Names, Nonsubstitutivity and the Tanney Puzzle

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I. Peter Hacker: the Name

Many propositions of the *Tractatus* are elusive; many are dubious. But one that seems so obvious as to be hardly worth expressing is 'A name refers to (bedeutet) an object. The object is its referent (Bedeutung)' (3.203). This claim about names is exactly the kind of philosophical 'theory' that, in later writings, Wittgenstein seeks to undermine by the simple expedient of looking closely at how words are actually used. How are names used – do they always serve to refer to their bearers?

Peter Hacker leaves the conference earlier than expected, on Wednesday, but, quite by chance, soon after he does so, another participant joins the conference and this person, though not the spitting image of Peter, resembles him quite strikingly. I am too lazy, so late in the day, to learn this new guy's name, but, just for a laugh, when speaking with friends, I refer to him as 'Peter Hacker' and my friends start adopting this usage too. I never get close enough to the new guy to read his name badge, but you can see, even at a distance, that it is quite a long name. So my friends and I are using the name 'Peter Hacker' to refer to someone whom we know not to be the bearer of that name. Consider some further uses of the name 'Hacker':

- I see Peter across a crowded room and joyfully cry out 'Hacker', choosing the surname because I know there to be many Peters in the room but only one Hacker.

- I confide to someone 'Hacker is so called because he breaks into other people's computers'.

- I hear that the astonishingly prolific Professor Hacker has several new volumes coming out in November and tell a colleague 'I shall have to clear more space for Hacker on my bookshelf'.

- I see James Conant emerging from a conference room in which he has just presented a paper defending the 'resolute' reading of the *Tractatus*. He is looking miserable, crestfallen, almost suicidal. Although I do not know who was in the evidently hostile audience, I can make an educated guess at the identity of one member most likely to have given the speaker a rough ride, and, nodding towards Unlucky Jim, I knowingly whisper to my companion 'Hacker'.

In all of these cases I am using the name 'Hacker' to do something other than to name or refer to Peter Hacker, and in not all of these cases could I properly substitute the name 'Peter' for 'Hacker'. My aim in this paper is to examine apparent cases of failure of substitutivity of co-referring expressions, with a view to showing how those that have proved tricky to understand can be understood quite easily once Wittgenstein's reflections on the uses of proper names are grasped. It is to their use that we should be looking: 'Every sign *by itself* seems dead. *What* gives it life? – In use it is *alive*. Is life breathed into it there? – Or is the use its breath?' (*PI* §432).[1]

II. The Fragility of Intuition

In his recent book *The Philosophy of Philosophy*, Timothy Williamson claims 'that much contemporary philosophy is vitiated by supposing that evidence in philosophy consists of intuitions which successful theory must explain' (Williamson 2007: 5). In an otherwise scathing (but witty) review of that book, Hacker writes 'This is one point in Williamson's book which

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[1] Some may here see a contrast with the *Tractatus* which seems to suggest that names are stagnant signs that represent objects (3.21). But, according to the *Tractatus*, it is *in a proposition* (Satz) that a name is the representative of an object (3.22), and a proposition is a propositional sign *in use* (3.11, 3.12, 3.326). There *is* a genuine contrast, however, because, in the *Tractatus*, the use of a proposition is a matter of projecting a possible situation, presenting a possible state of affairs, whereas the later writings are an effort to explore the *multiplicity* of uses to which sentences can be put.

is dead right'.[2] The idea that the job of philosophy is to vindicate rather than to question commonsense intuitions is, indeed a repugnant one, and the eponymous school of philosophy that championed commonsense is rarely mentioned these days, even inside Scotland. However, in the case of *semantic* intuitions, matters are more problematic. Semantic intuition just is commonsense about what words mean, and what words mean is how they are commonly used. Except in the case of certain technical expressions for an authoritative verdict on the correct meaning of which we defer to experts, meaning just is common use. For an ordinary expression, it would be absurd to claim that how it is used on the street, especially when that use is recorded in reputable, up-to-date dictionaries, is not the (or, at least, a) meaning of that expression.[3] So one would be right to be wary of a philosophical theory that entails that the meaning that almost all of us attach to a particular word is incorrect. There have been such theories. Tarski argued that our ordinary use of 'true' is confused; Dennett, to the same conclusion about our ordinary use of the word 'pain'; Churchland has argued that our ordinary conception of beliefs as being part of the furniture of the mind is mistaken. One ought to be suspicious of such theories – which is not to say that they should be rejected without a hearing.

