"Showing" in the "Tractatus":

the root of Wittgenstein and Russell's basic incompatibility

When the *Tractatus Logico-Philosophicus* was being prepared for its English edition, C.K. Ogden suggested as its English title, "Philosophical Logic". It was rejected by Wittgenstein because he did not think there was any such thing as philosophical logic. In fact, one of the points of his critique of *Principia Mathematica* was that it tried to make a case for philosophical logic, i.e. to find a "foundation for logic" and to formalize it. One cannot, however, lay out or say what the formal properties of a proposition are. This is shown by the proposition itself (6.12).[1] One cannot determine by rules what a valid inference is, for this is already shown in the inference itself (5.132). One cannot stipulate or define that signs are a proposition having a sense, for that something is a proposition is shown by the proposition itself (5.5351). This is Wittgenstein's well-known doctrine that what is shown in language cannot be said.

It is difficult to elucidate the doctrine of showing without simply repeating it. I think the reason for this is that the doctrine represents a synoptic view of the nature of language in general, and such synoptic views (like a view about the nature of philosophy) cannot be explained - they can only be illustrated. This indeed is how Wittgenstein presents the doctrine in the *Tractatus*. He gives various illustrations, and in spite of the apparent divergencies of these illustrations I think they possess a common core which is a general view about the nature of language and meaning.

If one accepts this view of language, one can understand and appreciate Wittgenstein's criticisms of Russell. If one fails to see language this way, then these criticisms will appear innocuous and have so appeared to many philosophers. Indeed, Wittgenstein's criticisms of Russell and Frege have had little, if any, impact upon the course of logic. This, I think, is be- cause logicians, in general, are far removed from the view of language re- presented by the doctrine of showing. For similar reasons, Russell never admitted the force of Wittgenstein's criticisms of *Principia,* and most like- ly never fully understood the *Tractatus.* In both cases this was due to his failure to grasp the impact of the doctrine of showing. Russell was hardly alone in this misunderstanding, for according to the letter that Witt-

genstein wrote to Russell from his prison camp in Italy on August 19, 1919, if Russell did not understand, then no one did, including Frege.[2] Wittgenstein, in this letter, laments that it is "very hard" not to be understood by a single person. He looks forward to seeing Russell personally as soon as he can so that he can explain matters to him directly. That the doctrine of showing was Russell's main stumbling- block is attested to by Wittgenstein's remark in this letter:

> Now I am afraid you haven't really got hold of my contention, to which the whole business of logical propositions is only a corollary. The main point is the theory of what can be expressed (*gesagt*) by propositions - i.e. by language - (and, which comes to the same, what can be *thought*) and what cannot be expressed by propositions, but only shown (*gezeigt*)....

Wittgenstein appended a postscript to this letter in which he answers some questions Russell had concerning the *Tractatus*. Of the nine points made, three are directed at Russell's failure to grasp the full impact of the doctrine of showing. On this evidence, I think it can be said that the main source of Russell's misunderstanding of the *Tractatus* was over the doctrine of showing.

My purpose in what follows is to bring together various remarks from the *Tractatus* in which "showing" plays a crucial role and to flush out the general view of language and meaning they display. We will thus be enabled to appreciate more fully the divergence of philosophic view- point that separated Russell and Wittgenstein even in the early stages of their relationship. The doctrine of showing was an important element in Wittgenstein's thinking almost from the very beginning. The "Notes Dictated to Moore in Norway" in April 1914 start with an enunciation of the doctrine of showing as applied to logical propositions, i.e. that logical propositions show the logic of language and the universe, but *say* nothing.

An interesting remark of Wittgenstein's is preserved by his pupil M. O'C. Drury. Drury says that Wittgenstein was once discussing with him the development of his thought while he was working on the *Investi- gations,* and he said to Drury, "My fundamental ideas came to me very early in life."[3] Drury quotes three passages from the *Tractatus* as ex- pressing these fundamental ideas.[4] Of these, two are clearly expressions

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[1]Parenthetical references, unless otherwise indicated, are to paragraphs in the *Tractatus*. Quotations are from the Pears and McGuinness translation.

