

## Two Puzzles Concerning the Use of Names

Note to the Reader: This paper is very much work in progress. The introduction, the last section and the middle section (§6) are not yet written; and much of the material is in very rough form. The paper is also very long; and those wanting a quick read might omit sections 3-5.

### §1 Names and Their Use

My interest throughout this paper is in proper names - such as 'Peter', 'Pierre', 'Cicero', 'London', or 'Hesperus'. There is some ambiguity as to the identity of names. Many people are called 'Peter'; and so there is a clear sense in which they each have the same name. We might call names in this sense 'typographic'.<sup>1</sup> But there is another - perhaps more philosophical - conception of name under which each of those Peter's would have a different name. If I am asked to list the names of the people in the room, then I might list 'Peter' twice on the grounds that the two Peter's in the room had different names. We might call names in this sense 'specific'. I think of a typographic name as somehow belonging to the language itself, while a specific name also belongs to the community who put the typographic name to a certain use.

It is not quite correct to identity a specific name with a typographic name for a particular individual. Let us suppose that the Aristotle, the shipping magnate, is in fact the same person as Aristotle, the philosopher (who turns out to be even more remarkable than we had supposed). There would then be one person, but two specific names; for the one name will trace back to an act of baptism in modern Greece, while the other will trace back to a different act of baptism in ancient Greece.

This paper is largely concerned with the *use* of specific names and it will be helpful, in this connection, to distinguish between different senses of 'use'. There are, first of all, the different *particular* uses or tokens of a name, whether in writing, speech or thought. There are then different *kinds* of use of a name. These are instantiated in different tokens (be they actual or possible). So, for example, what I previously called a specific name will correspond to a kind of use, one which is shared by two tokens when they trace back to a common origin.<sup>2</sup> And, in general, each kind of use of a typographic name will correlate with a criterion for when that use is shared, or 'the same'.

It will be important, in what follows, to distinguish between two different kinds of case in which the use of two token names may be the same. There are, first of all, those cases in which the names to be compared are produced by the very same person; and then there are those cases in which they are produced by different people. We might talk of *intra*-personal use in the one

---

<sup>1</sup>Despite what the label might suggest, the identity of a typographic name, even in its synchronic aspects, may not be entirely a matter of its shape or its sound; we might want to distinguish, for example, between the name 'Brown' and the adjective 'brown' or between the English name 'Maurice' and the French name 'Maurice'. For more on the identity of names, see Kaplan [90].

<sup>2</sup>There may be names - e.g. of numbers - which should not be treated in this way. For the purposes of this paper, I put such names on one side.

case and of *inter*-personal use in the other. The importance of the distinction lies in the fact that the two kinds of case would appear to lend themselves to somewhat different criteria for the sameness of use.

The intra-personal case would appear to lend itself to a distinctively personal criterion for sameness of use. Suppose Peter asserts 'Aristotle is Aristotle' in order to illustrate the Law of Identity. There is then a clear sense in which his two uses of the name 'Aristotle' are the same. Suppose now he asserts 'Aristotle is Aristotle' in order to illustrate his belief in the transmigration of souls, using the first 'Aristotle' to mean the ancient philosopher and the second 'Aristotle' to mean the twentieth century shipping magnate. His two uses of the name 'Aristotle' are not then the same; and this is the case even if his beliefs happen to be correct and the philosopher and the shipping magnate are indeed the same. So far, these cases of intra-personal use are not to distinguished from the specific use of the name mentioned above. But suppose, to use an example of Kripke [79], that Peter overhears two conversations involving the name 'Paderewski', one concerning Paderewski in his role as musician and the other concerning Paderewski in his role as statesman, and that Peter takes the conversations to be about two different people. There is then a clear sense in which his use of the name 'Paderewski' that derives from the one conversation will be different from his use of the name 'Paderewski' that derives from the other. He takes their use to be different; and that is enough, in the intended sense, to make them different. Thus even though their specific use, as given by their common origin, will be the same, their intra-personal use will be different. We might call such a use of the name *differentiated*, by contrast with its specific use.<sup>3</sup>

The differentiated use of a name is in a certain sense accessible to introspection. Suppose a given speaker, such as Peter, makes the same differentiated use of a name. Then he is in a position to know that he is making the same use of the name. Of course, in making this claim, I am presupposing some minimal competence on his behalf. He needs to have the relevant concept of *same use*; and he must be aware of how he used both names - it will not do if he remembers using the name 'Paderewski', say, but without remembering whether he used it for the musician or the statesman. We can even avoid appeal to the concept of *same use* in accounting for his competence if we appeal instead to the concept of *co-reference*. Thus what he will be in a position to know, in the envisaged circumstances, is that the two tokens of the name are coreferential (if they refer at all).

There is another feature of differentiated use - more psychological, and less semantic or epistemic, in character; for associated with an individual's differentiated use of a name is a distinctive long-term capacity for the production and recognition of the tokens that conform to the use. This capacity is more than the ability to produce and recognize tokens of the typographic name (which comes relatively easily). For one thing, I may have adopted several differentiated uses of the same typographic name; and each of those names will correspond to a distinct capacity. But even if I have adopted only one differentiated use of a name, say 'Plato', there

---

<sup>3</sup>Peter might also *confuse* two names; he might, for example, take the names for Aristotle the philosopher and Aristotle the shipping magnate to be the same. There would then be the same differentiated use and yet a different specific use. Although this kind of case is very interesting, I shall, for the most part, ignore the complications to which it gives rise.

would still be a significant difference between producing or recognizing instances of the mere 'word' and producing or recognizing instances of the use.

Such capacities appear to be of great psychological importance, since it through their exercise that we are able to store the relevant information we have concerning the bearer of a given name and to access and modify this information (for this reason, some philosophers have compared it to the keeping of a file). It is plausible that general capacities of this sort have an existence quite apart from the use of names; and it is conceivable that our use of names might not be tied to the exercise of such capacities. However, there is nothing that we would recognize as our normal practice of using names that did not require them to have this long-term organizing role.<sup>4</sup>

Finally, we should consider the question of inter-personal use. It is clear that we may legitimately talk of one person's use of a name being the same as another's; any two philosophers' use of the name 'Aristotle', for example, is likely to be the same. Now there appears to be a paradigm of inter-personal use; and, in calling it a 'paradigm', I mean that if any case counts as a case of same inter-personal use, then this should. The case I have in mind is when I derive a name from someone else. Suppose I hear the name 'Aristotle' for the first time in a conversation. I may then use the name 'Aristotle', intending to use it in the very same way as my interlocutor. This then seems as clear a case as any of one person's use of a name being the same as another's.

The case is in some ways quite extraordinary. For it seems that all that I need do in order to use the name in the same way as you is to form the intention to use it in the same way. As long as I then act in conformity with the intention, I will succeed. It therefore appears as if my intention is in the nature of a stipulative definition. Just as I may stipulate that 'composite', say, is to mean 'not prime' and thereby succeed in using it to mean just that, so I may stipulate that my use of 'Aristotle' is to be the same as yours and thereby succeed in making its use the same.

Since two people are involved, there is no single capacity that underlies the joint use of the name. But it does seem correct to say, as in the intra-personal case, that my use of the name is accessible to introspection. Suppose that I derive my use of a name from you. Then (subject to the usual qualifications) I am in position to know that my use is the same as yours. This strongly suggests that the two kinds of use - even though they concern the intra- and inter-personal domains - are somehow of a piece.

Not only do we here appear to have a paradigm of same inter-personal use, it is arguable that such cases are the foundation upon which all other cases of inter-personal use depend. We might ask: given the intra-personal use of names, then how is the inter-personal use of names also possible? And a natural answer is that any inter-personal use must be mediated through the kind of cases of derived reference that we have considered. In other words, if one person's use of a name is the same as another's, then there must be a chain of use, starting with the one, ending with the other, and, at each step, going through either an intra-personal case of same differentiated use or an inter-personal case of derived reference.

---

<sup>4</sup>The semantic and psychological features seem to come apart with anaphor; since an anaphor is used coreferentially with its antecedent without there being a long-term capacity for the recognition or production of its tokens.

## §2 The First Puzzle

We have considered two criteria for same use - one intra-personal and the other inter-personal. Roughly speaking, two tokens of a typographic name, produced by a single speaker, conform to the intra-personal criterion when they are taken by the speaker to be subject to the same use, and two tokens of a typographic name, produced by different speakers, satisfy the inter-criterion when the use of one is directly derived from the use of the other. We shall say that the tokens are *internally* linked (or *copies*) in the one case and *externally* linked in the other.

The first puzzle concerns a potential incompatibility in these two criterion for sameness in use. Let me state and discuss the principles upon the puzzle depends before presenting the puzzle itself. The first principle provides a necessary and sufficient condition for the same *intra*-personal use of a name:

Internal Coordination When two tokens of a given name are produced by the same speaker, they will be the same in use if and only if they are internally linked.

The second of the principles provides a sufficient condition for the same *inter*-personal use of a name:

External Coordination. When two tokens of a given name are produced by different speakers, they will be the same in use if they are externally linked.<sup>5</sup>

Note it is not appropriate to have a necessary and sufficient condition in the second case, since external coordination only concerns the circumstance in which one persons' use of a name is *directly* derived from another person's use.

Since the puzzle concerns the compatibility of the two principles, it will be worth considering the general reasons for thinking that they hold. However, we should bear in mind that, for the purpose of stating the puzzles, we need only appeal to particular instances of the principles; and, as we shall see, that there may be special reasons for thinking that these instances hold, even if the principles themselves are not accepted in full generality.

Now it can readily be conceded that there is a sense of 'same use', e.g. *differentiated* use, which conforms to the first principle and a sense of 'same use', e.g. *specific* use, which conforms to the second principle. But what may be doubted is whether there is a single unitary notion of 'same use' that conforms to both. Perhaps any inclination we have to accept both principles simply rests on an implicit equivocation in the sense of 'same use'.

I have previously suggested that the criteria of internal and external coordination are 'of a piece'; and let me now attempt to be more explicit about why I think this is so. It seems that we might distinguish a conception of use that is subjectivist in the sense that it is up to the speaker what is or is not a case of same use. In other words, we regard the speaker as an authority on the use of any name he introduces into his own idiolect; if he (with all due consideration) takes it to be the same in use as another name, then it is the same in use; and, likewise, if he takes it not be the same in use, then it is not the same in use. But under such a subjectivist conception, both principles are very plausible. Internal Coordination certainly holds; and External Coordination seems unproblematic. For a person who derives his use of the name from someone else's will be

---

<sup>5</sup>I could have said 'if the first is derived from the other' and then appealed to the symmetry of *same-use*. In that follows, I shall not always be careful in being explicit about appeals to symmetry.

an authority on its use; and since he takes the use of the two names to be the same, they *will* be the same. Thus, as long as we extend the authority of the individual from the repeated use of name to its introduction into his idiolect, the principles will be secure. Even though this conception of use is subjectivist, it may properly be taken to be *inter*-subjective as well as *intra*-subjective.

One might argue more formally for the same conclusion in the following way. Consider the case of someone like Peter, who is under the misapprehension that there are two specific names for a given individual when in fact there is only one. Then it seems clear, should I labor under the same misapprehension, that I may acquire the very same differentiated use of the name; I may, for example, derive one use of the name 'Paderewski' from Peter's use of the name for the musician and another use of the name 'Paderewski' from his use of the name for the statesman. It is not even necessary for me to do this that I labor under the same misapprehension. For even if I know that there is only one specific use of the name, I may still coordinate each of two uses of the name with Peter's two uses of the name ('Paderewski [sotto voce: the statesman]' versus 'Paderewski [sotto voce: the musician]'). Although these two uses of the name would be of no help to me in stating the ordinary facts about Paderewski, they would be of help to me in reporting Peter's beliefs; for I could say things like 'Peter believes that Paderewski [the musician] is a musician but that Paderewski [the statesman] is not'.