What about our semantic intuitions as they relate to the meanings and, consequently, the truth-values of whole sentences? In the case of single non-technical words, community use is constitutive of their meaning, but, in the case of many sentences, most members of a reputable community may be *wrong* about their truth value. This is obviously how it is with empirical claims that seemed, once upon a time, to be commonsensical but which subsequent science showed to be false. But it is also true of rather pedestrian sentences, where no science, but just a little interrogation of our semantic intuitions, may cause us to reverse our original, intuitive, assignments of meaning and of truth-value (Bach 2002). What happens, then, when a semantic theory entails that a sentence that most of us would say is true is false? Do we insist that to hold fast to the theory and abandon intuition is to allow the theoretical tail to wag the dog of good sense, or do we

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[2] See also Hintikka 1999.

[3] For an interesting discussion of our intuitions regarding the correct use of factive verbs, see Steven Pinker 2007, 7-8.

say that to hold fast to a semantic intuition that a plausible theory has revealed to be questionable is dogmatic and antithetical to the advancement of knowledge?

III. The Tanney Puzzle

We present here a 'case study' that takes as its starting point the fact that most people would accept as true

  1) Lois kissed Superman before she kissed Clark Kent.

but would reject as false

  2) Lois kissed Superman before she kissed Superman.[4]

We should note that even a linguistically competent individual who is well acquainted with the movie and who is fully aware that Superman just is Clark Kent would be willing to accept 1) as an accurate description of part of the action. Julia Tanney accepts this too, but is then struck by an apparent anomaly. She writes:

> Normally, I would be very sympathetic with the claim that there was a time, $t1$, at which Lois kissed Superman but not (yet) Clark Kent. I note however that the sense in which Lois (at $t1$) had not (yet) kissed Clark Kent would be the same as that in which Oedipus, although having slept with Jocasta, had not slept with his mother. But Jocasta hanged herself and Oedipus gouged out his eyes because there was no question for them of not accepting substitutivity.

Apart from the change of *dramatis personae*, the apparently only noteworthy difference between the kissing claim 1) and

  3) Oedipus slept with Jocasta before he slept with his mother.

is that less clothes and more action are involved, yet somehow, intuitively, we take 1) to be true and 3) false. So this is the Tanney puzzle, and the challenge is to find a plausible rationale for this difference in truth-value assignment.

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[4] Examples can be multiplied *ad libitum*. Most people, for example, would say that 'Clark Kent entered the phone booth and, seconds later, Clark Kent flew out' is false.

IV. Reports of Propositional Attitudes

Some semantic theorists would reject this puzzle on the grounds that there is no puzzle. They would claim that there is no difference in truth-value between 1) and 3); both statements, they would say, are false and that, if we have an inclination to say that 1) is true, this is a mistake and one that is easily diagnosed: Lois kissed Superman; since Superman is Clark Kent, she *ipso facto* kissed Clark Kent – there is no question of her kissing Superman *before* She kissed Clark. But let us look at another type of case – reports of propositional attitudes – for which this type of reply looks much less persuasive.

In direct quotation, the reporter or rapporteur (R) lets the reportee (E) speak for him/herself and, after introducing them as E's, simply reproduces E's words and mimics the force with which they were uttered by preserving the tonal features characteristic of that force . Of course, E is not literally speaking for him/herself, since it's the reporter, R, who is doing the speaking, but R, as it were, steps back and does not tamper with E's words (though R may sometimes sneer at those words or convey, by a stress or by some grammatical element, his/her belief that E was exaggerating, prevaricating or lying). In *oratio obliqua*, by contrast, there are certain changes of words that are obligatory. If Mick says (non-theatrically, non-ironically etc.) to Jerry 'Will you marry me?' then I report this episode correctly by saying 'Mick asked Jerry whether she would marry him', and if I do not alter pronouns appropriately when reporting Mick's proposal – suppose, for example, that I say 'Mick asked Jerry whether you would marry me' – then my report is unfaithful and, indeed, false.

