittgenstein 1922 [1961]), italicized and in square brackets.
disjunctions, negations, and other complex propositions are true. This, Wittgenstein thinks, is the conceptually minimal way in which we must think of reality, if it is to be represented in our thought and language.

What can be said about the objects that combine to make up atomic facts?

2.02 The object is simple.
2.0201 Every statement about complexes can be analyzed into a statement about their constituent parts, and into those propositions which completely describe the complexes.
2.021 Objects form the substance of the world. Therefore they cannot be compound.
2.0211 If the world had no substance, then whether a proposition had sense would depend on whether another proposition was true.
2.0212 It would then be impossible to form a picture of the world (true or false).

Section 2.02 tells us that there are metaphysically simple objects. These, Wittgenstein will treat as referents of logically proper names. Thus, in a very short space, we are given the ontological counterparts of the two key categories of representational language—proper names and atomic sentences. Section 2.0201 is a compressed statement of his commitment to the fundamental parallel between language and the world. As Wittgenstein will later tell us, an atomic (simple) sentence is a combination of logically proper names that represent the metaphysically simple objects they designate as standing in one or another relation to each other. Thus, sentences are, in effect, structured linguistic entities that are projections of the structured elements of reality they are used to represent. Since all complex sentences are ultimately to be analyzed in terms of the atomic sentences they logically depend on, complex statements are themselves, ultimately, reports about classes of possible atomic facts and the simple objects that make them up. Section 2.021 reminds us that this process of analysis, of moving from the more complex to the less complex, must come to an end—in metaphysically simple objects, on the side of the world, and in logically proper names and atomic sentences composed of them, on the side of language.

So far these doctrines are simply asserted without argument. Sections 2.0211 and 2.0212 are meant to provide an argument for this last claim—i.e., for the claim that the process of decomposition and analysis must terminate in the metaphysically simple. What, precisely, that argument is supposed to be is not made explicit. But given other assumptions of the Tractatus, one can make an educated guess. The most likely argument seems to be this: (i) Suppose there were no metaphysical simples. (ii) Then the simplest elements in language—logically proper names—would refer to composite objects; for example, the logically proper name n might refer to an object o, made up of a, b, and c composed in a certain way. (iii) In that case, whether or not o existed, and, hence, whether or not n referred
to anything, would depend on whether or not it was true that a, b, and c were composed in the requisite way. (iv) Since the meaning of n is simply its referent, it would follow that whether or not n had a meaning, and hence whether or not any atomic sentence, or proposition, containing n had a meaning, would depend on the truth of the proposition that a, b, and c are composed in the requisite way. (v) Moreover, if there were no metaphysical simples, then this process could be repeated for a, b, and c—i.e., whether or not it was even meaningful to suppose that a, b, and c were related in the requisite way would depend on the truth of still further propositions—and so on without end. (vi) The process could also be repeated for every name and every atomic sentence. (vii) The result extends to all logically complex sentences, since it is a central doctrine of the *Tractatus* that the meanings of all complex sentences are dependent on the meanings of atomic sentences. (viii) So, if there were no metaphysically simple objects, then whether or not any sentence whatsoever had a meaning would depend on the truth, and hence meaningfulness, of still further statements, the meaningfulness of which would depend on yet further statements, and so on. Since Wittgenstein regarded this scenario as absurd, he concluded that there really must be metaphysically simple objects.¹²

There are two points to notice. First, the argument is based on assumptions about language that Wittgenstein introduces later in the *Tractatus*. Hence, the ontological conclusion he derives here is mandated by his central doctrines about representational thought and language. Second, even if one relies on his linguistic assumptions, one must do more to show that the resulting *reductio ad absurdum* really reaches an absurdity, and so justifies his final conclusion. Why is it absurd that the meaning of some, perhaps even all, sentences should depend on the truth of further propositions?¹³

In answering this question it is crucial to clarify what one means by saying that the meaning of one sentence, P, depends on the truth of another

¹² Taking it to be established that there are metaphysically simple objects, a defender of the *Tractatus* might extend the argument to show that only metaphysical simples are constituents of (atomic) facts. For suppose otherwise, i.e., that some object o entering into a possible atomic fact F(o) is not metaphysically simple. Then o is a composite object made up of objects a, b, and c composed in a certain way. Thus, o’s existence depends on there being a fact F(a,b,c) of those objects being combined in the required way. Since this violates the independence of facts stated at 1.21, o must not be composite.