Thus given a token of Peter's name 'Padereswki' (as used for the musician), I may derive a use of the name that is the same in use as Peter's token of the name and yet not the same in use as any of Peter's tokens of the name that are not copies of the given token. But it then follows that none of Peter's tokens of the name that is not copy of the given token can be the same in use as the given token. For presumably, my token of the name is not only the same in use as Peter's but also the same in use as any of Peter's tokens that is the same in use as the given token (there is nothing special about the given token in this regard); and so, given that my token is only the same in use as copies of the given token, it is only those copies that can be the same in use as the given token.

The final principle upon which the puzzle rests is:

Transitivity of Same-Use If  $n$ ,  $n'$  and  $n''$  are three tokens of the name  $N$  and if  $n$  is the same in use as  $n'$  and  $n'$  the same in use as  $n''$ , then  $n$  is the same in use as  $n''$ .

There is a case of Transitivity that is unproblematic. For one way for  $n$  to be the same in use as  $n'$  is for the two tokens to be copies. But it then simply follows from the 'indistinguishability' of copies that  $n$  will be the same in use as  $n''$  if  $n'$  is the same in use as  $n''$  (and similarly for when  $n'$  and  $n''$  are copies).

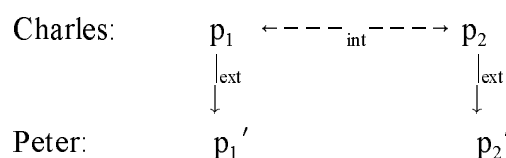
Given Internal Coordination, the only way for two name-tokens not to be internally linked and yet the same in use if for them to be produced by different speakers. Thus the only case of Transitivity that is at all problematic is the one in which  $n$  and  $n'$  and also  $n'$  and  $n''$  are produced by different speakers. (Our interest will actually be in the case in which  $n'$  and  $n''$  are produced by the same speaker but  $n$  is produced by a different speaker).

The puzzle is now readily stated.<sup>6</sup> Suppose that Peter derives a token  $p_1'$  of the name

---

<sup>6</sup> Strictly speaking, we also require assumptions concerning the 'existence' of the relevant tokens. But these are completely unproblematic.

‘Paderewski’ from Charles’ token  $p_1$  of the name and that he derives another token  $p_2'$  of ‘Paderewski’ from Charles’ subsequent token  $p_2$  of the name. Charles takes  $p_1$  and  $p_2$  to be tokens of the same (specific) name; and so they are internally linked. Peter thinks that  $p_1$  and  $p_2$  are tokens of different (specific) names; and so  $p_1'$  and  $p_2'$  are not internally linked. The situation is depicted below:



Now from External Coordination and the fact that  $p_1'$  is derived from  $p_1$ , it follows that  $p_1'$  and  $p_1$  are the same in use; from Internal Coordination and the fact that  $p_1$  and  $p_2$  are internally linked, it follows that  $p_1$  and  $p_2$  are the same in use; from External Coordination again and the fact that  $p_2'$  is derived from  $p_2$ , it follows  $p_2$  is the same in use as  $p_2'$ ; by two applications of Transitivity, it follows that  $p_1'$  is the same in use as  $p_2'$ ; and so, by the other direction of Internal Coordination and the fact that  $p_1'$  and  $p_2'$  are not internally linked, it follows that  $p_1'$  is not the same in use as  $p_2'$ . A contradiction.<sup>7</sup>

### §3 Other Versions of the First Puzzle

We shall present extensions of the puzzle to the phenomena of relaying information or reporting what someone says. As before, we begin by stating the principles upon which the puzzles depend.

Given that someone says something, I may *relay* what he said by conveying in my own words what he said; and I may *report* what he said by conveying the fact that he said what he did. Just as with the use of names, we may distinguish between the intra- and the inter-personal cases of relaying and reporting. My interest in what follows will be solely with *homonymous* relaying or reporting; the second speaker simply uses the same words as the first speaker to relay or report what he said. Thus if a speaker  $A$  utters a token of the sentence  $S$ , the other speaker will also utter a token of  $S$  to relay what he said and will utter a token of ‘ $A$  said that  $S$ ’ to report what he said (where ‘ $A$ ’ is a term for  $A$ ).

My interest is in the *correctness* of such relaying or reports; and I shall assume that, in uttering  $S$ , one correctly relays what someone said in uttering  $S$  if the one utterance, in some sense, ‘says the same thing’ as the other. It will be helpful in what follows to make some simplifying assumption about the sentence  $S$  in question. We shall assume that there is no significant variation in the speakers’ use of the words in  $S$  other than the names and that the correctness of the relaying or reporting therefore simply turns on their use of the names. We shall also assume that the sentence  $S$  only contains one name  $N$  and that this name only occurs once in

---

<sup>7</sup>We might get by with three tokens rather than four. Peter might first utter ‘Paderewski’, Charles could derive his use of ‘Paderewski’ from Peter’s, and then Peter could derive a further use of ‘Paderewski’ from Charles’, thinking it different in use from his own. In this way, we might also avoid appeal to the sufficiency part of Internal Coordination.

the sentence. Thus S might be written in the form S(N), where N is the single name that it contains.

The puzzles may be extended from the case of use to the cases of relaying and reporting by means of certain bridge principles. There are two such principles that we shall need, one relating the notion of *same-saying* for sentences to the notion of *same-use* for names and the other relating the notion of *correctness* for reports to the notion of same-saying for sentences:

Bridge I (from use to saying) Two utterances of the sentence S(N) say the same thing iff the two tokens of N that they involve are the same in use;

Bridge II (from saying to reporting) An utterance of 'A says that S' will correctly report A's utterance of S iff the two tokens of S say the same thing.<sup>8</sup>

In so far as there might be different standards of correctness for a report or different senses of 'same-use' or 'same-saying', then these principles are readily open to falsification. For we might adopt a strict standard of correctness for reports, for example, but a loose sense of 'same-saying' or a strict sense of 'same-saying' but a loose sense of 'same-use'. However, the thought behind the principles is that, once we fix the sense of 'same-use', we may so fix the sense of 'same-saying' and of 'correctness' that the principles come out true. And it is indeed very plausible to suppose that, for any notion of *same-use*, there are, in this sense, correlative notions of *same-saying* and *correctness*.<sup>9</sup>

The application of these bridge principles to the extension of the puzzles proceeds by way of certain 'lemmas'. These relate the notion in question (be it *same-saying* or *reporting*) to the notions of internal and external linkage; and the puzzles may then be derived from the lemmas. It is worth being explicit about what these lemmas are, since they have a great deal of independent plausibility. Thus even someone who questions the derivation of the lemmas from the Coordination and Bridge principles - perhaps because he is unhappy with the concept of *same-use* or with the concept of *same-saying* - will still face a problem of saying what is wrong with the 'autonomous' formulation of the puzzle, the one that proceeds directly from the lemmas and makes no appeal to the disputed concepts.

In each case, these lemmas will be analogues of the coordination and transitivity principles. The analogues of these principles for *same-saying* are as follows:

Internal Coordination (for saying). Two utterances of the sentence S(N), when produced by the same speaker, will say the same thing iff the two tokens of N involved in the respective utterances are internally linked;

External Coordination (for saying). Two utterances of the sentence S(N), when produced by different speakers, will say the same thing if the token names involved in the respective

<sup>8</sup>One might distinguish between what the *speaker* says and what his *utterance* says; but I assume that no such distinction will be relevant to the very simple kinds of example that I shall be considering. I should also note that my focus will be on reports that concern a particular utterance or occasion for utterance, though my arguments may be readily extended to cover reports concerning what someone said *on some or another occasion*.

<sup>9</sup> And also in the other direction, beginning with some notion of *same-saying* or *correctness* and then fixing the other notions.

utterances are externally linked.

Transitivity (for saying) If  $s$ ,  $s'$  and  $s''$  are three tokens of the sentence  $S$  and if  $s$  says the same as  $s'$  and  $s'$  the same as  $s''$ , then  $s$  says the same as  $s''$ .

It should be evident how the coordination principles might be derived from the corresponding principles for *same-use* with the help of the first Bridge principle. But, as I have indicated, they are also independently plausible. The right-to-left direction of Internal Coordination perhaps provides the most plausible non-trivial case of same-saying that there could be; the speaker simply makes what he takes to be the very same use of the name. There is, of course, a sense of 'same-saying' in which the left-to-right direction of Internal Coordination is false. Suppose that Peter says 'Paderewski<sub>M</sub> is a musician' and subsequently says 'Paderewski<sub>S</sub> is a musician' (where 'Paderewski<sub>M</sub>' and 'Paderewski<sub>S</sub>' indicate Peter's respective uses of the name 'Paderewski' for the musician and for the statesman). Then there is a sense (roughly: *expressing the same singular proposition*) in which Peter says the same thing from the one occasion to the next. But there is also a sense - indeed, a much more natural sense - in which he did not say the same thing. Indeed, Peter himself would deny that he said the same thing; and there is surely a sense of 'saying the same thing' in which he would be right. If we attempt to characterize this stricter form of relaying or same-saying, then we might describe it as 'faithful', since an attempt is made to be faithful to the speaker's own 'take' on what is said. Thus, in substituting what he takes to be one name for another, Peter is not being faithful to his own take on what he said, even if he thereby expresses the same singular proposition.

The externality principle is also very plausible. Suppose Sally hears Peter say 'Paderewski<sub>M</sub> is a musician' and then attempts to relay what he says with the words 'Paderewski is a musician', intending her use of the token 'Paderewski' to be derived from Peter's. It is then very plausible to suppose that she too, in the same strict sense, is saying the same thing as Peter; in appropriating Peter's own use of the name, she is being faithful to his own take on what he says. Indeed, it is hard to see how she could do *better* in relaying what he says; and so if it is possible for someone else to relay, in this strict sense, what he says, then she must have actually done so.

We have so far developed *plausibility* arguments in favor of the coordination principles. But one might also develop *pragmatic* arguments in their favor; for one might argue that there are certain basic aims implicit in the use of language whose fulfilment requires the truth of these principles. The validity of an argument, for example, is intimately related to the notion of same-saying. Thus for the argument from 'S & T' to S to be valid, the two tokens of S should both say the same thing. Now it is clearly desirable that we be able to assess the validity of the arguments that we put forward and to do so entirely on the basis of our linguistic competence. But it is hard to see how this would be possible unless *same-saying* were subject to Internal Coordination. If, for instance, we allowed 'Paderewski<sub>M</sub> is a musician' to say the same as 'Paderewski<sub>S</sub> is a musician', then the argument from 'Paderewski<sub>M</sub> is a musician and Paderewski<sub>M</sub> is a Pole' to 'Paderewski<sub>S</sub> is a musician' would in fact be valid though Peter would be in no position to recognize that it was.

Similarly, once we grant the desirability of being able to reproduce what others have said, it is hard to see what more than external linkage might reasonably be required in order to render this possible. The Fregean might insist that we knowingly attach the same sense to the name as

the speaker. But in so far as this is genuinely a further requirement, it would appear to place an intolerable burden on our ability to reproduce what others have said.

We turn to the analogues of the Coordination principles for the case of reporting. What now takes the place of *same-saying* is the relation of *correctly reporting* that holds between an utterance of a report and the utterance which it describes. The analogues go as follows:

Internal Coordination (for reporting). Speaker *A*'s utterance of the sentence 'I said that S(N)' will correctly describe *A*'s utterance of S(N) iff the two tokens of N involved in the respective utterance are internally linked<sup>10</sup>;

External Coordination (for reports). A speaker's utterance of the sentence 'A said that S(N)' will correctly describe *A*'s utterance of S(N) if the token of N in the first utterance is derived from the token of N in the second utterance.