[2]L. Wittgenstein, *Letters to Russell, Keynes and Moore,* ed. G.H. von Wright (Oxford: Blackwell, 1974), pp. 71-3.

[3]M. O'C. Drury, *The Danger of Words* (London: Routledge and Kegan Paul, 1973) p. ix.

[4]These are 4.115, 4.116 and 6.522.

of the doctrine of showing (4.115 and 6.522). It is clear that "showing" was both a fundamental and an early part of Wittgenstein's thought. An interesting speculation is, if Drury is correct, then what role does the doctrine of showing play in Wittgenstein's later views, when (so far as I know) it is hardly mentioned by him in his later writings?[5] Leaving this speculation aside for the moment and returning to our purpose at hand, let us examine the doctrine of showing in the *Tractatus* with an eye to the question of how an explication of this doctrine can help explain the failure of understanding apparent in the philosophical exchanges between Russell and Wittgenstein, as documented in their correspondence.

Our plan will be to discuss certain criticisms that Wittgenstein made of Russell's philosophy of logic and language which are grounded in the doctrine of showing. Among the topics we will discuss are: (1) the formalist's conception of logic which Wittgenstein thought *Principia* to be expounding, (2) the axiom of infinity, and (3) the theory of types. Wittgenstein's criticisms are not of a technical nature, but are directed at the ideas that lay behind these enterprises or theories. When one goes behind the scenes of these questions one finds a general difference of viewpoint as to the nature of the meaning of language. This divergence represents a wider gap in the philosophical positions of the early Wittgenstein and Russell than is commonly thought to exist. Other criticisms of Russell's logic can be found scattered throughout the *Notebooks* and the *Tractatus*, such as that of the assertion sign which Russell adopted from Frege, the distinction between real and apparent variables, and the claims that the primitive propositions of *Principia* are truly primitive and that logical relations are genuine relations. However, these criticisms do not arise from the doctrine of showing, and since the main burden of this paper is to compare Russell and Wittgenstein on "showing", we shall leave them aside here.

Let us turn to the first criticism mentioned above. Throughout his philosophical career, Wittgenstein criticized what roughly can be called "formalism" in logic. He understood it as the doctrine that what determines the validity of a particular logical inference is whether it can be seen to follow from certain "rules of inference"; generally, the doctrine that a well-formed proposition is possible only within a system that stipulates the rules for the formation of propositions. Whether the rules of inference or the rules for the formation of propositions

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[5]A rare exception is in *On Certainty*, paragraphs 7 and 618. In 501 there is the thought without the phrase.

can themselves be validated in a way that is non-circular is a moot point. I think that Wittgenstein would say that such a validation is not possible, but in any event his criticism of Russell and of Frege on the first point is clearly stated in 5.132:

> If p follows from q, I can make an inference from q to p, deduce p from q.
> The nature of the inference can be gathered only from the two propositions.
> They themselves are the only possible justification of the inference.
> "Laws of inference", which are supposed to justify inferences, as in the works of Frege and Russell, have no sense, and would be superfluous.

The nature of the relation between two propositions whereby one follows from the other is an internal one in that if p follows from q, then "... the sense of 'p' is contained in the sense of 'q'" (5.122). From this is derived Wittgenstein's notion that all logical inferences are tautologies. As he says in 5.13, "When the truth of one proposition follows from the truth of the others, we can see this from the structure of the propositions". What Wittgenstein means here by "structure" is something like logical form (4.122), and logical form is shown by a proposition (4.121). No other proposition can say what the logical form of any proposition is, for to do this one would have to devise a proposition that itself would be devoid of logical form, which is impossible. This idea requires explanation, for it is basic to an understanding of the *Tractatus*.