¹³ It may be noted that while the argument makes crucial use of the notions *sentence* and *proposition*, it doesn’t say what propositions are or how they are related to sentences. Roughly put, Wittgenstein took propositions to be something like meaningful sentences, uses of such sentences, sets of sentences that mean the same thing, or, as it is put in Ramsey (1923), abstract types the instances of which are sentences that have the same sense. For now, the key point is that, for Wittgenstein, propositions are closely related to sentences in a way that remains to be made precise. The task of reconstructing a coherent view of this type will be taken up in chapter 2.
sentence, or proposition, Q. Suppose one means that in order to determine, or come to know, that P is meaningful (as well as coming to know what P’s meaning is) one must first determine, or come to know, that Q is true. On this interpretation, what is said in the argument to be absurd is that in order to determine, or come to know, that any sentence has a meaning (as well as to know what it does, in fact, mean), one has first to determine, or come to know, that other sentences are both true and meaningful, and so on, ad infinitum. That really is absurd, since it leads to the result that we can never determine, or come to know, what any sentence means, or whether it was meaningful at all.

But the argument doesn’t establish that this absurdity follows from the supposition that there are no metaphysical simples, since, on this interpretation, steps (iii) and (iv) do not follow obviously from step (ii). To see this, suppose I were to use the word ‘this’ as a logically proper name to refer to the chair I am sitting on. In order for this use of the word to have that meaning, the chair I intend to use it to refer to must exist. Suppose that my chair is made up of a huge collection of molecules configured in a certain way. Since my chair is made up of these molecules in this configuration, it may be necessary in order for my chair to exist, and, hence, in order for my use of the word ‘this’ on the present occasion to have both a referent and a meaning, that these molecules be so configured.14 But this is not something I have to know in order to know that the chair exists, or that my utterance meant what I took it to mean.

Next imagine a group of people with no conception of molecular structure who speak a language L with precisely the logical structure that Wittgenstein imagines, where the logically proper names are restricted to referring to people and ordinary middle-sized objects of their acquaintance. Even if none of the names, atomic sentences, or non-atomic sentences of L would have meanings were it not for the fact that certain molecular configurations existed, speakers of L could know their words to have the meanings they do without knowing any of this. The reconstructed tractarian argument for metaphysical simples fails because it doesn’t, as it stands, rule out the possibility that our language might be like L in never referring to metaphysical simples.

One could, of course, repair it so that steps (iii) and (iv) really did follow from step (ii). For example, one could stipulate that for the meaningfulness of a sentence S to depend on the truth of the claim that so-and-so is simply for it to be the case that necessarily, were it not a fact that so-and-so,

14 Perhaps not every molecule of which my chair consists must exist in order for my chair to exist, and perhaps the relevant cloud of molecules need not be configured exactly as they are presently configured. Still it may be necessary that if my chair exists, then some large number of the relevant molecules must be configured in some way approximating how they are presently configured in order for my chair to exist. The argument abstracts away from fine details of this sort.
then S would not be meaningful (or at least have the meaning it does). But, with this interpretation of dependence, the conclusion derived from the supposition that there are no metaphysical simples is no longer obviously absurd. Why shouldn’t it be the case that for any sentence S, S wouldn’t have a meaning (or at any rate have the meaning it does) were it not a fact that so-and-so, which, in turn, would not have been a fact had it also been a fact that such-and-such, and so on, ad infinitum? Perhaps there is some good reason for thinking that this really is impossible, or absurd, but, if so, we haven’t located it.

So far we have two versions of the argument. One rests on a claim about what knowledge of meaning epistemically requires; the other rests on a claim about what having a given meaning metaphysically requires. As we have seen, the former version is, though a genuine reductio, unsound, while the latter is no reductio. There is, however, a tractarian premise that could be added to bring these two versions together in a way that might more plausibly be thought to establish Wittgenstein’s conclusion. The needed tractarian premise relates necessity to apriority, and ultimately to provable logical truth. The premise, which will be discussed in later chapters, is that a proposition is necessarily true if and only if it is knowable a priori, if and only if it is a logical truth that can be proven by formal calculation. Although I take this to be one of the central philosophical errors of the Tractatus, Wittgenstein and his followers took it to be an important truth.