Again, it should be evident how these principles might be derived from the original Coordination principles and the second Bridge principle.

The analogue of transitivity is somewhat more complicated to state:

Transitivity (for reporting) If *B*'s utterance of 'A said that S(N)' correctly describe *A*'s utterance of S(N) and *C*'s utterance of 'B said that A said that S(N)' correctly describes *B*'s utterance of 'A said that S(N)', then *C*'s utterance of 'A said that S(N)' correctly describes *A*'s utterance of S(N) as long as the two tokens of N employed in *C*'s utterances are internally linked. The situation envisaged in the antecedent of the principle might be depicted as follows (with the speaker to the left of the colon and his utterance to the right):

*A*: S(N);

*B*: A said that S(N)

*C*: B said that A said that S(N).

The principle may be justified as follows. We have assumed that the utterances of *B* and *C* are both correct. But this means that *C*'s utterance of 'B correctly said that A said that S(N)' would also be correct and, from this, it surely follows that *C*'s utterance of 'A said that S(N)' would then be correct (assuming, of course, that the relevant tokens of N are internally linked).

The notion of correct-reporting, like the notions of same-use or same-saying, is subject to some ambiguity. Suppose Peter says 'Paderewski<sub>M</sub> is a musician'. Then we can concede that there is a sense in which Peter might correctly report on what he said with the words, 'I said that Paderewski<sub>S</sub> is a musician'. But again, there is a sense - indeed, a more natural sense - in which his report is not correct. This is a sense, or standard, of *faithful* reporting in which we attempt to be true to the speaker's own take on what he said; and, of course, it is only natural that, in reporting what someone says, we should attempt to do this from a perspective that is true to the speaker's own conception of what he is saying. We should note that the internality principle concerns the case of *self*-reporting and, in this case, it would be especially bizarre if the speaker did not adopt his own perspective in reporting on what he said. The considerations in favor of the internality principle therefore seem even more compelling in this case than in the case of same-saying.

---

<sup>10</sup>I have made the natural assumption that the speaker refers to himself by means of the first-person pronoun. But nothing turns on this; and it is, in general, irrelevant to the correctness of a report how the speaker is referred to.

The case of reporting also raises another, quite separate, issue. Is the correctness of a report simply its truth and do different standards of correctness, in so far as they exist, simply arise from different ways of interpreting the report? Or are there pragmatic standards of correctness for a report that go beyond its mere truth under one or another interpretation? And what, in particular, should we say about the standard of faithful reporting described above? Fortunately, there will be no need for us to answer these difficult questions, since the status of faithful reporting as semantic or pragmatic will be irrelevant to either the statement or solution of the puzzles.

We are now in a position to present the extensions of the puzzles. For the case of saying, we imagine that Charles and Peter play the following ‘game’ of repeat-after-me. Charles says ‘Paderewski is suave’; and Peter repeats what Charles says, using a token of the name ‘Paderewski’ derived from Charles. Charles later says ‘Paderewski is suave’; and Peter, thinking that Charles has used a different name, repeats what Charles says, again deriving his use of the name from Charles.

As before, four tokens of the name ‘Paderewski’ are involved - Charles two tokens  $p_1$  and  $p_2$ , which are internally linked, and Peter’s two tokens  $p_1$  and  $p_2$ , which are not internally linked; and each of these tokens  $p$  occurs in a sentence-token of the form ‘ $p$  is suave’, which we write as  $S(p)$ . By External Coordination,  $S(p_1')$  says the same as  $S(p_1)$  and  $S(p_2)$  as  $S(p_2')$ ; by Internal Coordination,  $S(p_1)$  says the same as  $S(p_2)$ ; and so by Transitivity,  $S(p_1')$  says the same as  $S(p_2')$ . But by Internal Coordination and the fact that  $p_1'$  and  $p_2'$  are not internally linked,  $S(p_1')$  does *not* say the same as  $S(p_2')$ . Thus each repeats what the other says and yet Peter ends up saying different things!

For the case of reporting, we imagine the following scenario. Peter says, ‘Paderewski<sub>M</sub> is a musician’, having previously acquired the name; Charles reports, ‘Peter said that Paderewski is suave’, deriving his use of the name from Peter’s; Peter then says ‘Charles said that Peter said that Paderewski<sub>S</sub> is suave’, deriving what he takes to be a different use of the name ‘Paderewski’ from Charles; and finally, Peter says (perhaps insincerely) ‘I said that Paderewski<sub>S</sub> is suave’.<sup>11</sup>

We now reason as follows. By External Coordination, Charles’ report ‘Peter said that Paderewski is suave’ is correct. By External Coordination again, Peter’s report ‘Charles said that Peter said that Paderewski<sub>S</sub> is suave’ is also correct. By Transitivity, Peter’s report ‘Peter [or: I] said that Paderewski<sub>S</sub> is suave’ is correct. But by Internal Coordination, the report is *not* correct. After all, Peter was talking about the person he took to be a musician, not the person he took to be a statesman.<sup>12</sup>

---

<sup>11</sup>Of course, it is somewhat unrealistic to suppose that Peter misidentifies Charles’ use of the name ‘Paderewski’. By slightly strengthening External Coordination, and allowing Peter to derive his second use of the name from a *copy* of Charles’ first use of the name, we may make the example more realistic.

<sup>12</sup> Another way to justify the transition from Charles’ report on what Peter said to Peter’s own report on what he said is by means of the principle that the correctness of a report is preserved under the substitution of a derived token of a name for the given token. We might also note that the above argument does not appeal to the sufficiency part of Internal Coordination.

The discussion of reporting in the literature has usually focused on the reporting of *beliefs*. In this case, we cannot make a direct comparison between two utterances of the same sentence, since belief is something mental. But we can make an indirect comparison. For there is a natural and intuitive sense in which someone can be said to *express* a belief. Thus Peter might express his beliefs concerning Paderewski with the words ‘Paderewski<sub>M</sub> is a musician’ or with the words ‘Paderewski<sub>S</sub> is not a musician’. The comparison can now be made between the sentence in the embedded clause of the report and the expression of the belief. The coordination principles therefore take the following form:

Internal Coordination (for reporting of beliefs). *A*’s utterance of the sentence ‘I believe that S(N)’ will correctly describe a belief of *A*’s iff *A*’s belief is expressed by an utterance of S(N) whose token of N is internally linked to the token of N in the report;

External Coordination (for reporting of beliefs). An utterance of the sentence ‘A believes that S(N)’ will correctly report a belief of *A*’s if the token of N in the report is derived from a token of N in an expression S(N) of *A*’s belief.

And similarly for Transitivity.

Internal Coordination is perhaps especially plausible in this case. For there is no real room for any slack between a belief and its expression. A belief that Peter might express with the words ‘Paderewski<sub>M</sub> is a musician’, for example, is not one that he might also express with the words ‘Paderewski<sub>S</sub> is a musician’. But it now seems eminently reasonable that someone should be held to the same high standards in the reporting of their beliefs as they are in their expression. If it would not be correct for Peter to *express* his belief in the words ‘Paderewski<sub>S</sub> is a musician’, then nor - by these lights - would it be correct for him to *report* his belief in the words ‘I believe that Paderewski<sub>S</sub> is a musician’.

Given these principles, the formulation of the puzzle is then much the same as before, with the expression of a belief now taking the place of the thing said. There is also no need to appeal to Charles’ or Peter’s *actual* expression of their belief if we are prepared to appeal, instead, to how they *might* express their belief were they so disposed.

Note that the current version of the puzzle is rather different from Kripke’s. For it rests on a problem that Peter has in correctly reporting his own beliefs (the puzzle is ‘brought home’ to the believer, as it were) and not on a problem that we have in reporting his beliefs.

#### §4 The Second Puzzle

Our strategy for presenting the second puzzle is the same as for the first. We begin, in this section, with a version of the puzzle concerning the use of the names and continue, in the next section, with the extension of the puzzle to the relaying and reporting of what is said.

The second puzzle does not rest upon the same assumptions as the first. It still depends - or, at least, can be made to depend - upon the principle of External Coordination. But in place of Internal Coordination and Transitivity, it employs somewhat different, though related, assumptions.

To state these other assumptions, we need to extend the notion of *same-use*. So far this notion has been taken to be a relation that holds between single utterances of names. But I now want to consider the possibility of its holding between *composite* utterances of names. Thus in any contexts in which several names are used, we may meaningfully consider whether the tokens

$m_1, m_2, \dots, m_k$  from one such context are the same in use as the tokens  $n_1, n_2, \dots, n_k$  from another context.

This extension of the notion is naturally taken to be governed by the following two principles:

Fidelity If the composite utterance of the token-names  $m_1, m_2, \dots, m_k$  of some speaker is the same in use as the composite utterance of the token-names  $n_1, n_2, \dots, n_k$  of some other speaker, then the tokens  $m_i$  and  $m_j$  are internally linked iff the corresponding tokens  $n_i$  and  $n_j$  are internally linked for any  $i$  and  $j$  for which  $1 \leq i < j \leq k$ ;

Atomicity If the token name  $m_1$  is the same in use as  $n_1$ ,  $m_2$  the same in use as  $n_2, \dots$ , and  $m_k$  the same in use as  $n_k$ , then the composite utterance of  $m_1, m_2, \dots, m_k$  is the same in use as the composite utterance of  $n_1, n_2, \dots, n_k$ .

We might say that the composite utterances  $m_1, m_2, \dots, m_k$  and  $n_1, n_2, \dots, n_k$  *internally match* if the necessary condition of the first principle is met, i.e. if there is match between the internal pattern of coordination exhibited in each utterance. The first principles then states that sameness in use is a sufficient condition for internal matching. We might say that the composite utterances  $m_1, m_2, \dots, m_k$  and  $n_1, n_2, \dots, n_k$  *externally match* if the sufficient condition of the second principle is met, i.e. if the corresponding name-tokens in the two utterances are the same in use. The second principle then states that external matching is a sufficient condition for sameness in use. The two together, of course, imply that external matching is a sufficient condition for internal matching.

Fidelity is like an externality principle in that it states a criterion - or rather, necessary condition - for an inter-personal comparison of use, but it is best regarded as an internality principle in that the criterion is stated exclusively in intra-personal terms; no appeal is made to 'problematic' inter-personal notions. (In this respect, it is like the Pareto principle in economics).

Both principles are very plausible. We might argue for Fidelity in the following way. In the special case in which the two composite utterances  $m_1, m_2, \dots, m_k$  and  $n_1, n_2, \dots, n_k$  are both made by the same speaker, it is very plausible to suppose that they will internally match if they are the same in use.<sup>13</sup> But given that the requirement of internal matching is necessary for same-use in the case in which the utterances are made by the same person, it seems very reasonable to suppose that it should also be necessary when the two utterances are made by different speakers. For why should the requirements on same use be less stringent when two speakers are involved rather than just one.

Atomicity essentially rules out aspects of use that are essentially relational in character. For external matching guarantees that the intrinsic (or local) aspects of use in the two utterances are the same. And this, according to the principle, should then be sufficient to guarantee that the

---

<sup>13</sup>For if they are the same in use, then presumably they will externally match, with each  $m_i$  being the same in use as  $n_i$ , for  $1 \leq i < j \leq k$ . But then by Internal Coordination, each  $m_i$  will be internally linked to  $n_i$ ,  $i = 1, 2, \dots, k$ . But suppose now that  $m_i$  is internally linked to  $m_j$ . Then since  $m_i$  is internally linked to  $n_i$  and  $m_j$  to  $m_i$ , it follows by the symmetry and transitivity of internal linkage that  $n_i$  is internally linked to  $n_j$ . A similar argument might be used to establish Fidelity directly if we were to assume transitivity of *same-use*. But this is something that I would prefer not to assume.

relational aspects of use are also the same.