One of the conventions, then, for the indirect reporting in English of what someone said, is that the reporter must make appropriate pronominal substitutions on pain of speaking falsely. It is easy to conceive, however of a possible language in which reported speech requires much the same grammatical paraphernalia as English, but in which the pronouns that would be used in an *oratio recta* report are obligatorily retained unaltered.[5] What about the conventions for reporting, in English, what someone *believes* or *thinks*? In belief reports in English, the same pronoun-shift rules

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[5] Unfortunately, I have not, so far, discovered such a language, but I would not bet against finding one.

apply as apply for reported speech. The rationale is obvious enough. Suppose that Mick believes that Jerry is a better person than he is. For a belief that p of which a person is conscious of believing it and is capable of articulating it, having that belief is approximately having a settled disposition to say that p. Mick, roughly speaking, has a settled disposition to say 'Jerry is a better person than I am', so, in reporting his belief, we are reporting what he *would say*, and therefore make the same pronominal adjustments as for reporting a saying. This suggests that, generally speaking and *ceteribus paribus*, a true report reports how a reportee would express his or her beliefs. This principle for reporting – that I call the Perspectival Principle – is not a recommendation as to literary style; it is not a principle of rhetoric but a prescription (albeit a *ceteribus paribus* prescription) for *true* reporting. The use of quotation, in a direct report is, as we have seen, another means for the reporter to stand back and let the reportee, E, speak in his or her own voice.

Confirmation that correct reporting requires, other things being equal, saying things as the reportee sees them, can be had from examining reports where the perspectives of R and E sharply differ. Let me inform you that my son believes that Santa Claus comes down the chimney every Christmas Eve. You have now been informed, even though I have used a referring expression that I believe refers to nothing and which is therefore co-referential, so far as I am concerned, with 'The Man in the Moon'. It would be foolhardy in the extreme for me to impose my perspective in reports of my son's Yuletide beliefs. Were I to say to you 'My son believes that the Man in the Moon comes down the chimney every Christmas Eve', then I would not only have misled you, but would also have told you something *false*. (My son is not so stupid as to believe that the Man in the Moon could be at two places at once – in the moon and half way down someone's chimney.) Likewise, were I reporting to you Lois' beliefs at a time before she became aware that Clark Kent is Superman I would be lying if I said to you 'Lois believes that Clark Kent flies'[6], or, better, only in unusual sur-

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[6] Lois is sitting in the newspaper office snatching furtive glances at Clark Kent. There is something about him that she can't quite put her finger on. Then it occurs to her that, whenever there's a Superman-sighting, Clark is not around. She stares hard at Clark, her mind races back over events of the last few days, and suddenly it

roundings ('Umgebungen' and 'Umstände' are terms Wittgenstein uses pretty much interchangeably, e.g. *PI* §§155, 250, 412) could I use a token of that sentence to make a true statement. Surely only those besotted by a theory to the point of insanity would claim that Oedipus, about to set sail on his honeymoon, believed that he was going off to have sex with his mother.[7] In accurately reporting his beliefs, we have to say things as *he* sees them.

V. When Substitution Fails to Preserve Truth-Value

One object may have two or more names and many uniquely identifying descriptions. If we say something true about that object then, in making that statement, it should not matter which singular term (which name or definite description of the object) we use, in the sense that a true statement should not be transformed into a false one merely by substituting a different singular term for the one used in the original statement. This seems to follow, quite trivially, from the Law of the Indiscernibility of Identicals. Given that 'a' and 'b' are referring expressions (names or definite descriptions) that pick out the same object, then, for any predicate 'F' the truth-value of 'Fa' has to be the same as the truth-value of 'Fb'. Or so it would seem. Yet, as we have just observed, where for 'F' we have a predicate ascribing a propositional attitude of an agent towards some object, then the singular term chosen by the speaker to refer to that object may have an influence on the truth-value of the ascription. It will be useful to look at some other contexts in which failure of substitutivity occurs.