With this in mind, consider again the hypothesis that o is a composite object that consists in objects a, b, and c combined in a certain way. Given this, one might be able to argue that it is a necessary truth that o exists if and only if a, b, and c are combined in the right way.\textsuperscript{15} It then follows from the tractarian collapse of metaphysical, epistemic, and logical modalities into one another that it is knowable a priori that if o exists, then a, b, and c are combined in such-and-such way. But then, the proposition that a, b, and c are combined in such-and-such way must be an a priori consequence of the proposition that o exists. Next it is argued that no agent who is not in a position to know that a, b, and c are combined in such-and-such way can know that o exists. Now return to the example about the chair I am sitting on and the complicated configuration of molecules with which it is identified. I don’t, in fact, know which molecules are present in the array, or how they are related to one another. Moreover, there is no way for me to derive the correct conclusions about this from the proposition that I express by saying “This chair exists.” Since I am not in a position to know that the molecules (my a, b, and c) are combined in the requisite way, it follows that I don’t know that this chair—o—exists after all.

I don’t accept this conclusion, because I take the tractarian collapse of the modalities on which it is based to be a mistake. But logical atomists

\textsuperscript{15} The qualifications mentioned in the previous footnote apply here as well.
like Russell and Wittgenstein couldn’t avoid the conclusion in this way. Suitable
interpreted, they wouldn’t reject it at all. The Russell of The Philosophy of Logical Atomism
would express the conclusion by saying that my chair is a logical fiction, meaning by this that although the sentence ‘the
chair SS is sitting on exists’ is true, a proper analysis will reveal that it
doesn’t assert the existence of any entity properly characterized as a chair
or as something I am sitting on.¹⁶ A proper analysis must reveal this if,
as Russell and Wittgenstein believed, all necessary, conceptual connec-
tions between propositions are nothing more than logical connections to
be made transparent through analysis. Applying this idea to the sentence
about my chair, they would claim that it speaks of metaphysical simples
(which chairs are obviously not) as being arranged in a certain way, and
nothing more. For Wittgenstein, there are no composite objects because
if there were, they could be named by logically proper names, with the
result that some necessary connections between propositions wouldn’t be
logical or a priori connections.¹⁷ He would say that the fact that I do know
the truth expressed by ‘the chair SS is sitting on exists’ without know-
ing anything about molecules just shows that molecules aren’t simples.
If we could informatively identify the simples, we could specify just what
simples we are talking about, and what we are saying about them. But, as
we are about to see, it is central to the Tractatus that we can’t do this.

Putting this all together, we can improve the reconstructed tractarian
argument for metaphysical simples as follows. (i) Suppose there were
no metaphysical simples. (ii) Then the simplest elements in language—
logically proper names—would refer to composite objects; for example, a
logically proper name n might refer to an object o, made up of a, b, and c
composed in a certain way. (iii) In that case, it would be both a necessary
and a priori truth that n exists iff a, b, and c are composed in the requisite
way. (iva) Since the meaning of n is simply its referent, it would follow
that knowing that n means what it does, and hence knowing the meanings
of atomic sentences containing n (and perhaps even knowing that they
are meaningful) would require knowing the proposition that a, b, and c
are composed in the right way. (ivb) Because tractarian propositions are
meaningful uses of sentences, this would, in turn, require having proper
names a*, b*, and c* for a, b, and c, and using them in a proposition—that
a, b, and c are indeed combined—that one knows to be true. (v) Moreover, if
there were no metaphysical simples, then this process could be repeated for
a, b, and c—i.e., knowing that they exist and that propositions about them
are meaningful, and have the senses that they do, would require knowing