The scenario for the puzzle is the same as before: Charles utters two internally linked tokens,  $p_1$  and  $p_2$ , of 'Paderewski'; and Peter derives two non-internally linked tokens,  $p_1'$  and  $p_2'$ , of 'Paderewski' from them. The argument then goes as follows. By External Coordination,  $p_1'$  is the same in use as  $p_1$  and  $p_2'$  the same in use as  $p_2$ . So by Atomicity, the pair of tokens  $p_1'$ ,  $p_2'$  is the same in use as the pair  $p_1$ ,  $p_2$ . But  $p_1$  and  $p_2$  are internally linked, while  $p_1'$  and  $p_2'$  are not - in violation of Fidelity.

There is a related puzzle concerning our *understanding* of names, which I sketch without stating formally. We begin by noting that there is a natural sense in which we may talk of someone understanding or failing to understand someone's use of a name. If someone uses the name 'Aristotle', for example, then I do not understand his use of the name unless I know whether he has the philosopher or the shipping magnate in mind. And similarly, when someone uses *several* names, we can talk of someone understanding or failing to understand how those several names are being used.

Suppose now that Peter is in an extended conversation with Charles about Paderewski. Charles introduces the name 'Paderewski' to talk about Paderewski's life as a musician and Peter, deriving his use of the name from Charles, continues the conversation. This would then appear to be a case in which Peter understands (or 'latches onto') Charles' use of the name. Charles later uses the name to talk about Paderewski's life as a statesman and Peter, thinking that Charles is talking about someone else, again derives his use of the name from Charles and continues the conversation. Again, this would appear to be a case in which Peter has latched onto Charles' use of the name. Thus Peter understands Charles earlier uses of the name and also the later uses.

The question now is whether he necessarily understands Charles' repeated use of the name 'Paderewski' throughout the conversation. Charles might say 'Paderewski admires Paderewski', for example. Does Peter understand the multiple use of the name that Charles makes in this sentence? Now it might be thought that a sufficient condition for understanding the repeated use of a name is that one understood each individual use of the name. But Peter does in the present case; and so, by this criterion, he does understand the repeated use of the name. On the other hand, it might be thought to be a necessary condition of one's understanding the repeated use of the name that one know that they are internally linked. After all, it would be odd to suppose that Peter understood Charles' utterance if he took the first person mentioned to be Paderewski<sub>M</sub> and the second person to be Paderewski<sub>S</sub>. But by this criterion, there is no reason to suppose that Peter will understand Charles' repeated use of the name. Thus the two criterion for understanding the repeated use of a name may come in conflict.

#### §5 Other Versions of the Second Puzzle

We consider analogues of the second puzzle for the cases of relaying and reporting. The statement of the puzzle proceeds, as before, through a series of lemmas, which play more or less the same role as the Fidelity and Atomicity principles in the original statement of the puzzle.

To state the relay version of the puzzle, we need to extend the notion of same-saying to the composite utterances of sentences, i.e. to the utterance, by a single person, of several sentences in sequence. Given two such utterances, we may consider whether one says the same as another; and, of course, our aim in relaying what someone said by means of a composite

utterance is to produce another composite utterance that ‘says the same thing’. We may plausibly taken same-saying, in this extended sense, to be governed by the following analogues of the previous fidelity and atomicity principles:

Fidelity (for saying) If one person’s composite utterance of the sentences  $S_1(N_1)$ ,  $S_2(N_2)$ , ... ,  $S_k(N_k)$  says the same as another person’s composite utterance of those sentences, then the two utterances are ‘internally matched’, i.e. the internal pattern of coordination among the respective tokens in each utterance is the same.

Atomicity (for saying) If two composite utterances of the sentences  $S_1(N_1)$ ,  $S_2(N_2)$ , ... ,  $S_k(N_k)$  are externally matched, i.e. if each token of  $S_i(N_i)$  says the same as the other for  $1 \leq i < j \leq k$ , then the two utterances say the same thing.

If we are to derive these principles from the original Fidelity and Atomicity assumptions, we should adopt the following bridge principle:

Extended Bridge (from use to saying) The utterances of the sentences  $S_1(N_1)$ ,  $S_2(N_2)$ , ... ,  $S_k(N_k)$  say the same thing if the corresponding utterances of the token-names are the same in use.

Fidelity is again very plausible and again we may produce a similar argument in its favor, viz. that the requirements on two people to say the same thing should be no less stringent than the requirements on one person. Consider, for example, the case in which Peter says ‘Paderewski<sub>M</sub> admires Paderewski<sub>M</sub>’ and also says ‘Paderewski<sub>M</sub> admires Paderewski<sub>S</sub>’. It is then plausible to deny that he said the same thing on the two occasions. For after all, he is speaking of what he takes to be one person in the one case and two people in the other. Suppose now that Peter says ‘Paderewski<sub>M</sub> admires Paderewski<sub>S</sub>’ and that Charles says ‘Paderewski admires Paderewski’. Then, by the same token, should we not also deny that Charles and Peter said the same thing?

Atomicity is not so plausible as a general principle, since context may interact with the two utterances of the tokens in different ways. But in the cases of interest to us, the principle is very plausible. For we may suppose that the use of the non-nominal components of the sentences  $S_1(N)$  and  $S_2(N)$  is insensitive to context and, given that the use of the specific name  $N$  is also insensitive to context, there is then no room for context to make a difference to what is said. In this ‘non-tricky’ case, then, the way to relay what someone said in uttering a series of sentences is to relay what he said by each sentence in turn.

The puzzle, in relay form, now goes as follows. We imagine that Charles says ‘Paderewski is a musician’ and later says ‘Paderewski is a statesman’, using internally linked tokens of ‘Paderewski’, and that Peter repeats what Charles says on each occasion, using tokens of ‘Paderewski’ that are derived from Charles’ but not internally linked. By External Coordination, Peter’s utterance of ‘Paderewski<sub>M</sub> is a musician’ says the same as Charles’ utterance of ‘Paderewski is a musician’ and Peter’s utterance of ‘Paderewski<sub>S</sub> is a statesman’ says the same as Charles’ utterance of ‘Paderewski is a statesman’. So by Atomicity, Peter’s utterance of the pair of sentences ‘Paderewski<sub>M</sub> is a musician’ and ‘Paderewski<sub>S</sub> is a statesman’ says the same as Charles’ utterance of the pair of sentences ‘Paderewski is a musician’ and ‘Paderewski is a statesman’. But Charles’ two tokens of ‘Paderewski’ are internally linked while Peter’s are not - in violation of Fidelity.

Let us note that, although I have used the different sentences ‘Paderewski is a musician’ and ‘Paderewski is a statesman’ to present the puzzle, I could also have used the same sentence - say ‘Paderewski is suave’ - in each case. For then Charles, in saying ‘Paderewski is suave’ and

‘Paderwski is suave’, would be repeating himself whereas Peter, in saying ‘Paderewski<sub>M</sub> is suave’ and ‘Paderewski [the politician] is suave’ would not. And so how can they be saying the same thing in uttering the two sentences when the one repeats himself and the other does not? (Or, under a modification of the puzzle that uses a single sentence in place of a several, we might imagine that Charles says ‘Paderewski admires Paderewski’ while Peter says ‘Paderewski<sub>M</sub> admires Paderewski<sub>S</sub>’).

The puzzle, in the ‘says-that’ case, requires the notion of a composite report. A *simple* report is a sentence of the form ‘A says that S’, while a *composite* report is a sequence of such sentences (with a common subject term ‘A’). An example might be the pair of sentences: ‘Peter said that Paderewski is a musician’ and ‘Peter said that Paderewski is a statesman’.

Just as we may talk of the correctness of a simple report, so we may talk in an equally intelligible way of the correctness of a composite report. This notion of correctness is then naturally taken to be governed by the following analogues of the Fidelity and Atomicity principles:

Fidelity (for reporting) If *B*’s utterance of the composite report ‘A says that  $S_1$ ’, ‘A says that  $S_2$ ’, ..., ‘A says that  $S_k$ ’ is a correctly describes *A*’s utterances of  $S_1, S_2, \dots, S_k$ , then the name-tokens occurring in *B*’s utterance of  $S_1, S_2, \dots, S_k$  should internally match the name-tokens occurring in *A*’s utterance of  $S_1, S_2, \dots, S_k$ .

Atomicity (for reporting) *B*’s utterance of the composite report ‘A says that  $S_1$ ’, ‘A says that  $S_2$ ’, ..., ‘A says that  $S_k$ ’ correctly describes *A*’s utterances of  $S_1, S_2, \dots, S_k$  if each of *B*’s utterance of ‘A said that  $S_i$ ’ correctly describes *A*’s utterance of  $S_i$ , for  $i = 1, 2, \dots, k$ .

If we are to derive these principles from the original Fidelity and Atomicity assumptions, we should adopt the following bridge principle:

Extended Bridge (from saying to reporting) An utterance of the composite report ‘A says that  $S_1$ ’, ‘A says that  $S_2$ ’, ..., ‘A says that  $S_k$ ’ is a correctly reports *A*’s utterances of  $S_1, S_2, \dots, S_k$  iff the respective utterances of  $S_1, S_2, \dots, S_k$  say the same thing.

Again, the Fidelity and Atomicity principles are very plausible as they stand (and there are similar arguments in their favor). In reporting what someone says we may attempt to be faithful to the speaker’s own take on what he is saying; and this surely requires that the internal pattern of coordination in the embedded clauses of the reports should match those in the utterances upon which we are reporting; what the speaker does or does not take as the same object is something that should be reflected in the report. And again, surely one should be able correctly to report on what someone said by correctly reporting on each of his utterances in turn (assuming no unwanted interference from context).

We can now state the second puzzle for the case of reporting. Peter has two uses of the name ‘Paderewski’, one for the musician and the other for the statesman, while Charles has only one use of the name. Peter says ‘Paderewski<sub>M</sub> is a musician’, deriving his use of the name from Charles, and Charles reports ‘Peter said that Paderewski is a musician’; Peter than says ‘Paderewski<sub>S</sub> is a statesman’, again deriving his use of the name from Charles, and Charles reports, ‘Peter said that Paderewski is a statesman’.

By External Correspondence, each of Charles’ simple reports - ‘Peter said that Paderewski is a musician’ and ‘Peter said that Paderewski is a statesman’ - correctly reports on each of Peter’s utterances - ‘Paderewski<sub>M</sub> is a musician’ and ‘Paderewski<sub>S</sub> is a statesman’. So by Atomicity, Charles’ composite report, consisting of ‘Peter said that Paderewski is a musician’ and

‘Peter said that Paderewski is a statesman’, correctly describes Peter’s composite utterance, consisting of ‘Paderewski<sub>M</sub> is a musician’ and ‘Paderewski<sub>S</sub> is a statesman’. But Charles’ two tokens of ‘Paderewski’ are internally linked while Peter’s are not - in violation of Fidelity.