What Wittgenstein means by a proposition *saying* something is that it gives information that otherwise would be unknown. What a proposition *says* is the empirical content of the proposition. Logical form, however, is what any proposition must have before it can say anything, and one must be able to understand logical form before one can grasp the sense of *any* proposition. However, if the logical form of a proposition could be *said* by another proposition, then logical form must be something I can know only on the basis of what the proposition tells me, i.e. what it says. If this were so, I would not be able to understand the proposition in the first place. I must in some sense be able to recognize it as a proposition before it is presented to me, though I may not know the information that this proposition conveys. If a novel is written in English, I know I can read it and understand it though I know nothing of what the novel is about. Or what is perhaps more to the point, if I know that certain unintelligible marks are a language, I know I could understand them if I could only "break the code" or determine the "logico-syntactical employment of the signs", to

use the language of the *Tractatus*. The reason I can know all this in advance is that such knowledge is not information conveyed by the propositions of language. Logical form is what I must know in order to understand language. It is therefore, not something that can be taught *by* language. The generative process of how we come to know logical form was considered by Wittgenstein as a problem for psychology and had nothing to do with philosophy or the *logical* analysis of language.

When Wittgenstein says that logical form is "shown" by language, he means that this is what I must know in order to recognize that this is a proposition, i.e. that it *says* something. In order for a proposition to be able to *say* what logical form is, logical form would have to be information of which one would be ignorant without this proposition. But if this were the case, this proposition itself would have to be constructed independently of logical form: otherwise one would have to know logical form in order to recognize it as a proposition, in which case logical form could not be information conveyed by a proposition of which one would otherwise be ignorant. In other words, a proposition that says what logical form is would be a proposition that was not part of language and thought as we know it. It would stand outside logic and language altogether and would be what Wittgenstein calls the illogical (*unlogisch*).[6] Wittgenstein thought it *prima facie* absurd that there could be such a thing as an illogical proposition, since if there were "... we should have to think illogically" (3.03), which is, of course, impossible. This is part of what Wittgenstein meant when he said that what is shown by a proposition cannot be said. At least it is how this broad dictum would apply to propositions of logic. It is also the reason why "rules of inference" do not validate logical inferences. The structures of the propositions themselves show this. An attempt to justify this in a "rule of inference" is one form of an attempt to say what can only be shown.

Wittgenstein underscores this point further by his claim that the essence of logical inference is *modus ponens* and that "one cannot express the *modus ponens* by means of a proposition" (6.1264). I take this to mean that the logical truth of *modus ponens* is "shown" by the logical propositions and that there are no rules of inference in terms of which it itself could be proven. In logic, Wittgenstein says, every proposition is its own proof (6.1265). This is an obscure saying, but I think

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[6]Perhaps a better translation would have been "non-logical" or that which not only contradicts logic but which also transcends logic, though there is ultimately no difference between the two.

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it means that no proposition of logic is more primitive than any other. This is because all logical propositions are tautologies and one tautology is no more primitive than any other, though some tautologies may be more complex than others. The important point, however, is that whether a proposition *is* a tautology cannot be determined by rules or definitions, for "Every tautology itself shows that it is a tautology" (6.127).

Similarly, the question of what determines a "well-formed formula", or what makes signs into a proposition, is also not something that can be answered by rules or definitions. There can be no rules that say that something is a proposition. That "p" is a proposition is shown by "p" itself. A proposition shows its sense (4.122), and its sense cannot be said for it by another proposition.

This is no doubt what Wittgenstein had in mind in 5.5351 when he was criticizing Russell's *Principles of Mathematics*.

> ... in Russell's *Principles of Mathematics* "p is a proposition" – which is nonsense – was given the symbolic rendering "p ⊃ q" and placed as an hypothesis in front of certain propositions in order to exclude from their argument-places everything but propositions.
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> (It is nonsense to place the hypothesis "p ⊃ p" in front of a proposition, in order to ensure that its arguments shall have the right form, if only because with a non-proposition as argument the hypothesis becomes not false but nonsensical, and because arguments of the wrong kind make the proposition itself nonsensical, so that it preserves itself from wrong arguments just as well, or as badly, as the hypothesis without sense that was appended for that purpose.)