¹⁶ For critical discussion of Russell on analysis and logical fictions, see pp. 614–29 of volume
1 of this work.
¹⁷ If n named a composite object, then, since names are rigid designators, it would be plau-
sible to suppose that ‘n exists only if so-and-so are combined in such-and-such way’ is a
necessary truth that can’t be known a priori, and certainly is not a logical truth.
the existence of still further objects, as well as the meaningfulness of still further names for those objects and the truth of atomic propositions about how they are combined—and so on without end. (vi) The process could be repeated for every name and every atomic sentence. (vii) Finally, the result extends to all logically complex sentences, since it is a central doctrine of the *Tractatus* that the meanings of all complex sentences depend on the meanings of atomic sentences. (viii) Thus, if there were no metaphysically simple objects, then one couldn’t know the meaning of any sentence, or perhaps whether it even had a meaning. Since unknowable meanings are not meanings, the supposition that there are no metaphysical simples leads, in the presence of other tractarian assumptions, to the absurd conclusion that no sentences are meaningful. This is Wittgenstein’s *reductio*.

This is not the place to critique the cogency of the various tractarian assumptions on which the argument depends. For now it is enough to emphasize that the notorious tractarian collapse of the modalities was one of the key doctrines at work in motivating the simplicity of objects, which was fundamental to the ontology of the *Tractatus*.¹⁸ The resulting picture involves a striking parallel between language and reality. Linguistically simple expressions (logically proper names) stand for ultimate metaphysical simples. Linguistically simple sentences, which are combinations of names standing in relations to one another, stand for atomic facts, which are combinations of metaphysical simples standing in relations to one another. Since complex sentences will be claimed to be truth functions of atomic sentences, a world of atomic facts is all that is needed to determine the truth of all meaningful sentences. Whether the ontology is really derived from the linguistic theses, or whether each plays a role in motivating the other, the two are designed to fit together as hand and glove. The resulting metaphysical vision is a sparse but logicized version of traditional metaphysical atomism.¹⁹

¹⁸ It is instructive to compare the above reconstruction of the *reductio* with Max Black’s summary account of it on page 60 of Black (1964). He says, “If the world had no substance”—i.e. if there were no [simple] objects—. . . . we could never know what the sense of a given S₁ was without first, *per impossibile*, knowing an infinity of other propositions to be true. More simply: unless some signs are in direct connection with the world (as names are when they stand for [simple] objects) no signs can be in indirect connection either. Thus the sense which we find attached to the propositions we encounter in ordinary life forces us to believe in elementary propositions and so to believe in [simple] objects.” On p. 57 Black notes that the regress is closely connected to the possibility of *analysis* in Wittgenstein’s sense, and on p. 59 he generates the regress by taking composite objects to be necessarily composed of their parts. What he doesn’t do is explain why or how this necessity imposes requirements about what must be known by one who knows that the object exists, and hence that a name for it is meaningful. This is the role of the tractarian thesis collapsing the modalities, which drove both the logical atomism of Wittgenstein and that of Russell. I suspect the reason that Black didn’t mention it is that it was not, in 1964, recognized to be the very far-reaching and deeply misguided thesis that it is.

¹⁹ This point is emphasized in Robert Fogelin (1987).
3. WITTGENSTEIN’S LOGICALLY ATOMISTIC EXPLANATION OF CHANGE AND POSSIBILITY

Traditional atomism held that there are certain simple, indivisible bits of matter called ‘atoms’ which are the building blocks out of which everything in the universe is made up. All change in the universe was held to be the result of old combinations of atoms breaking down and new combinations taking their place. Even though atoms were taken to be the source of all change, they were themselves regarded to be eternal and unchanging.

Wittgenstein took over this traditional picture and recast it in a new form. The traditional statements of atomism looked like very general empirical hypotheses that might eventually be confirmed, refuted, partially supported, or partially undermined by continuing progress in science. Wittgenstein’s version of atomism was different. His statements couldn’t be confirmed or refuted by science because they were supposed to be prior to science. In addition, the simples he talked about were not simply the unchanging source of all change; they were also the source of all conceptual or logical possibility. Just as all change, all variation over time, is the combination and recombination of unchanging simples, so all variation in logical space between one possible state of affairs and another is a matter of the way that the same metaphysical simples are combined.

Wittgenstein expresses this idea in various ways. For example, in sections 2.027, 2.0271, and 2.0272 we get the idea that metaphysically simple objects are the unchanging source of all change.