Again, we might suppose that the puzzle is stated with a single sentence - say ‘Paderewski is suave’ - in place of two different sentences. Charles’ composite report, consisting of ‘Peter said that Paderewski is suave’ and ‘Peter said that Paderewski is suave’, is then correct as a pleonastic report of any one of Peter’s utterances, but it is not correct as a report of both utterances, since it represents Peter as saying the same thing twice. Or we might even have Peter doing the reporting. Charles says ‘Paderewski is suave’ twice and Peter reports, ‘Charles said that Paderewski<sub>M</sub> is suave’, ‘Charles said that Paderewski<sub>S</sub> is suave’. The report is then incorrect since it reports Charles as saying different things when in fact he said the same thing.<sup>14</sup>

There is a similar version of the puzzle for the reporting of beliefs. Just as we may report on single belief, so we may report on several beliefs. This notion of a composite belief report is then subject to the following analogues of Fidelity and Atomicity:

Fidelity (for the reporting of beliefs) If *B*’s utterance of the composite report ‘*A* believes that *S*<sub>1</sub>’, ‘*A* believes that *S*<sub>2</sub>’, ..., ‘*A* believes that *S*<sub>*k*</sub>’ correctly describes the beliefs expressed by *A*’s utterances of *S*<sub>1</sub>, *S*<sub>2</sub>, ..., *S*<sub>*k*</sub>, then the name-tokens occurring in *B*’s utterance of *S*<sub>1</sub>, *S*<sub>2</sub>, ..., *S*<sub>*k*</sub> should internally match the name-tokens occurring in *A*’s utterance of *S*<sub>1</sub>, *S*<sub>2</sub>, ..., *S*<sub>*k*</sub>.

Atomicity (for the reporting of beliefs) *B*’s utterance of the composite report ‘*A* believes that that *S*<sub>1</sub>’, ‘*A* believes that *S*<sub>2</sub>’, ..., ‘*A* believes that *S*<sub>*k*</sub>’ correctly describe the beliefs expressed by *A*’s utterances of *S*<sub>1</sub>, *S*<sub>2</sub>, ..., *S*<sub>*k*</sub> if each of *B*’s utterance of ‘*A* believes that *S*<sub>*i*</sub>’ correctly describes the belief expressed by *A*’s utterance of *S*<sub>*i*</sub>, for *i* = 1, 2, ..., *k*.

The puzzle may then be stated in much the same manner as before.

It is also possible to provide a somewhat less linguistic formulation of Fidelity, since the internal pattern of coordination exhibited in the expression of the beliefs will match an internal pattern of coordination to be found within the beliefs themselves. Thus if Charles could express his beliefs in the words ‘Paderewski is a musician’ and ‘Paderewski is a statesman’, using coordinated tokens of ‘Paderewski’, then the beliefs themselves will be correspondingly coordinated - the object of the two beliefs will be taken as the same just as are the referents of the token names. It follows that a composite report consisting of ‘Charles believes Paderewski is a musician’ and ‘Charles believes Paderewski is a statesman’ can only be correct if the coordination within the beliefs matches the coordination within the report. And similarly for other attitudes, even those that are not propositional or homogenous in type. I might report on Charles with the words: ‘Charles believes that Paderewski is a great musician’, and ‘Charles admires Paderewski’. The correctness of the report would then require that Charles’ belief be appropriately coordinated with his state of admiration, with the object of the admiration and of the belief being taken as the same.

There is a strong argument for adopting a criterion of correctness that conforms to this general constraint from the demands of explanation. Suppose that the composite report,

---

<sup>14</sup>Fidelity might only be taken to require that any internal linkage in the reports should reflect an internal linkage in the utterances (but not vice versa). Our earlier examples will then still stand though the present one will not.

consisting of ‘Charles believes that Paderewski is a great musician’ and ‘Charles admires Paderewski’, is correct. Then the statement ‘Charles admires Paderewski because Charles believes that Paderewski is a great musician’ might reasonably be taken to provide a plausible explanation of Charles’ admiration (which is not to say that the explanation is correct, but merely that the explanans makes intelligible how the explanandum might be true). But one would then think that the plausibility of the explanation should generalize to other cases. After all, the plausibility merely depends upon the link in content between the mental states and, since the proffered explanation explicitly indicates what that content is, one would expect its plausibility to be preserved when the same form of explanation is applied to other people or to other contexts. So suppose that the composite report, ‘Peter believes that Paderewski is a great musician’ and ‘Peter admires Paderewski’, is correct. Then the statement ‘Peter admires Paderewski because Peter believes that Paderewski is a great musician’ should also be taken to provide a plausible explanation of Peter’ admiration. But suppose now that correct reports need not conform to the fidelity constraint on coordination and that the report is correct in virtue of Peter’s admiring Paderewski<sub>S</sub> and his believing Paderewski<sub>M</sub> to be a great musician. We then no longer have a plausible explanation of Peter’s admiration, since the two individuals are not taken by Peter to be the same. Thus the possibility of providing explanations of this sort would appear to depend upon adopting a strict ‘fidelity-bound’ standard of correctness for the underlying reports.<sup>15</sup>

The current version of the puzzle corresponds, of course, to Kripke’s puzzle about belief, and it might therefore be worthwhile to comment on the differences in presentation - some being relatively minor, but others of much greater significance:

(1) We have attempted to be a bit more explicit about the connection between the reporter’s and the subject’s use of the various names. This makes it clearer how the various forms of internal and external coordination might be implicated in the statement and solution of the puzzle. It is perhaps worth noting that we restrict External Coordination (which corresponds to Kripke’s Disquotation principle) to the case in which the given sentence contains only one occurrence of a name. The cases in which the sentence contains several occurrences of a name raise special problems and are not essential to the statement of the puzzle.

(2) Kripke takes ‘assent’ to a sentence to be evidence of belief and perhaps even a guarantee of belief under certain felicitous conditions. We avoid the question of the connection between assent and belief either by dealing with speech reports or by appealing to the *expression* of one’s beliefs - which is tied, in a conceptual manner, to belief in the way that Kripke would want assent to be tied to belief.

(3) We have presented the puzzles in terms of the *correctness* of belief reports and the like, while Kripke presents the puzzles in terms of the *truth* of the belief reports (often he just talks in the material mode and simply asks, for example, whether Peter believes that Paderewski has musical talent). We thereby finesse the question that some philosophers have raised as to

---

<sup>15</sup>One might also think of this as a pragmatic argument, having its basis in the desirability of being able to provide explanations of the required sort. Similar arguments also apply, of course, to the explanation of behavior. There is an interesting question, which I shall not explore, as to the extent to which the demands of explanation might require some external form of coordination.

whether there might be pragmatic standards of correctness in play here that differ from the semantic standard of truth. I might mention in this regard that if we work with the concept of correctness rather than truth then we can still maintain that a belief report and its negation cannot both be correct but we cannot maintain that one of them must be correct. Thus Kripke's rhetorical question 'Does Peter believe that Paderewski is a musician or not?' is out of place.

(4) For the purpose of stating the puzzle, we have attempted to distinguish a relatively strict standard of correctness, one which requires that we be faithful to the subject's own take on what he says or believes. Kripke, on the other hand, attempts to characterize the corresponding strict reading of belief reports in terms of the *de re/de dicto* distinction. One must interpret 'A believes that S' as 'A believes that: S', with the names that occur in S taking relatively narrow scope. Although I shall not argue the matter, I doubt that one can secure the required reading in this way, especially under a view which takes names to be 'scopeless'. One might say, oddly enough, that our own reading of the belief reports is *de dicto*, for the report should be faithful to the dictum, or expression, of the belief. But I believe this notion of *de dicto* to be independent of the scopal notion; scopal *de re* belief reports might be *de dicto* in my sense and scopal *de dicto* reports fail to be *de dicto* in my sense.

(5) Kripke appeals to a principle of consistency, to the idea that it cannot be correct to attribute to a rational and reflective person the belief in each of two contradictory propositions. He has Peter believing that Paderewski<sub>M</sub> has musical talent and that Paderewski<sub>M</sub> does not have musical talent and then argues, on this ground, that it would not be correct to attribute to Peter both the belief that Paderewski has musical talent and the belief that Paderewski does not have musical talent (after all, Kripke suggests, Peter might be the leading logician in the land). We, on the other hand, appeal to the less colorful principle of Fidelity, to the idea that there should be a match between the internal pattern of coordination in the belief and in the report. I would not wish to dissent from Kripke's consistency principle but it does not, it seems to me, get to the heart of the issue. Some logicians believe that contradictions can be true and, if Peter is among them, then we might wish to attribute to him the belief in each of two contradictory propositions. The significant point is not that the attribution of contradictory beliefs to Peter cannot be correct but that it misrepresents what he believes. And the reason it misrepresents what he believes is that its correctness would require a match between the internal pattern of coordination in the report and in Peter's beliefs and hence would require that Peter himself be aware of the inconsistency in his beliefs. Thus the case of inconsistent belief merely provides a particularly dramatic illustration of the significance of coordination but is not itself at issue in the statement of the puzzle. (Indeed, as we have seen, we can state the puzzle with Peter having exactly the same beliefs about what he takes to be the two Paderewski's.)

(6) We draw a distinction between a simple and a composite report. Thus there is for us, at least in principle, a distinction between the correctness of a composite report and the correctness of the individual reports that make it up. Kripke does not make such distinction. Indeed, he tends to operate in the material mode (asking what Peter believes etc), and so the question of whether we should think of ourselves as producing several individual reports of what Peter believes or a single composite report is one that never explicitly arises. Of course, one might think that this is a distinction without a difference, which is just what Atomicity affirms. But we should at least be open to the possibility that there might be a relevant difference of this

sort. Indeed, my own view is that the second puzzle should be solved by rejecting Atomicity; and if I am right, then the ingredients for its solution are not even present in Kripke's presentation of the puzzle.

### §6 How the Puzzles Might be Solved (Incomplete)

I wish, in this section, to make some remarks about the general nature of the puzzles, survey the various possible solutions to them, and then say what I think is wrong about the most plausible alternative to my own solution.

There are two core puzzles, one arising from the *continued* use of a name, i.e. from the use of a name from one occasion to the next, and the other arising from the *collective* use of names, i.e. from the use on a given occasion of more than one name. Each puzzle arises from a potential conflict between the criteria for the intra-personal and the inter-personal use of a name, though the conflict arises somewhat differently in each case. Both puzzles rest on a principle of External Coordination (governing inter-personal use), but the first takes intra-personal use to be subject to a principle of Internal Coordination while the second takes it to be subject to a principle of Fidelity. These internality and externality principles then come into conflict with certain 'formal' principles - Transitivity in the first case and Atomicity in the second.<sup>16</sup>

Each of the core puzzles has variants concerning the relay of information and the reporting of what is said. One can derive these variants from the core puzzle using certain very natural bridge principles. But one can always state them as puzzles in their own right, using a combination of internality, externality and formal principle that is tailored to the case at hand.

Most readers will be familiar with Kripke's puzzle concerning belief; and what our panoply of puzzles reveals is that the kind of puzzle Kripke considers is far more extensive and deeper in its significance than one might have thought. It is not just a puzzle about our practice of reporting beliefs, since the use and relay versions of the puzzle would arise even if there were no such practice. And nor is it essentially a puzzle about the 'content' of sentences, since the core versions of the puzzles still arise for the case of name when they occur in isolation from their use in sentences. My own view is that the puzzle concerning the use of names is fundamental. We need to show how, or to what extent, the intra-personal use of names is compatible with their inter-personal use; and it is through solving this version of the puzzle that the others are to be solved, rather than vice versa. But even someone not of this view would find it hard to deny that the various versions of the puzzles are somehow of a piece and that a solution to one should somehow bear on a solution to another.

[This section needs to be completed. I am mainly interested in classifying the kinds of solution that might be given and in warding off attacks on the Externality principles. I myself am a 'compatibilist'; I want to keep the Internality and Externality principles and to drop Transitivity and Atomicity.]

---

<sup>16</sup>The metaphysical inclined reader will have noticed an analogy between our first puzzle and the puzzle over personal identity in the case of fission. I leave it as an exercise to construct the personal identity analogue of our second puzzle.

### §7 How the Puzzle Should be Solved

Any satisfactory solution to the puzzles should be both materially and philosophically adequate.