In the same vein, Wittgenstein criticizes Frege in 5.4733:

> Frege says that any legitimately constructed proposition must have a sense. And I say that any possible proposition is legitimately constructed....

That "p" is a proposition does not wait upon its conformity to some predetermined formula or formal analysis. That is, one cannot *say* what is a proposition. Rather, "p" shows itself to be a proposition with a sense. One can perform a *post mortem*, so to speak, on a proposition and analyze its form, but one cannot create propositions by using these forms as guides. This is what it means to say that one cannot state what the sense of a proposition is. After the proposition is given it is redundant to say that it is a proposition or to say that it has a certain form.

The term "proposition" is what Wittgenstein called a formal concept. The above criticism is put succinctly by him in 4.216 when he says that formal concepts cannot be expressed by means of functions but by what he calls a variable. That is, we cannot attribute properties or

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characteristics to formal concepts: we simply stipulate signs to stand for them. Thus a proposition is not expressed by a propositional function but by a propositional variable, in Wittgenstein's language, and the sign of a proposition is simply "p", which stands for any proposition just as "$\overset{.}{x}$" in Wittgenstein's notation stands for any name. Basically, the idea is that formal concepts cannot be talked about by propositions. Propositions show that certain formal concepts are being utilized. When I use the word "table" or the sign for the number one, I show that I am making use of the formal concepts "object" and "number". One cannot, however, use the formal concepts the same way one uses the things that introduce them. One can say "These are tables" but not "These are objects" (4.1272). One can say "1 + 1 = 2" but not "One is a number" or "There is only one zero." When I say "There is a number on the back of my shirt" or "There is only one zero in the equation", I am not talking about numbers but symbols of numbers, and when I talk about a table I am not talking about the concept "object". "Object" and "number" here are not like genus and species. That Socrates is a man and that man is a species of animal can be said by a proposition. It gives us information about Socrates and about what man is. It represents an increase in our knowledge of the world.

However, if I say "The table is an object" or "One is a number", what I say gives no information about the table or about "one". That the table is an object and "one" is a number are things I must know before I can understand any proposition in which they occur, but this is something that no proposition could tell me. I might not know what the word "table" means in English, but it is certain that this could not explained to me unless I understood what a table was in *some* language. If I had no idea what a table was because where I grew up there were no such things as tables, though I knew all about chairs, beds, sofas and dressers, then you could explain to me what this piece of furniture was like by describing how it looks and how it is used. If I had been even more deprived, so that I didn't know what furniture in general was and had never seen any, though I knew all about trees and animals, it might be more difficult to get me to understand what a table is, though I suppose with time and patience it could be done. But if my deprivation extended so far that I had no concept of an object, there is no way in the world that "table" could ever be explained to me. Similarly, if I do not understand what number is you cannot explain to me how to count or add. That I am able to understand propositions like "The table is brown" and "1 + 1 = 2" comes from my being able to understand the general form of the sign for an object or a number, and this sign is what Witt-

genstein calls a variable.

Another important critique of *Principia* is expressed by Wittgenstein's dictum that logic must take care of itself. That is, the propositions of logic must show themselves to be true or false independently of any confirmation by observation of the world. That is, the truth or falsity of logical propositions must be seen from their sense alone. This means that the kind of sense they have is not the kind of sense that a genuine proposition has which describes or limits the world. In this sense they are "*sinloss*", i.e. senseless, for they are true or false in every or any possible world. The truth or falsity of logical propositions Wittgenstein called "tautology" and "contradiction". As a tautology is true under all conceivable conditions, it requires no empirical axioms or propositions to support it.

Now Russell's definition of number, in order to avoid circularity, required a reference to objects in the world. To ensure that one would not run out of numbers he assumed the axiom of infinity, which stipulated that the objects in the world are infinite. This, however, is a statement of fact, a proposition with a sense that is true or false of the world. As such, it could not be an axiom in number theory or logic according to Wittgenstein's conception of logic.