2.027  The fixed, the existent and the object are one. [Objects, the unalterable, and the subsistent are one and the same.]
2.0271 The object is the fixed, the existent; the configuration is the changing, the variable. [Objects are unalterable and subsistent. Their configuration is changing and unstable.]
2.0272 The configuration of the objects forms the atomic fact.

Wittgenstein also makes it clear that the metaphysically simple objects of the world exist at all possible states of the world, and are the source of all possibility. On this view, to say that something isn’t the case, but could have been, is to say that although the basic objects are not combined in a certain way, they could have been so combined. Sample passages indicating this view include the following.

2  What is the case, the fact, is the existence of atomic facts. [What is the case—a fact—is the existence of states of affairs.]
2.01 An atomic fact is a combination of objects (entities, things). [A state of affairs (a state of things) is a combination of objects (things).]
2.011 It is essential to a thing that it can be a constituent part of an atomic fact. [It is essential to things that they should be possible constituents of states of affairs.]
2.012 In logic nothing is accidental: if a thing can occur in an atomic fact the possibility of that atomic fact must already be prejudged in the thing. [In logic nothing is accidental; if a thing can occur in state of affairs, the possibility of the state of affairs must be written into the thing itself.]

2.0121 (c) A logical entity cannot be merely possible. Logic treats every possibility and all possibilities are its facts. [Nothing in the province of logic can be merely possible. Logic deals with every possibility and all possibilities are logical possibilities.]

2.0122 The thing is independent, in so far as it can occur in all possible circumstances, but this form of independence is a form of connection with the atomic fact, a form of dependence. . . . [Things are independent in so far as they can occur in all possible situations, but this form of independence is a form of connection with states of affairs, a form of dependence. . . .]

2.0123 If I know an object, then I also know all the possibilities of its occurrence in atomic facts. [If I know an object, I also know all its possible occurrence in states of affairs.]

(Every such possibility must lie in the nature of the object.)

2.0124 If all objects are given, then thereby are all possible atomic facts also given. [If all objects are given, then at the same time all possible states of affairs are also given.]

2.014 Objects contain the possibility of all states of affairs.

2.0141 The possibility of its occurrence in atomic facts is the form of the object.

2.021 Objects form the substance of the world. . . .

2.022 It is clear that however different from the real one an imagined world may be, it must have something—a form—in common with the real world.

2.023 This fixed form consists of the objects.

According to the *Tractatus*, simple objects are fixed and unchanging. All possibility and all change are understood in terms of the combinations and recombinations of the same simple objects. Clearly, the individual simples persist throughout time, and exist at different possible world-states. There are strong suggestions that they exist throughout all time and at every possible world-state. In the *Tractatus*, all possibility—all variation in logical space—is nothing more than variation in the way that metaphysical simples are combined. But what are these objects like? From what we have said so far, one might think that they are something like the tiny billiard-ball bits of matter envisioned in traditional versions of atomism. But this isn’t what Wittgenstein had in mind.

4. THE HIDDENNESS OF THE METAPHYSICALLY SIMPLE

Wittgenstein says that objects are simple. They are shapeless, colorless, and, in general, have none of the familiar properties exemplified by
ordinary medium-sized things we encounter in everyday life. Not only do
metaphysical simples lack those familiar properties; they are what, so to
speak, make up or constitute such properties. One might say that the fa-
miliar properties of everyday life “come into existence” only with the con-
figuration of simple objects. For this reason, we have no way of describing
such objects, though, supposedly, we can name them.

Wittgenstein makes an illuminating comment about shape in the note-
books he kept while working on the Tractatus. He says:

Let us suppose we were to see a circular patch: is the circular form its prop-
erty? Certainly not. It seems to be a structural “property”. And if I notice
that a spot is round, am I not noticing an infinitely complicated structural
property?20

The point is something like this: when we say that something we perceive
is circular, what we are really saying is that the metaphysically simple ob-
jects that make it up bear certain structural (in this case, spatial) relations
to one another. Thus, the logical form of a sentence the so-and-so is circular
is, or at least includes, a complex statement of the sort a is related to b in
such-and-such way, which in turn is related to c in a certain way, which in turn
is related to d (and so on). Here ‘a’, ‘b’, ‘c’, and ‘d’ are logically proper names
for metaphysical simples that make up the complex thing denoted by the
subject of the original sentence. On this view, all talk of circularity can be
analyzed into talk of how multitudes of simples are related to one another.
If we ask whether the metaphysical simples are themselves circular, we are
asking a nonsensical question. To say that something is circular, or that
it has any shape, is to presuppose that it is a complex, the parts of which
stand in relations to one another. Since, by definition, simples have no
parts, they have no shape.