In saying that it is ‘materially adequate’, I mean that, once given all of the relevant facts, it should then deliver a verdict on the question of whether two names are the same in use, or whether two sentences say the same thing, or whether a given report correctly describes what someone says or believes. I take the relevant facts to be essentially constituted by the relationships of internal and external linkage among the different token names. The facts of same-use etc. would appear to ‘supervene’ on the facts of internal and external linkage - indeed, it is hard to see what else, apart from the obvious ancillary facts, might be relevant; and so a solution to the puzzles should tell us *how* they supervene.

A comprehensive verdict is not only required by a desire for completeness. For the puzzle cases are merely two cases out of many; and there may be other cases which raise unforeseen problems or to which our response to the puzzle cases will not extend. Thus a comprehensive answer is also important for showing that a proposed solution is coherent and for securing it from counter-example.<sup>17</sup>

However, material adequacy is not enough, even if the solution enjoys some reasonable consonance with our intuitions. For we should be able to provide some philosophical rationale or justification for the proposed solution. Why should this solution rather than some other, perhaps equally consonant with our intuitions, be accepted?

I can think of two kinds of philosophical rationale that might be provided. The first is pragmatic; we show that the proposed solution is the only one to satisfy such and such desiderata. Thus given that we want these desiderata to be satisfied, the proposed solution is then forced upon us.

The other rationale is semantic; we show how the proposed solution follows from the semantic rules governing the use of names. Given that sameness in use is a semantic phenomenon, there should be an underlying semantic explanation of why the criterion for sameness in use is as it is. I for one find the thought almost irresistible that internal and external linkage are semantic phenomena - that, in making repeated use of a name one is taking advantage of some semantic connection between the two uses of the name and that, in deriving one’s use of a name from someone else’s, one is setting up some kind of semantic connection between the two uses of the name. And if this is one’s view, then one is *obliged* to show how the proposed solution somehow falls out of some underlying account of the semantics of internal and external linkage. But even if one is of another view, one should still show how the proposed solution is *compatible* with whatever it is that one takes to be the proper semantical treatment of names.

I shall spell out a materially adequate solution to the puzzles in the present section and then attempt to provide a pragmatic and semantic defense of it in the next. It will be very helpful, in presenting the solution, to re-frame the terms in which the puzzle has been posed. We have taken *same-use* to be a relation between token names (and similarly, *same-saying* has been taken to be a relation between token sentences and *correctness* a relation between a token report and an

---

<sup>17</sup> I am surprised that there appears to be no appreciation in the literature of the desirability of providing a comprehensive verdict on all possible cases.

utterance or belief). But it is very plausible to suppose that the intended sense of ‘same use’ is insensitive to the difference between tokens that are internally linked. In other words, if token  $m$  is the same in use as token  $n$ , then  $m$  is the same in use as  $n'$  if  $n$  is internally linked to token  $n'$  and  $m'$  is the same in use as  $n$  if  $m'$  is internally linked to  $m$  (and similarly for the cases of *same-saying* and *correctness*).

Given this assumption, we may then *identify* internal copies of the same token name. We call the result of identifying all (actual and possible) internal copies of a given token name an *individual* name. Thus the tokens of a individual name will consist of all those token names that are internally linked to a given token name. Individual names are private to a speaker; the name is *his* in the sense that only he can produce tokens of the name. But the privacy is not of a philosophically significant sort; we have simply *stipulated* that no other tokens are to count as tokens of the name. From another perspective, we might think of names as having an cross-personal identity and of individual names as being the speaker-induced ‘stages’ of such names. But just as it is convenient to talk of person-stages in discussions of personal identity, so it convenient for us to talk of these name-stages.

Much of our preceding discussion could have been simplified if it had been conducted in terms of individual names. We could have taken two individual names to be the same in use if they have tokens that are the same in use (it not mattering which tokens we choose). The puzzles could then have been formulated using three individual names, rather than four or more token names. And the formulation of the principles could have been simplified. Internal Coordination, for example, could have been formulated in the form: no two distinct individual names are the same in use. However, I preferred not to build this assumption into the very formulation of the puzzle, even though it can safely be presupposed in presenting a solution.

I now present the solution. Say that a sequence of individual names  $M_1, M_2, \dots, M_k$ ,  $k \geq 1$ , is a *referential path from M to N* if  $M = M_1$ ,  $N = M_k$  and, for each  $i = 1, 2, \dots, k-1$ ,  $M_i$  is (directly) derived from  $M_{i+1}$  or  $M_{i+1}$  is (directly) derived from  $M_i$ . Thus a referential path specifies the external links through which one individual name may be indirectly derived from another. Two individual names will be same in specific use iff there is a referential path from the one to the other. Specific use is at odds with Internal Coordination (distinct individual names of the same speaker may be identified); and so we require something more restrictive.

The criterion is simply this: two names are the same in (differentiated) use iff there is a referential path  $M_1, M_2, \dots, M_k$  from one to the other which should be acceptable in the sense that no two distinct names  $M_i$  and  $M_j$  on the path,  $1 \leq i < j \leq k$ , belong to the same individual. Thus the referential path should not ‘visit’ the same individual twice (except in the trivial case in which the very same individual name is re-employed).<sup>18</sup>

---

<sup>18</sup>The present considerations can all be laid out within a formal framework. The basic notion is that of a *manifold of names*. This is a triple  $(I, \mathcal{N}, \gg)$ , where  $I$  (individuals) is a non-empty set,  $\mathcal{N}$  is a function taking each member  $i$  of  $I$  into a set  $\mathcal{N}_i$  (the individual names belonging to  $i$ ), and  $\gg$  is a relation on  $\bigcup_{i \in I} \mathcal{N}_i$  (direct derivation), subject to the following conditions:

(i) the  $\mathcal{N}_i$  for different  $i \in I$  are disjoint;

The additional constraint might be motivated as follows. Suppose that the constraint were violated in the case of the individual names  $M$  and  $N$ . Then  $M$  and  $N$  would be the same in use even though any referential path from  $M$  and  $N$  would contain two individual names belonging to the very same speaker. Thus the sameness in use of  $M$  and  $N$  would presuppose the sameness in use of two names that, by Internal Coordination, were not the same in use; and so it should be rejected.

The above criterion might be extended to sequences of individual names in the obvious way. Two sequences of names  $M_1, M_2, \dots, M_k$  and  $N_1, N_2, \dots, N_k$ ,  $k \geq 1$ , will be the same in use if there are paths  $P_1, P_2, \dots, P_k$ ,  $k \geq 1$ , from  $M_1$  to  $N_1$ ,  $M_2$  to  $N_2$ , ..., and  $M_k$  to  $N_k$ , respectively, which are jointly acceptable in the sense that, for any names  $M$  and  $N$  on the respective paths  $P_i$  and  $P_j$ ,  $1 \leq i, j \leq k$ ,  $M$  is identical to  $N$  iff  $M_i$  is identical to  $M_j$ . In other words, the internal pattern of coordination should be ‘preserved’ in making the transition from the one sequence to the other. The motivation for the condition is similar to before: the derivations from the names in the initial sequence should not presuppose the sameness or difference in use of names that in fact are not the same or distinct in use.

The reader may readily verify that these definitions do indeed conform to the previous internality and externality principles. We also see from the standard case in which name  $L$  is directly derived from  $M$  and  $M$  directly derived from  $N$ , with  $L$  and  $N$  belonging to the same individual and  $M$  to another individual, that Transitivity and Atomicity may fail. For the acceptable referential paths  $L, M$  and  $M, N$  establish that  $L$  is the same in use as  $M$  and  $M$  the same in use as  $N$ . But any referential path from  $L$  to  $N$  cannot be acceptable and so  $L$  is not the same in use as  $M$ . So Transitivity fails. Or again,  $L$  is the same in use as  $M$  and  $N$  the same in use as  $M$ . But  $L, N$  is not the same in use as  $M, M$  since there can be no jointly acceptable paths from the one to the other. So Atomicity fails.

Using the Bridge principles, it is straightforward to extend these definitions to the cases of same-saying and reporting. Suppose that  $S_1, S_2, \dots, S_k$  is a sequence of sentences containing the individual names  $M_1, M_2, \dots, M_k$  in order and that  $T_1, T_2, \dots, T_k$  is a (homophonic) sequence of sentences containing the individual names  $N_1, N_2, \dots, N_k$  in order. Then  $S_1, S_2, \dots, S_k$  says the same as  $T_1, T_2, \dots, T_k$  iff  $M_1, M_2, \dots, M_k$  is the same in use as  $N_1, N_2, \dots, N_k$ . Similarly, the reports ‘ $A$  says that  $S_1$ ’, ‘ $A$  says that  $S_2$ ’, ..., ‘ $A$  says that  $S_k$ ’ will correctly describe  $A$ ’s

- (ii) for each  $N \in \mathcal{N}_1$  there is at most one  $M$  for which  $N \gg M$ ;
- (iii) never  $N \gg M$  for  $N, M \in \mathcal{N}_1$ ;
- (iv)  $\gg$  is well-founded.

A manifold provides us with the supervenience base from which all questions of same-use etc. are to be settled.

Let us use  $\times$  for the relevant notion of same-use. Then the Internality and Externality principles correspond to the following two conditions:

- (a) Never  $N \times M$  for distinct  $N, M \in \mathcal{N}_i$ ;
- (b)  $N \gg M$  implies  $N \times M$ ;

Thus a full compatibilist solution should provide a definition of ‘ $\times$ ’ (in any manifold) that conforms to (a) and (b).

The formal theory of these manifolds is of some interest, but will not be pursued here.

utterances of the (homophonically matched) sentences  $T_1, T_2, \dots, T_k$  if the sequence of sentences  $S_1, S_2, \dots, S_k$  says the same as the sequence  $T_1, T_2, \dots, T_k$ .

### §8 Semantic Underpinning

As I have indicated, there are two kinds of rationale our solutions that might be given - one pragmatic and the other semantic. I shall focus here on the first puzzle, though similar remarks might be made about our solution to the second puzzle. I shall also focus on the semantic rationale, but let me briefly mention one line of pragmatic justification that might be given.

We have so far insisted upon the Internality and Externality principles. But these are not the only constraints that might reasonably be imposed. Another constraint that seems very reasonable is the following:

if the individual names M and N are not the same in use, then any 'new' name M' that is directly derived from M should also not be the same in use as N.<sup>19</sup>

In other words, the introduction of a new individual name should respect pre-existing differences in use. This constraint is clearly desirable if, in introducing a new name M', we wish to distinguish between what might be said by using the name M from which it is derived and by using another name N that is not the same in use as M. It may now be shown that our solution is the maximal one to satisfy this constraint in addition to the Internality and Externality constraints. Now it seems very reasonable that one would wish to maximize the possible relationships of *same-use* (and hence the possibilities for saying or reporting what others say) within any reasonable constraints that might be imposed upon the relation. Thus given that there are no other constraints that might reasonably be imposed, our choice for the relation is forced upon us. (There are other results of this sort that might be proved).

I turn to the question of providing a semantic justification for our proposed solution. I have so far assumed that there may be internal and external links among names, but I have not made any attempt to account for the semantic import of those links, i.e. for the semantic connections that will hold among the token (or individual) names in virtue of their being linked as they are. Now one might think that these links are of no semantic import; the links go one way and the semantics another. Thus a Fregean might think that the semantics of a name is given by the 'sense' that each of us attach to it but that there is no reason, should I derive my use of a name from you, for the sense that I attach to the name to be the same as the sense that you attach to the name. And it is even conceivable that he might think, in the same spirit, that there is no need for me to attach the same sense to my own repeated uses of the name; it is as if I were a different semantic individual whenever I make a different use of the name.