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dawns on her that Clark Kent is Superman. Here is another example of the Perspectival Principle. Although identity is commutative, it would have been wrong (misleading, false?) of me to conclude the above story '… and suddenly it dawns on her that Superman is Clark Kent'. In my report on the revealed identity, I give prominence to, by placing it first, the name that Lois would have used to refer to the person on whom she was focusing.

[7] Among the besotted are some 'Direct Reference' theorists who would claim that Oedipus believed that he was going off to have sex with his mother, and some Freudian theorists who claim that he not only believed it but, deep down, wanted it too. The Direct Reference theorist could, however, distance himself from the Freudian by adding '… not knowing, even subconsciously, that his mother was his mother'.

The most obvious example is *metonymy*. If a referring expression is being used in a statement to refer to something other than its normal referent, then it is no surprise that the truth value of that statement is unlikely to survive replacement of that term with another that denotes the normal referent. Two slices of bread with ham between them did not leave without paying the bill, though the ham sandwich (viz., the guy whom the waitress identified via a description of what he ordered) did. If one accepts that the intentions of its user may sometimes help fix the referent of an expression, then metonymy is only apparent failure of substitutivity of co-referentials because the terms switched are not really co-referential.

Consider next quotational contexts. Here is a clearly invalid argument:

"Beijing" contains seven letters.
Beijing = 北京
"北京" contains seven letters.

On the sort of theory of quotation pioneered by Donald Davidson (1979), quotation marks help refer to a shape by pointing out something that has it; usually what is pointed out is an inscription, a physical token. That material is *displayed* (rather than being referred to).[8] Hence exchanging the material pointed to in the first premise with some quite different material (such as the Chinese inscription) will result in reference being made to a different shape, and will result in a sentence with a different truth-value – unless, of course, that latter material is another assemblage of seven letters. On a classical alternative theory due to Tarski (1933), the grammatical subject of the first premise is the name of a name. But, again, while what is true of Beijing is true of that city by any other name, what is true of the name 'Beijing' will not generally be true of alternative names for Beijing; substitutivity *salva veritate* is not to be expected.[9] But, again, this is not a case of failure of substitutivity of co-referring expressions, because, while 'Beijing' and '北京' are co-referring names, the quotations of those names

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[8] For discussion of this, see Zemach 1985, 194.

[9] There are several other competing theories of quotation. Failure of substitutivity in quotational contexts may be regarded as a datum against which to measure, in the manner of Cappelen and Lepore 2007, the adequacy of any such theory.

are not. So, in neither metonymous nor quotational contexts is there real failure of substitutivity because, in both cases, what may have seemed the referent of the singular terms involved is not the real referent.

As is well known, Frege thought this also to be the case with attitude-ascribing contexts; he said that, in such contexts the referent (Bedeutung) of a singular term is its normal *sense* (Sinn). We are not, however, taking the Frege route. In treating reports of propositional attitudes as reports of what a reportee would *say* when expressing his or her beliefs, hopes, fears, desires etc., we are assimilating an attitude report to a report of what a reportee would say if disclosing those attitudes to the reporter in the reporter's own language. The form of a report is 'E would say, Attingly, qu (p)', where 'qu' is the function that quotes and translates E's perhaps unvoiced utterances that disclose his or her attitude, e.g. 'Pierre would say, belief-ingly, qu (Londres est jolie)'.

There is a famous example, due to Quine, which, at first sight anyway, seems to be a case where co-referring expressions genuinely cannot be switched *salva veritate*:

> Giorgione was so called because of his size.
> Giorgione = Barbarelli.
> Barbarelli was so called because of his size.

Although this example has generated a lot of discussion in the literature, it simply turns on a trick. Here is a naked exposure of the trick:

> Richard the lionhearted was so described because of his exceptional bravery.
> They say that Cedric was chicken-livered, though why he was so described, I don't know.
> Ergo, Richard and Cedric have some property in common, viz., being so described!!

It is, I take it, obvious, what has happened here. There is no property of *being so described* that Richard and Cedric have in common.[10] In the first sentence, the property ascribed to Richard is that of being lion-hearted.

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[10] Similar remarks apply to *being true of its own quotation*, which, equally, is not a property. There is, then, no well defined question as to whether 'heterological' has the property of being true of its own quotation.