What applies to shape also applies to other familiar properties encoun-
tered in everyday life. Whenever we say of anything that it has one of these
properties, what we are saying is that the simples that make it up are ar-
ranged in a certain way. Since all these properties arise only at the level of
combinations of simples, it is nonsensical to ascribe them to the simples
themselves. We can, in principle, name the simples with logically proper
names, and say something about how they are arranged, but we can’t say
what they are like in themselves.

The hiddenness of metaphysical simples, and our inability to describe
what they are like, are, for Wittgenstein, not the result of remediable igno-
rance on our part. The mystery in which they are shrouded is essential to
them, and closely connected with central doctrines of the Tractatus.

2.021 Objects form the substance of the world. Therefore they cannot be
compound.

2.0231 The substance of the world can only determine a form and not any material properties. For these are first presented by the propositions—first formed by the configuration of the objects. [The substance of the world can only determine a form, and not any material properties. For it is only by means of propositions that material properties are represented—only by the configuration of objects that they are produced.]

2.0232 Roughly speaking: objects are colorless.

2.0233 Two objects of the same logical form are—apart from their external properties—only differentiated from one another in that they are different.

The first passage identifies objects with the substance of the world. The second tells us that this substance—the metaphysically simple objects—can only determine a form; they only have possibilities of entering into different configurations. In saying that they don’t determine “material properties,” Wittgenstein is, I take it, saying that they don’t possess properties like shape or color; nor do the objects themselves determine which things have such properties. These properties are represented only by propositions; they come into being with “the configuration” of objects. In short, such properties are to be analyzed in terms of the relations among the simples.

In the third passage we are given an example. Colors are among the “material properties” that Wittgenstein is talking about. Since being a certain color—say red—is simply a matter of being made up of simples that stand in a certain configuration, the simples themselves aren’t colored. Thus, we are told, they are colorless. Finally, in the fourth passage, two metaphysical simples of the same logical form—i.e., two simples with the same possibilities of combining with other objects—are said to have no intrinsic properties that differentiate them. They may have different external or relational properties; they may, as a matter of actual fact, happen to be combined with different objects, and so bear different relational properties. But apart from that there are no intrinsic properties to differentiate them. One of them, a, is simply different from, i.e., nonidentical with, b, whereas the other, b, is different from, i.e., nonidentical with, a.

Thus, for Wittgenstein the only thing we can say about simple objects is how they combine. He explicitly draws this conclusion at 3.221.

3.221 Objects I can only name. Signs represent them. I can only speak of them. I cannot assert them. A proposition can only say how a thing is, not what it is. [Objects can only be named. Signs are their representatives. I can only speak about them: I cannot put them into words. Propositions can only say how things are, not what they are.]

Although we can’t say what metaphysical simples are like, we are supposed to be able to describe how they combine. But even this may be overoptimistic. Doctrines about necessity and possibility, which go to the
heart of the Tractatus, place severe constraints on the relational statements about metaphysically simple objects we can intelligibly make.

5. THE LOGICAL INDEPENDENCE OF ATOMIC SENTENCES AND ATOMIC FACTS

I have already highlighted the tractarian collapse of necessity and apriority into logical necessity. Various passages throughout the Tractatus contribute to this doctrine. For example, at 6.375 we are told that the only necessity is logical necessity and the only possibility is logical possibility.

6.375 As there is only a logical necessity, so there is only a logical possibility. [Just as the only necessity that exists is logical necessity, so too the only impossibility that exists is logical impossibility.]

From this we know that any proposition that is true at all possible world-states, and so is metaphysically necessary, is also a logical truth, and so is logically necessary. Since the converse is obvious, necessary truth and logical truth are the same. At 5.13, 5.131, and 4.1211 we are told that whenever propositions stand in any logical relation, they do so because of their structure (which is shown on an analysis that reveals their logical forms).