I find this general position very hard to swallow. The thought is almost irresistible that, in deriving my use of a name from yours, I am setting up some kind of semantic connection between the two uses of the name. The mechanism of derived reference would appear to be a form of stipulative definition: I *define* my use of the name by reference to yours. And, as with any other form of stipulative definition, we expect its successful execution to result in a semantic connection

---

<sup>19</sup> In saying that the name M' is 'new', I mean that neither M nor N is (directly or indirectly) derived from M'. Thus M' will be introduced into someone's idiolect *after* M and N.

between the term defined and the term or terms by which it is defined. Likewise, the thought is almost irresistible that, within someone's idiolect if not within the language at large, there is an especially intimate semantic connection among internal copies of the same name.

If we regard derived reference as a form of stipulative definition, then the natural suggestion as to how it sets up a semantic connection is that it confers the same *meaning* on the two uses of the name; it associates with my use of the name the same meaning as is already associated with your use of the name. And this is a view one can hold regardless of one's view as to what the meaning of a name (or its use) should be taken to be. Thus one might be a Millian and take the meaning of a name to be its referent; and derived reference will then be a linguistic act by which coreference is secured. Or one might be a Fregean and take the meaning of a name to be its sense; and derived reference will then be a mechanism by which synonymy (or identity of sense) is secured.

But this is hardly a position that the compatibilist can comfortably adopt. For take the three individual versions P1, P2 and P3 of 'Paderewski' involved in the statement of the first puzzle (where P1 and P3 belong to Peter, P2 belongs to Charles, P2 is derived from P1, and P3 from P2). Then P1 will have the same meaning as P2 and P2 as P3; and so P1 will have the same meaning as P3. But it is then hard to say why he should allow P1 to be the same in use as P2 and P2 to be the same in use as P3 yet not allow P1 to be the same in use as P3. It cannot be that the latter connection is indirect while the former are indirect, since there will be indirect connections that he *will* want to allow; and so on what basis will he distinguish between the 'good' indirect connections and the bad ones? From a semantical perspective, then, the compatibilist's position would appear to be completely unmotivated.

We have here a strong argument against giving up Transitivity (and the related assumption of Atomicity). It is not merely that we should take the morphology of the phrase 'same in use' seriously and suppose that there must be a conception of *use* under which two names are the same in use iff the use of one is the same as the use of the other. For we could simply question whether the phrase is indeed to be understood in the way the morphology suggests. It is rather that, once we take account of the semantics of derived reference, it is hard to see on what basis Transitivity - or, rather, the relevant instances of Transitivity - might sensibly be questioned.

We therefore need some other conception of the semantics of internal and external linkage (or, alternatively, some other view of the connection between the semantics of linkage and the concept of *use*). I shall attempt to provide such a conception, working within the broadly Millian tradition on proper names. This is the tradition according to which there is no more to the meaning of a proper name than its bearer. It is to be contrasted with the Fregean tradition, according to which the meaning of a proper name is given by its sense, rather than by its bearer. Not only do I believe there to be a reasonable answer to the question within the Millian tradition. I also doubt that there is any reasonable answer to be found within the Fregean tradition. Thus my solution to the puzzles provides a partial vindication of Millianism: for to solve the puzzles, one should reject Transitivity; and properly to motivate the rejection of Transitivity, one should be Millian rather than Fregean.

My attitude to the puzzles might be compared to Kripke's. He thinks of his puzzle as showing that what appear to be special difficulty for the Millian over the substitutivity of names is, in reality, a general difficulty for anyone whatever. We wish to argue, paradoxical as this might

sound, that the Millian is in a *better* position to account for the failures in substitutivity involved in the puzzles than his opponents.

Of the two questions concerning semantic import, the one concerning internal linkage is easier and will provide us with an essential clue in answering the question on external linkage. What, then, is the semantic import of internal linkage? How are internally linked tokens of a given name semantically related?

In attempting to answer this question, we no longer have the previous difficulties over transitivity, since internal linkage may safely be assumed to be transitive. But Millians have a different problem. For all there is to the meaning of a proper name is its bearer. So how can we distinguish semantically between coreferential specific names, such as 'Cicero' and 'Tully', let alone between coreferential individual names, such as Peter's two versions of 'Paderewski'?

The Millian needs to be able to draw some kind of distinction between *accidental* or *de facto* co-reference and *strict* or *de jure* coreference. For he can then say that 'Cicero' and 'Tully' or that Peter's two versions of Paderewski' are only accidentally coreferential while internal copies of the same individual name are strictly coreferential.

Now the obvious - and perhaps the only plausible - way to draw this distinction is in terms of the semantical rules governing the language to which the expressions belong. Two names will be *strictly* coreferential if it follows from the semantical rules of the language - or, as I shall put it, if it is a *semantic fact* - that they are coreferential; and two names will be *accidentally* coreferential if they are coreferential but not strictly so. Thus we may say that it is not a semantic fact of our language that 'Cicero' and 'Tully' are coreferential or a semantic fact of Peter's individual language that his two versions of 'Paderewski' are coreferential, even though it is a semantic fact of his language that any two internal copies of 'Paderewski<sub>M</sub>' are coreferential<sup>20</sup>.

The Fregean has no difficulty in understanding the relevant sense of semantic fact. For it will not be a semantic fact in his sense - it will not follow from the senses attached to the names 'Cicero' and 'Tully' - that they are coreferential; but it will be a semantic fact that two internal copies of 'Paderewski' within Peter's idiolect will be coreferential (if they are referential at all), since the sense attached to the two copies within his idiolect will presumably be the same.

But, at this point, the Millian faces a peculiar difficulty. For he will want to claim that it is a semantic fact that 'Cicero' refers to a particular person - call him *Cissy* - and also a semantic fact that 'Tully' refers to *Cissy*. But from the fact that 'Cicero' refers to *Cissy* and the fact that 'Tully' refers to *Cissy*, it follows that 'Cicero' and 'Tully' co-refer; and so it should be a semantic fact that they co-refer and hence are strictly coreferential. The Millian might attempt to resist this conclusion by denying that it is semantic fact that a proper name refers to what it does. But this would then be at the expense of his no longer being able to draw any semantic distinction between non-coreferential names, such as 'Cicero' and 'Caesar'.

I believe that this to be a fundamental problem for Millianism and, more generally, for the Russellian approach to semantics; and I would like to make a radical proposal as to how it might

---

<sup>20</sup>In talking of facts, I do not wish to commit myself to an ontology of facts as opposed to true propositions. The allusion to 'facts' is my way of emphasizing that semantics deals with real world items (people, mountains, atoms etc). Even appeal to propositions might be avoided if we took the semantic-fact locution as a sentential operator rather than as a predicate of propositions.

be solved. It is that the Russellian should not take the relevant notion of semantic fact to be closed under classical consequence. Thus even though he may accept that  $p, q, r, \dots$  are semantic facts and that  $s$  is a classical consequence of  $p, q, r, \dots$ , he need not then accept that  $s$  is a semantic fact; and, in particular, he may take it to be semantic fact that ‘Cicero’ refers to *Cissy* and also that ‘Tully’ refers to *Cissy* (should he be a Millian) and yet not take it to be semantic fact that ‘Cicero’ and ‘Tully’ are coreferential.

If this approach is to be viable, then two concerns need to be addressed. First, the Russellian needs to specify a reasonably strong notion of consequence under which the semantic facts *will* be closed. There are certain basic semantic facts concerning lexical items and certain basic semantic principles that enable us to determine the semantic features of complex expressions on the basis of the semantic features of the simpler expressions from which they are formed. The semantic features of complex expressions are a more or less direct consequence of these basic semantic facts; and any acceptable notion of semantic fact must be closed under a notion of consequence for which this is so. Any reasonable notion of semantic fact must enable semantics to operate as an ‘inference-engine’ for the generation of semantic facts.

Second, the relevant notion of semantic fact needs to be motivated. We are not simply after an ‘engineering-type’ solution to the current difficulties. We wish to understand, in terms of an underlying conception of what semantics is, why the notion of semantic fact should be taken to work in just this way.

Let me address these worries in turn, though my remarks will be somewhat sketchy and suggestive. I adopt what one might call a Janus-faced conception of semantics and of the semantic facts by which it is constituted. On the one hand, semantics looks outwards to the world. It deals with the relationship between the expressions of language and the objects in the world and, in particular, with the relationship between names and their referents. On the hand, semantics looks inwards to the speaker of the language. The semantics is somehow made internal to the speaker; in understanding the language, he must somehow have grasped or ‘internalized’ the semantic rules by which it is governed. Thus semantics, on this Janus-faced conception, both belongs to the mind and yet pertains to the world.

There is clearly some tension between these two aspects of semantics. At its crudest, they might appear to place the world within the mind of the speaker; and so it is not clear how they might genuinely be brought together. In the face of this tension, most philosophers of language have tended to emphasize one aspect to the exclusion of the other. Thus most Russellians emphasize the former and either neglect the internal aspects of language or treat it as independent of semantics proper, while most Fregeans emphasize the latter and treat the external aspects of language as an off-shoot of the internal (‘sense determines reference’).

I wish to suggest something more in the nature of a genuine synthesis. On the one hand, we take the semantic facts to be ‘objective’; they concern the relationship between language and the world, with reference constituting a paradigm of such a relationship. On the other hand, we treat the semantic facts as a possible object of cognition. We only recognize something to be a semantic fact in so far as it might be known or ‘internalized’ by the speaker of the language.

Thus in doing semantics, we adopt a subjective stance on an objective reality.<sup>21</sup>

This point of view has definite consequences for what one might properly recognize to be a semantic fact. For we want certain semantic facts to follow from others. But in so far as we take semantics to constitute a possible object of knowledge, we will want these consequences to be manifest to the speaker. He must be in a position to know that they obtain on the basis of his knowledge of the facts from which they follow. But it is a familiar point, when it comes to our knowledge of singular propositions, that the logical consequences of known facts may not be manifest to a cognizer. Peter, for example, may know the singular proposition *that Paderewski is a pianist* and he may know the singular proposition *that Paderewski is a statesman*. But his 'take' on Paderewski in the two cases may not be the same; and so he may not be in a position to know that there is someone who is both a pianist and a statesman, no matter how great his logical acumen. Thus our knowledge of singular propositions will not be closed under classical consequence; and so neither, on the current view, will the semantic facts.

But this is not to claim that knowledge or semantics is logically inert. They still will be closed under a fairly strong notion of consequence, albeit weaker than full classical consequence. If someone knows the singular proposition  $p \ \& \ q$ , for example, he will be in position to know each of the conjuncts  $p$  and  $q$  or if he knows *everything F's and a G's*, then he will be in a position to know *a F's and G's*.

The relevant notion of consequence under which our knowledge of propositions (both general and singular) is closed I call 'manifest' consequence.<sup>22</sup> It is subject to the following constraint:

If  $s$  is a consequence of  $p, q, r, \dots$ , then, for any way of knowing  $p, q, r, \dots$ , there is a way of knowing  $s$ .

The notion of manifest consequence is then the strongest notion of consequence included in classical consequence to conform to this constraint.

Even though the notion may be *identified* in epistemic terms, it can also be characterized in purely logical terms. The idea behind the characterization is this. To recognize the manifest consequences of some singular propositions, we must put ourselves in the shoes of a possible cognizer. He will be presented with what he takes to be possibly different propositions - where in fact there is only one object occurring several times in the propositions, he takes there to be possibly several different objects. The relationships of manifest consequence among the original propositions will then be determined on the basis of the relationships of classical consequence among their 'manifest image' (to re-coin a phrase). Thus the notion of manifest consequence, like the notion of semantic fact, will not itself be an epistemic notion, even though it is subject to epistemic constraints.