Furthermore, since "number" is a formal concept it is nonsense even to consider the possibility of there being only so many numbers in the world and no more, as one might talk about the number of neutrinos. The axiom of infinity, however, seems to admit the possibility that the number of integers could be finite; otherwise there would be no need of an axiom to ensure that they are not. But it is nonsense to admit the possibility of running out of integers. That the integers are infinite, or rather denumerably infinite, is shown by the number series itself. Therefore the axiom of infinity is redundant. It tries to say what can only be shown, i.e. what anyone knows who can count.

It follows that one cannot attempt a constructive definition of number. Since the concept of number is a formal concept it can only be shown through the various operations of integers that compose arithmetic. Though Wittgenstein himself attempted a definition of number in the *Tractatus*, it was not meant as a constructive definition in which the definiens cannot assume the definiendum under pain of circularity, but rather it was intended by Wittgenstein as a contextual definition to elucidate how number actually operates in calculation. Indeed, the *Tractatus* definition of number assumes the laws of addition and therefore number. The fact that Russell had to resort to referring to physical

entities in order to avoid circularity shows that this kind of definition is misguided, for it renders the definition of number empirical. It is paradoxical that this result goes counter to the over-all intention of *Principia* to reduce mathematics to logic.

The truth is that one does not need a definition of number to do arithmetic any more than one needs a definition of an object to talk about furniture. Calculation and arithmetic are part of our language and lives just as interior decorating is, and how numbers are used is shown by the language of arithmetic. The need of Russell and Frege to define number was primarily due to their desire to reduce arithmetic to logic. Wittgenstein criticized this attempt at reduction by saying that the propositions of logic are tautologies while the propositions of arithmetic are equations, and that these are two *different* ways of showing the logical structure of the world.

> The logic of the world, which is shown in tautologies by the propositions of logic, is shown in equations by mathematics. (6.22)

Whether arithmetic can be reduced to logic is not to the point. What is to the point is that the propositions of logic and arithmetic are *different* ways in which the logical form of the world is shown, as poetry and music might be said to be different ways of expressing an emotion. What would be the point of reducing one to the other, assuming that it could be done?

One can "reduce" mathematics to logic only by masking the essence of mathematics. This would not make mathematics more valid or certain, any more than our ability to reduce music to mathematical analysis would give us a better or more certain grasp of music. As Wittgenstein said later in his *Remarks on the Foundations of Mathematics*, one can wrap up any piece of furniture to look like a ball, but it is very misleading to do so.[7] The important point is that tautologies and equations are different forms of necessary propositions and that a proposition is a tautology or an equation can only be shown by the proposition itself, once the terms of the propostion are clear. Necessary propositions cannot be stipulated or defined, since "Every tautology itself shows that it is a tautology" (6.127). The *Tractatus* makes no similar claim for equations, but I think Wittgenstein would have said that the same holds for them. The attempt of Russell and Frege to define number and then derive the definition from propositions of logic might be said, in the language of the *Tractatus*, to be a grand scheme for *saying* what a

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[7]P. 73.

number is in a manner similar to the way in which philosophical phenomenalism can be said to be attempt to *say* what an object is. Both attempts are misguided in the same way. An object is a concept we *must* have in order to talk about furniture, but the definition of an object can do nothing more than describe how we *do* talk about furniture and other objects. It cannot legislate how we *shall* talk about them or get us to understand any better the design and construction of furniture. Similarly, number is a concept we *must* have to calculate, but a definition of number cannot legislate how we shall calculate or help us better understand a calculation. Such definitions are useless and perhaps misleading if they give the impression of being illuminating or telling us something about what it means to be a piece of furniture or a calculation. Such attempts sometimes go under the rubric of "philosophy of empirical knowledge", "philosophy of mathematics", or "philosophy of logic". Behind Wittgenstein's denial of the validity of such "philosophies" was his conception that they attempted to say what can only be shown. They attempt to define a formal concept whose meaning can be given only by the way things displaying this concept are used and understood in language and thought.