5.13 That the truth of one proposition follows from the truth of other propositions, we perceive from the structure of the propositions. [When the truth of one proposition follows from the truth of others, we can see this from the structure of the propositions.]

5.131 If the truth of one proposition follows from the truth of others, this expresses itself in relations in which the forms of these propositions stand to one another.

4.1211 If two propositions contradict one another, this is shown by their structure; similarly if one follows from another, etc.

This suggests the remarkable view that whenever q is a necessary consequence of p, a formal proof of q from p can be given; similarly, whenever p and q are necessarily inconsistent, the falsity of one can be formally derived from the truth of the other.

Two corollaries are (i) that one atomic proposition is never a necessary consequence of another—i.e., the truth of one atomic proposition never follows necessarily from the truth of another, and (ii) that atomic propositions are never incompatible with one another. Corollary (i) is made explicit in the sequence ending in 5.134.

5.132 If p follows from q, I can conclude from q to p; infer p from q. [If p follows from q, I can make an inference from q to p, deduce p from q.]

The method of inference is to be made from the two propositions alone. [The nature of the inference can be gathered only from the two propositions.]
Only they themselves can justify the inference. [They themselves are the only justifications of the inference.]

Laws of inference, which—as in Frege and Russell—are to justify conclusions, are senseless and would be superfluous. ['Laws of inference', which are supposed to justify inferences, as in the works of Frege and Russell, have no sense, and would be superfluous.]

5.133 All inference takes place a priori. [All deductions are made a priori.]

5.134 From an elementary proposition no other can be inferred. [One elementary proposition cannot be deduced from another.]

In talking here about inference and deduction, Wittgenstein is talking about a priori consequence: q is an a priori consequence of p iff q can be validly deduced or inferred from p on the basis of a priori reasoning alone. Viewing such inference to be necessarily truth-preserving, he assimilated a priori consequence to necessary consequence and necessary consequence to logical consequence. Thus, we are told not only that no atomic proposition is a logical or a priori consequence of another, but also that no atomic proposition is a necessary consequence of another either. Corollary (ii) is explicitly endorsed at 6.3751 (c).²¹

6.3751(c) It is clear that the logical product of two elementary propositions can neither be a tautology nor a contradiction.

The idea behind these corollaries is clear. If an atomic sentence/proposition Ha logically entailed, or was logically incompatible with, another atomic sentence/proposition Gb, then the logical relation between the two would not be a matter of the structural relations between these two propositions, but rather would be about their subject matters, or contents. This cannot be so, because logic has no specific subject matter. Rather, the logical relationships holding among different sentences/propositions is always a purely formal matter; for Wittgenstein, it is always discoverable from an examination of their structure.

Since logic has no subject matter of its own, it has no method of finding out which atomic sentences/propositions are true and which are not. A central task of logic is to find sentences—logical truths, or tautologies—that are guaranteed to be true no matter how truth values are assigned to the atomic sentences; another task is to find sentences—contradictions—that are guaranteed to be false no matter how truth values are assigned to atomic sentences. Related to these tasks, logic will tell us when the truth of one sentence, or one set of sentences, guarantees the truth of another sentence, as well as when a set of sentences cannot jointly be true. If to

²¹ Elementary propositions are atomic propositions. The logical product of two propositions is their conjunction. If the conjunction of two atomic propositions can never be a contradiction, then the two propositions cannot be incompatible.
this conception of logic one adds the tractarian doctrine that all necessity (and apriority) is logical necessity and all impossibility is logical impossibility, one gets the result that every necessary, and every a priori, truth is a logical truth, or tautology, and every necessary falsehood, and every proposition that can be known a priori to be false, is a logical falsehood or contradiction. One also gets the result that whenever the truth of one sentence/proposition necessitates the truth, or the falsity, of another, the second sentence/proposition is a logical consequence of the first, or logically incompatible with the first.