Here, 'so' is operating as a proquoe – a word that stands in for the quotation of an expression – and, in the statement about Richard, that expression is 'lionhearted'. The *Giorgione* argument exhibits a simple fallacy of equivocation – in the first premise, 'was so called' abbreviates 'was called "Giorgione"'; in the conclusion, the same phrase abbreviates 'was called "Barbarelli"'. The first statement can be rewritten as

> Giorgione was called "Giorgione" because of his size.

This is a true statement and its truth value survives substitution of the referring term; it is *true* that Barbarelli was called "Giorgione" because of his size. (As we saw previously, terms within quotation marks are not available for substitution.) So Leibniz Law that identical objects have all their properties in common is not threatened.

Modal contexts seem to resist substitution of co-referring terms. It is true that

> 9 is necessarily greater than 7

but we intuitively think it false that

> The number of the planets is necessarily greater than 7.

Following Kripke, we can interrogate this intuition. What planets is the speaker referring to? It is a human speaker, so he is referring to the planets in our solar system. Let us then make that explicit:

> The number of planets in our solar system is necessarily greater than 7.

Is that true? Someone might say it is not, on the grounds that there could have been 8 or 14 planets in our solar system. But is that correct? If there were 8 or 14 planets, that would be a *different* solar system. That would be the solar system of a possible world perhaps not too dissimilar to our own world. So long as we insist that reference be rigid (Kripke) we can substitute *salva veritate* 'Dthat [the number of planets in the solar system of the actual world]' for '9' (Kaplan), and here we have genuine co-reference and substitutivity *salva veritate*.

VI. Return to the Tanney Puzzle

The Tanney Puzzle was why substitutivity fails in the Lois case but not in the Oedipus. An obvious answer would be that, according to the Perspectival Principle, we should report things as the reportee would say them. Oedipus would not say 'I slept with Jocasta before I slept with my mother', whereas Lois would say 'I kissed Superman before I kissed Clark Kent'. But would Lois be right to express herself that way? I think she would. Most writers on the subject seem to agree that Superman is identical to Clark Kent. Yet, if they were identical then, by Leibniz' law, all their properties would be shared. Superman is superhuman, his powers include the power of unassisted flight. Define

> x is supermanic as x is superhuman and possesses all Superman's other essential attributes.

> x is kentic as x is human and possesses all Clark Kent's other essential attributes.

Superman, though superhuman, cannot do the logically impossible; in particular, he cannot be human and superhuman at the same time. For simplicity, let us work with a fictionalized version of the movie in which there is only one Superman-to-Clark switch and that it occurs at time t_1 (and that Lois kissed the leading male character once before t_1, and once after). In the movie, then, there is an x such that

> x is supermanic before t_1, and x is kentic after t_1.

Consider, following Goodman (1955), a precious stone that, at t_2, changes from being an emerald to being a ruby. Then there is a y such that

> y is an emerald before t_2, and y is a ruby after t_2.

This precious stone is an emeruby and is clearly neither an emerald nor a ruby, though it possesses the essential attributes of each at different times. Likewise, the individual in our simplified movie is superkentic – he is not identical to either Superman or Clark Kent, though he possesses the essential attributes of each at different times. Lois kissed *Superkent* before and after t_1, but, in so doing, she kissed Superman before t_1, and a *different* individual, Clark Kent, after t_1. Unfortunately for Oedipus, Jocasta always was his mom; her essential properties never changed. Whereas Lois was

merely promiscuous, Oedipus was incestuous and, in Greece of the 6th Century B.C., incest was regarded more dimly than it is today.

This escape from the Tanney puzzle may seem unsatisfactory because surely there are cases of apparent failure of substitutivity where the object to which reference is made does not undergo essential change. Consider, for example, the British glamour model Jordan who was born 'Katie Price', a name still used by friends and family and indeed by Katie herself when not in glamorous circumstances (Price 2004). Katie, except when stripped for professional action, looks rather unremarkable and unattractive. It is Ernest's birthday, and his wife promises to buy him, as a birthday present, an inflateable doll that looks like Jordan. We should think Ernest's wife wicked and deceitful if what she actually gives him on his birthday is an inflateable doll that looks like Katie Price. In these circumstances, truth is not preserved in substituting 'Katie Price' for 'Jordan' in the statement

Ernest wants an inflateable doll that looks like Jordan.