The failure to appreciate the full force of Wittgenstein's doctrine of "showing" is manifest in the Introduction that Russell wrote to the English edition of the *Tractatus*. In this Introduction Russell fails to understand the implications the doctrine has for language and meaning in general. It seems to me that the notion of showing in the *Tractatus* can, in a certain sense, be a general critique of all theories of meaning. The reason is that *any* theory of meaning is redundant in establishing or explaining the meaningfulness of a proposition. A good illustration is Plato's view in the *Sophist* that the weaving of the forms is necessary if there is to be significant discourse, i.e. propositions. But significant discourse is a fact about the world, beautifully illustrated by the *Sophist* itself, whether or not the forms weave or whether there are forms at all. One could say the same thing about the universals, classes and indivduals that Russell at one time or another claimed to be necessary in order for language to be meaningful. Meaningful language exists regardless of any particular theory of meaning or semantics. Any such theory is, therefore, redundant. This, I think, is behind Wittgenstein's remark in 5.5563:

> In fact, all propositions of our everyday language, just as they stand, are in perfect logical order. — That utterly simple thing, which we have to formulate here, is not an image of the truth, but the truth itself in its entirety.

(Our problems are not abstract, but perhaps the most concrete that there are.)

Shades of Wittgenstein's later philosophy! Indeed, the concept of the meaning of a sign as determined by its use is clearly expressed in the famous Occam's razor remark of 5.47321:

Occam's maxim is, of course, not an arbitrary rule, nor one that is justified by its success in practice: its point is that *unnecessary* units in a sign-language mean nothing.

Signs that serve *one* purpose are logically equivalent, and signs that serve *none* are logically meaningless.

Occam's maxim can be applied to propositional signs themselves. It can be said that propositional signs which have a use in a language are precisely those that have sense. That is why the propositions of everyday language are in perfect logical order just as they are, for just as they are they have a legitimate use.

This notion of a "legitimate use" plays a more important role in the *Tractatus* than is generally believed. It is what transforms a sign into a symbol.

In order to recognize a symbol by its sign we must observe how it is used with a sense. (3.326)

In "Green is green" where "Green" is a proper name and "green" an adjective, there is perhaps one sign (leaving the capital "G" aside) but two symbols, for "Green" has a different use in the proposition from "green". This ambiguity is due to a certain looseness in the signs in everyday language which a conceptual notation or a more rigorous language, such as Russell's or Frege's, would avoid. However, even though the syntax of everyday language is loose, it is still *syntax*, which is what renders the signs of everyday language into symbols. Even in a rigorous language, the sense of the propositions would be determined solely by the "logico-syntactical employment of the signs" (3.327). The "employment" or use of the signs cannot be stipulated or defined, i.e. their use cannot be *said*. Rather, the rules of logical syntax are the rules we *must* follow in order to produce propositions and not nonsense. It is this logical syntax that determines (or rather "shows") logical form, and it is this that transforms a sign into a symbol.

A sign does not determine a logical form unless it is taken together with its logico-syntactical employment. (3.327)

That a sign is a symbol is shown by its use. The use shows the sign to be the kind of symbol it is. Now Russell had thought that a sign became a meaningful symbol when it had a legitimate semantical employment, i.e. it referred to something. This is just what Wittgenstein denied in 3.33:

> In logical syntax the meaning [*Bedeutung*] of a sign would never play
> a role. It must be possible to establish logical syntax without
> mentioning the *meaning* [*Bedeutung*] of a sign: only the description
> of expressions may be presupposed.

Wittgenstein proceeded from this remark to a criticism of Russell's
theory of types in 3.331.

> From this observation we turn to Russell's "theory of types". It
> can be seen that Russell must be wrong, because he had to mention the
> meaning [*Bedeutung*] of signs when establishing the rules for them.