Suppose for the moment that Wittgenstein is right: if p and q are atomic sentences/propositions, then the truth, or the falsity, of p is always compatible with the truth, or the falsity, of q; it is possible for both to be true, both to be false, or either one to be true while the other is false. In short, the two are independent. Since the Tractatus posits a parallel between atomic sentences/propositions and atomic facts, the same sort of result holds for atomic facts. Thus, just after being told at 5.134 that one elementary proposition can never be logically deduced, or inferred, from another, we are given 5.135, while earlier we were given 2.061 and 2.062.

5.135 In no way can an inference be made from the existence of one state of affairs to the existence of another entirely different from it. [There is no possible way of making an inference from the existence of one situation to the existence of another, entirely different from it.]

2.061 Atomic facts are independent of one another.

2.062 From the existence or nonexistence of an atomic fact we cannot infer the existence or nonexistence of another.

These doctrines about the independence of atomic sentences/propositions and facts can be used to throw light on what atomic sentences/propositions really say about metaphysical simples, and what atomic facts really are possible. At 6.3751 (a,c), Wittgenstein provides an example of the kind of argument we can use.

6.3751(a) For two colors, e.g. to be at one place in the visual field, is impossible, logically impossible, for it is excluded by the logical structure of color.

(c) (It is clear that the logical product of two elementary propositions can neither be a tautology nor a contradiction. The assertion that a point in the visual field has two different colors at the same time, is a contradiction.)

It follows from these remarks that there can be no meaningful atomic proposition that a is red, no proposition that says of some particular metaphysical simple that it is red. The reason that there can be no such atomic proposition is that if there were, its truth would be incompatible with the truth of the atomic proposition that a is green. Thus, the propositions—that a is red and that a is green—cannot be atomic. Likewise, there is no possible
atomic state of affairs that a is red, since this state of affairs would not be independent of the possible state of affairs that a is green.

This might not seem surprising, since we have already determined that, according to Wittgenstein, objects can’t have color, or indeed any other material properties. But the point is much more far-reaching. Consider the following relational statements.

1a. a is to the right of b.
   b. b is to the right of a.
   c. a is to the right of a.
2a. a is heavier than b.
   b. b is heavier than a.
   c. a is heavier than a.
3a. a is exactly two inches away from b.
   b. a is exactly one inch away from b.
   c. a is exactly one inch away from a.
4a. a is touching b.
   b. b is touching a.

In each case, the (a) and (b) statements are not independent of each other. In the first three cases they are incompatible with one another—i.e., it is impossible for both to be true. In the fourth case they are necessary consequences of one another—if one is true, then the other must be true. Similarly, statement (c) in the first three cases is necessarily false. These observations together with tractarian doctrines about atomic sentences/propositions entail that the statements in each example cannot all be atomic. Since in each example there is every reason to think that if one is atomic they all are, it follows from the fact that they are not logically independent that none qualify as atomic sentences, or propositions, in the sense of the *Tractatus*. We could produce the same sort of argument for virtually any statement involving spatial relations, temporal relations, relations involving measurement, or relations of relative size or degree. It follows that no statements of these types can be atomic sentences/propositions in the sense postulated by the *Tractatus*. This means that atomic sentences/propositions cannot attribute ordinary properties to metaphysical simples, nor can they attribute familiar relations involving space, time, measurement, or degree to these objects.

This leaves little or nothing we can imagine that atomic sentences/propositions can say. This is an incredible result. According to Wittgenstein, atomic sentences/propositions are the building blocks out of which all meaning is constructed. But if his doctrines are correct, we can scarcely conceive of any atomic sentences, or the specific contents they might have. In the end, he is forced into saying that all thought about the world reduces to thought about simple objects that have no properties we can identify and that can’t be combined in any ways we can imagine; nevertheless they do combine in ways we can’t comprehend. It is hard to understand what
this really amounts to, let alone why anyone should believe it. It is, I think, fair to say that few, if any, philosophers did.

Wittgenstein’s views about metaphysical simples and the way they combine to form atomic facts are among the darkest and most implausible aspects of the *Tractatus*. But other aspects of the *Tractatus* were much more interesting and influential. Particularly important were the doctrines about the nature of truth, meaning, and propositions, as well as related doctrines about logic, necessity, possibility, and the relationship between logically complex and atomic sentences/propositions. These aspects of the *Tractatus* are examined in the next two chapters.