The Perspectival Principle suggests that we establish what Ernest would say if asked. What he would say is 'I want an inflateable doll that looks like Jordan' and, just so as to avoid all possibility of disappointment, might add 'and I definitely do not want one that looks like Katie Price'. He doesn't much like the look of Katie Price, but he loves the look of Katie Price when glamoured up – and Katie Price glamoured up is Jordan.

It may seem, at this point, that, having successfully identified the referents of the names 'Superman' and 'Clark Kent', we should now be looking for an answer to the question 'What is the referent of "Jordan"?'. It may even seem as if we have found one, namely that 'Jordan' refers to the fusion of those time-slices of Katie when she is glamoured up, just as (to borrow an example of David Pitt's) a stoat is called an ermine *when its fur turns white during the winter*. Pitt himself would take the view that 'Jordan' refers to an *alter ego* of the *primum ego* Katie Price, and he expends a lot of energy examining what kind of entity, metaphysically and legally, an *alter ego* is (Pitt 2001). The ease with which we were able to solve the Tanney puzzle has created a danger of thinking that, in all circumstances of use, a name must have a determinate referent, though not, perhaps, its standard one. But the very assumption that every name has to have a fixed referent needs to be questioned. The general philosophical claim that Witt-

genstein wishes to challenge is that the senses of words are fixed unambiguously (*PI* §426). That they are so fixed is, he believes, a misguided belief, a mere prejudice. He writes, 'In the actual use of expressions we make detours, we go by side-roads. We see the straight highway before us, but of course we cannot use it, because it is permanently closed'. Permanently closed. Wittgenstein is here repudiating the view, so central to the *Tractatus* (3.23) and to his predecessor Frege, that words have a fixed sense or a (typically small) set of fixed senses.

The subset of expressions he considers at *PI* §79 is that of *names*. Following Wittgenstein, what we should be asking, as we did at the beginning of this paper, is how a name is *used*, and what we find is that a particular name may be used in a variety of ways. One of his own examples is the statement 'Moses did not exist' (*PI* §79). If the speaker is speaking the truth, then he cannot here be using 'Moses' to refer to any individual; he may be referring to no individual at all (though this does not entail that his remark means the same as 'Santa Claus did not exist'). This is reminiscent of our 'Giorgione' example, for one of the things the speaker may be meaning is 'There is no historical figure answering to the name 'Moses' – so this context is a disguised quotational one. The speaker might also be meaning that the Israelites did not have a *single* leader when they withdrew from Egypt, or might be meaning something else quite different (*PI* §79).

What this suggests is something anathema to logicians and formal semanticists – that names have a certain flexibility, that they are used in different ways, varying in their use with topic of conversation and with the mutual knowledge shared by particular conversational partners. Suppose that, by some freak of fortune, Ernest's wife runs into Katie Price at a polo match, takes a liking to her and, upon returning home, suggests to her husband that they invite Jordan to dinner. He is keen on the idea, even though he is not in the least expecting her to turn up dressed only in skimpy underwear. In the statement

Ernest wants Jordan to come to dinner

the name 'Jordan' is not being used to refer to glamorous Katie episodes, and substitution in that statement of the name 'Katie Price' for 'Jordan' is truth-preserving.

If I am speaking to someone who knows Katie as 'Katie', knows that she strips off for a living, is a glamour model and is best known to the public for this rôle, but does not know that she goes under the name 'Jordan', then I could inform that person by saying 'Ernest wants an inflateable doll that looks like Katie' and be speaking the *truth*. For in this case the Perspectival Principle is trumped by the imperative for speakers to attempt to make themselves intelligible to their particular hearers. That sentence has an interesting kind of ambiguity; it contains no indexicals, explicit or hidden, and is not amphibolous and is yet ambiguous in that it expresses a truth when a token is uttered in one conversation but a falsehood when a token of the same type is uttered in a different conversational setting[11].[*]

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[11] For a more elaborate example, see *PI* §525.

[*] This paper supplements, but also corrects, a paper of mine (2002) presented in an earlier Wittgenstein symposium.

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