According to the theory of types, one cannot determine the rules for the
ground-level language until one first determines that some signs refer
to (mean) concrete objects, the next type level cannot be determined
until one first determines which signs refer to (mean) symbols of the
ground-level language, and so on. But this is unnecessary, for all that
is required to recognize a symbol by its sign is to "... observe how it
is used with a sense", and this is shown by the proposition itself. It
follows from this that one can determine the sense of a proposition apart
from the question of the truth of the proposition or whether the signs
refer to anything. I can know that a sign is a proposition without know-
ing whether it is true or whether its symbols refer to anything (4.024).
Thus the doctrine of showing, whereby a proposition shows its sense and
its sense is not dependent on semantical reference, is an important ele-
ment in Wittgenstein's criticism of Russell's theory of types.[8]

For our purposes, this criticism of the theory of types is im-
portant for seeing a crucial divergence between Russell and Wittgenstein
on the source of the meaningfulness of language. Wittgenstein holds that
it lies in the syntactical use of the signs in his special sense of "syn-
tactics", while Russell holds that it lies in the semantic reference
of names. This divergence is, I believe, one of the main stumbling-blocks
to Russell's understanding of the *Tractatus*. He always thought that the
Tractatus held a theory of the meaningfulness of language that was basic-
ally the same as his own. Thus his description of what he takes the

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[8]The same idea is expressed in different wording in the Aug. 19, 1919,
letter. In characterizing his theory of types, Russell had written to
Wittgenstein: "The theory of types, in my view, is a theory of correct
symbolism: (a) a simple symbol must not be used to express anything
complex; (b) more generally, a symbol must have the same structure as
its meaning." (What Russell here means by "meaning" is "referent".)
To this Wittgenstein replied: "That's exactly what one can't say. You
cannot prescribe to a symbol what it *may* be used to express. All that a
symbol CAN express, it MAY express." This is cryptic, but I think it
means basically the same thing as the remark of 5.5563 quoted above,
that all propositions of everyday language, just as they stand, are in
perfect logical order.

logical analysis of language to be in the *Tractatus* is more a description
of his own views than those of the *Tractatus*. He writes in his Intro-
duction:

> The assertion that there is a certain complex reduces to the assertion
> that its constituents are related in a certain way, which is the
> assertion of a *fact*: thus if we give a name to the complex the name
> only has meaning in virtue of the truth of a certain proposition,
> namely the proposition asserting the relatedness of the constituents
> of the complex. Thus the naming of complexes presupposes propositions,
> while propositions presuppose the naming of simples. In this way the
> naming of simples is shown to be what is logically first in logic.
> (p. xiii)

This misrepresents the *Tractatus*, for it is not the naming of simples
(a semantical notion) that is logically first in logic, but the sense
that is shown by propositions, in the context of which names can occur.
As Wittgenstein often said, the sense of a proposition is a *syntactical*
notion. Names which refer to simple objects can occur *only* within the
context of a proposition having sense:

> Only propositions have sense; only in the nexus of a proposition
> does a name have a meaning. (3.3)

That is, it is the syntax or the *use* of the signs that determines the
meaningfulness of language. Thus the idea of "use" plays as important
a role in Wittgenstein's conception of language in his *Tractatus* period
as it does in his later period. I think Russell never fully realized
this.

One might be tempted to say that Russell *did* understand the doc-
trine of showing, for after all he does mention it with his approval
and praise in the Introduction, and on page xx he notes that it is the
logical form of a proposition that is said to be shown. However,
Russell never mentions the crucial point that it is the *sense* of a pro-
position that is shown and cannot be said, though this is very explicit-
ly stated in the *Tractatus* (4.022), and it is this that lies at the
heart of the doctrine. That logical form is shown, is a kind of corol-
lary of the fact that it is the sense of a proposition that is shown,
for it is the sense which renders signs into propositions and connects
propositions with the world.

In discussing the problem of generality Russell notes that, on
Wittgenstein's analysis, one has to have a statement about the sum-
total of things in the world.[9] As Russell says, this is impossible on
Wittgenstein's view, for the objects of the world cannot be said but only

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[9]Introduction to *Tractatus*, pp. xxi-xxii.

shown. Russell quotes 6.45 that "the feeling of the world as a bounded
whole is the mystical" and then adds himself, "... hence the totality
of the values of x is mystical". Here x is the variable for all names
of objects in the world. 6.45, however, is not giving a reason why we
cannot say how many objects there are in the world. It is simply saying
that seeing the world as a limited whole is what is mystical. The reason
why one cannot say how many objects there are is given in 4.1272. There
Wittgenstein says that since "object" is a formal concept one cannot say:

> ... "There are objects", as one might say "There are books". And it
> is just as impossible to say "There are 100 objects", or "There are
> $\aleph_0$ objects".

The number of objects in the world is shown in the language by the number
of names the language contains. One cannot say how many values there
are of the variable "x". It is shown by the list of names a, b, c, ...
in the language.[10] This confirms something we have already argued:
that Russell did not grasp the distinction in the *Tractatus* between
formal and proper concepts. This distinction is one of the primary spin-
offs of the doctrine of showing.

It is the last paragraph of his Introduction, where Russell makes
the famous suggestion of a hierarchy of languages, that is really the
last word in this misunderstanding. Russell asks us to consider the
following possibility:

> that every language has, as Mr. Wittgenstein says, a structure con-
> cerning which, *in the language*, nothing can be said, but that there
> may be another language dealing with the structure of the first
> language, and having itself a new structure, and that to this hier-
> archy of languages there may be no limit. Mr. Wittgenstein would of
> course reply that his whole theory is applicable unchanged to the
> totality of such languages. The only retort would be to deny that
> there is any such totality. The totalities concerning which Mr. Witt-
> genstein holds that it is impossible to speak logically are neverthe-
> less thought by him to exist, and are the subject-matter of his mysti-
> cism. The totality resulting from our hierarchy would not be merely
> logically inexpressible, but a fiction, a mere delusion, and in this
> way the supposed sphere of the mystical would be abolished.

What Russell fails to see here is that the very concept of a
hierarchy of languages is a confusion according to the doctrine of
showing. It is not that there is a hierarchy of languages about which
nothing can be said. Rather, the very idea of a hierarchy is misguided
in the first place. One cannot stand above language and formulate a
meta-language in which one can describe the logic of the first-order
language. This would be like standing outside of language in order to

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[10]Wittgenstein says this in his reply to Russell on Aug. 19, 1919.

say what are the boundaries of language. Since the boundaries of language are circumscribed by the logical propositions, to stand outside these boundaries would mean to stand outside logic. But language cannot express and the mind cannot think the illogical, as we noted above, and so a description of the boundaries of language is inconceivable. In truth there is only one language, human language, of which there are various forms such as German, French, English, etc. In this sense there can be different "languages", but not in the sense that there can be various levels of types of language each with a logic of its own.

There is an interesting passage in the *Notebooks* in which Wittgenstein talks around this point without any reference to his doctrine of showing. In the entry for 29.5.15 he asks:

> But is *language* the *only* language?
>
> Why should there not be a mode of expression through which I can talk *about* language in such a way that it can appear to me in co-ordination with something else?

Such a "language" could not, of course, be contained in the language it talks about. Suppose, for instance, that music were such a "language". Then music would not be part of the descriptive language itself. But music is not such a "language" and in truth there *is* no such language, for as Wittgenstein says later on in the same entry, "I myself can only write *sentences* down here". One can talk about language only through and by means of language. In other words, language is a whole and at the same time unique. This, I believe, is the essence of the doctrine that what is shown in language cannot be said.

I myself think that this doctrine is true. However, if it is true, all theories of meaning are misguided, if we mean by a theory of meaning, a theory that tries to say what makes languages possible. Any attempt to do so is bound to lead to the kind of paradoxes that are called "philosophical problems". I like to think that this is what Wittgenstein had in mind when he wrote in the Preface to the *Tractatus* that the reason why the problems of philosophy arise is that "... the logic of language is misunderstood". I would have said rather that the problems of philosophy arise from philosophers saying what the logic of language *must* be in order for language to be meaningful. However, the very idea of a *meaningless* language is itself a contradiction, so that one cannot even frame what it is philosophers try to do without involving oneself in a paradox. This itself may be as good a piece of evidence as one can find for the truth of Wittgenstein's doctrine of showing.

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