We now take the semantic facts - like our knowledge of facts in general - to be closed under manifest consequence. The semantic facts, so conceived, then suffice for the inferential

<sup>21</sup>There is a suggestive parallel with Kant, for we might take appearances to be *identical* to noumena but considered entirely from the subjective point of view.

<sup>22</sup> I find it surprising that there has been no attempt in the literature either to isolate the notion or to study its properties.

needs of semantics; we need only the manifest consequences of the basic semantic facts, not also the classical consequences.<sup>23</sup>

It is this 'internalized' notion of semantic fact that we take to embody the subjective/objective duality in our conception of semantics: the semantic facts are objective in that they relate to the real world; and they are regarded from a subjective standpoint in that they are only taken to be closed under manifest consequence.

I should here anticipate a concern some readers may have. If the semantic facts are internalized, then surely there must be some way in which they are internalized; there must be some internal representation of the facts. But then will not these internal representations constitute the proper object of study of semantics? This would be a reasonable point if the internalization was by way of Fregean concepts (or senses). For then the semantical features of language would ultimately reside in the representational features of those concepts. But I do not believe that this is how it is. The idea that there are such concepts is a myth (or, at best, a mistake); if we retreat to the language of thought (if I may indulge in this fantasy), then we shall find that this is no more Fregean in character than the language with which we began. Thus my view is that there is, in general, no deeper form of representation by which the 'objective' semantical facts might be explained.<sup>24</sup>

Let us return, at last, to the question of internal linkage. Our basic idea is this: same use, as embodied in the links, is strict coreference. And so if this is to work, we face both the negative task of showing that expressions not the same in use are not strictly coreferential and also the positive task of showing that expressions the same in use are strictly coreferential.

There is now no essential difficulty in seeing how two individual versions of a name - say, Peter's two versions of the name 'Paderewski' - might fail to be strictly coreferential. For the fact that they corefer is not a manifest consequence of the facts that they each name refers to the man Paderewski; and so the semantic facts that each refers to that man will not be sufficient to guarantee that it is a semantic fact that they corefer. (It is always possible, of course, that there are other semantic facts in virtue of which they might be taken to corefer). Note that it is essential here to take the question of strict coreference to be relative to Peter's individual language. Within that language, it is not a semantic fact that the individual names (or that tokens of the individual names) corefer. But within the language at large, it is plausibly taken to be a semantic fact that the two names (or tokens) corefer.

But we also want to maintain that any two tokens of an individual name - say, two tokens  $p_1$  and  $p_2$  of Peter's individual name 'Paderewski<sub>M</sub>' - *will* be strictly coreferential. Now the basic semantic facts would appear to be that each of  $p_1$  and  $p_2$  is strictly coreferential with

---

<sup>23</sup> I have over-simplified for the purposes of exposition. A fuller account should also allow for the idea of *coordination*: occurrences of the same object may be linked or coordinated within a system of propositions in much the same way a names within a body of discourse. Coordinated occurrences of objects may then be treated as the same for the purposes of inference.

<sup>24</sup>This is all by way of a credo; a great deal more on the question needs to be said.

Paderewski<sub>M</sub>.<sup>25</sup> But we then face a peculiar difficulty. For it might be maintained that the coreference of  $p_1$  and  $p_2$  is not a manifest consequence of the coreference of each of  $p_1$  and  $p_2$  to 'Paderewski<sub>M</sub>', the reason being that, in knowing the two facts of coreference, someone's take on the name 'Paderewski<sub>M</sub>' may not be the same. Perhaps Peter dimly remembers using the name 'Paderewski<sub>S</sub>' when in fact it was 'Paderewski<sub>M</sub>'. His current and past takes on the name 'Paderewski<sub>M</sub>' will not then be the same.

However, these cases are irrelevant to the case at hand. We should presuppose that, in applying the semantics for a given language, the speaker has a uniform 'take' on its expressions and that any failure to coordinate corresponds to a deficiency in his attempt to apply the semantics and not to a deficiency in the semantics itself. We might say that an object is *transparent* with respect to a body of facts, conceived as a possible object of knowledge, if the cognizer's take on the object is always presumed to be the same.<sup>26</sup> We should then take it to be a general feature of language that its expressions are transparent. Syntax is transparent, even if semantics is not; and one's take on the expressions of the language is always presumed to be the same, even if one's take on their referents is not.

Our previous difficulty now disappears. For with this stricture in place, it will be a manifest consequence of the coreference of each of  $p_1$  and  $p_2$  with Paderewski<sub>M</sub> that they are coreferential; and so the strict coreference of  $p_1$  and  $p_2$  will follow from the strict coreference of each of them to Paderewski<sub>M</sub>. (One might also show, under plausible assumptions, that strict coreference is an equivalence relation).

We turn to the far more difficult question of external linkage. I have understood the semantics of repeated use, or of internal linkage, in terms of each token of an individual name being taken to be strictly coreferential with the individual name. Each token comes with the stipulation, as it were, that the token is to be coreferential with the individual name; and, indeed, it is perhaps part of what it is to be a token of the individual name that it is taken to be governed by such a stipulation.<sup>27</sup>

I wish to understand the semantics of derived reference, or external linkage, similarly - but one step up in the token-type hierarchy. Suppose that I hear a token of the name 'Paderewski' for the first time. Then I take it to be an instance of a name that is - or is capable of being - in common use (this is what I previously called the 'specific name'). In deriving my use of the name from the token, I then wish to gear my use of the name to the name in common use. Thus the act

<sup>25</sup>In contrast to the external link, it is not as if one of the tokens is derived from the other. Each has its source, and derives its semantic import, from an underlying disposition to use the name in a certain way. I identify this disposition with the individual name.

<sup>26</sup>This idea is best explained using the notion of a coordinated system of propositions. A transparent object is then one all of whose occurrences are 'coordinated', thereby indicating that the cognizer's take on the object in its various occurrences should always be taken to be the same.

<sup>27</sup>A slightly different approach is to derive the coreferentiality of a particular token with its type from the fact that the token is of the type and the general principle that tokens are coreferential with their types. Nothing will turn on which of these two alternatives is adopted.

of derivation amounts to a semantic stipulation to the effect that a particular one of my individual names is to be coreferential with the common name. Given that the stipulation is successful, it will be a semantic fact within my language that the individual and the common name are coreferential.

It should be noted that the stipulation involves understanding the names in my language by reference to the names in the common language. Some philosophers have cast doubt on the idea of a common language but the present application of the idea is relatively unproblematic, since the common name is simply constituted by all those uses of the name that eventually derive from the original use. Thus in making my own use of the name, I simply take myself to belong to this extended network of use.

We might think of my individual language as constituting a perspective on the common language. Thus the fact that two of my individual names are not the same might be taken to reflect the fact that the corresponding names in the common language are not the same. The perspective might then be more or less accurate, depending on whether the differences in the individual language do genuinely reflect differences in the common language.

With this conception of derived reference, let us now see whether we can account for our various verdicts on use. Consider again the case in which Charles' (individual) name P2 is derived from Peter's name P1 and Peter's name P3 is then derived from Charles' name P2. We do not want P1 and P3 to be the same in use. But under our conception of derived reference, P1 will be strictly coreferential with the common name 'Paderewski', as will be P3. But will it not then follow that P1 and P3 are strictly coreferential. After all, in the analogous case in which we had two tokens of an individual name, we felt justified in concluding, on grounds of the transparency of syntax, that the tokens were strictly coreferential. And so why is this case any different?

Our previous reasoning depended upon the transparency of syntax; the expressions of the language were taken to be transparent to the user of the language. But although we have provided a semantic explanation of the individual names in terms of the common names, there is no need to think of the common names as themselves belonging to the individual language. From within the context of an individual language, the common names should be regarded as 'out there' - as belonging to the opaque world of real things rather than to the transparent world of linguistic items. And this then means that we cannot infer the strict coreferentiality of the individual names from their strict coreferentiality with the common name.

But we now have the opposite problem. For when one name is derived from another - say, P2 from P1 - then we want their use to be the same. But the semantics of derived reference merely ensures that each of the individual names will be strictly coreferential with the common name; and that is not enough, as we have seen, to ensure that they themselves are strictly coreferential. We need here to appeal to another feature of derived reference. For when I derive my individual use of the name from yours, it is not that we independently make our individual names coreferential with the common name. For my take on what the common name is is derivative upon yours; this seems to be as clear a case as any in which two individuals have the same 'take' on some object in the world. And this suggests that we should take the common name to be 'locally' transparent, as it were; it should be assumed that, within the semantic facts that P1 is coreferential with P (which I take to abbreviate 'Paderewski') and that P2 with 'P', the two occurrences of the common name 'P' are 'coordinated'. Given that this is so, it will then be a

manifest consequence of the facts that P1 and P2 are coreferential; and so it will be a semantic fact that they are coreferential.

Of course, we are not here dealing with a requirement on the semantics for the individual languages, since P1 belongs only to the language of Peter and P2 only to the language of Charles. Rather, we have a requirement on the joint language. And the requirement has consequences both for what may be deduced from the semantics, as we have seen, and also for what it is to internalize the semantics. For it means that if Peter and Charles are jointly to internalize the semantics then their 'take' on the common name, at least in regard to the particular semantic facts in question, should be the same. Thus the joint semantics is not the simple union of the individual semantics.<sup>28</sup> To internalize the semantics, each individual must not only internalize his own semantics but do so in a way that appropriately coordinates with the other individual's take on his own semantics. Thus derived reference not only serves to extend a given individual's semantics but also imposes a requirement on how the resulting semantics is to be jointly internalized with the semantics of others.

Unfortunately, we are still not out of the thickets. For if we look at the semantics for the joint language of Peter and Charles, we see that P1 is coreferential with P, P2 is coreferential with P and that P3 is coreferential P, with coordination between the first two occurrences of P and between the second two occurrences of P. But this suggests that there should be coordination between the first and third occurrences of P and so we are back to our original problem!

And just in case one is tempted to solve the problem by appealing to the distinction between direct and indirect coordination, here is a related form of the difficulty. Suppose that P1 is derived from P2 and P2 from P3, with a different individual involved in each case. Then we want to say that P1 is the same in use as P3. Suppose now that P1 is derived from P2 and P2 from P3, with P1 and P3 belonging to the same individual (as in the puzzle case). Then we want to deny that P1 is the same in use as P3. But what can be the semantic justification for making this distinction? How can the coreferentiality of P1 and P3 belong to the semantics of the joint language of the individuals in the one case but not in the other?

To solve this difficulty we must find some basis for distinguishing between the relation of manifest consequence in each of these cases: the fact that P1 and P3 must somehow be a manifest consequence of the semantic facts in the one case and yet not of the same semantic facts in the other case! Now the notion of manifest consequence is meant to reflect our access to the facts. But in the present case we are not talking of a single individual's access to the facts but of several individuals taken together. We must therefore consider what is the appropriate notion of consequence when *joint* or *distributed* knowledge is in question.

So let us consider this question without any regard for the intended linguistic application. Consider various individuals who know various things; and let us ask what they *jointly* know. An obvious answer is that they know what someone would know if he or she had access to what each of them knows. Or to put the point picturesquely, we take down the 'compartments' between

---

<sup>28</sup>If we think of a semantics as a set of propositions closed under manifest consequence, then the joint semantics is not merely the closure of the union of the individual semantics. We must also add appropriate coordinating links between the 'objects' occurring in the two sets of propositions; and this then changes the manifest consequences of their union.

their minds and suppose that they are one mind, not two; it is what that single mind would know that they can then be said to know. Thus if one of the individuals knows  $p$  and another knows  $q$ , then they will jointly know  $p$  and jointly know  $q$ . But a single individual who knew these things would also know their consequences. So they can jointly be said to know ( $p \& q$ ), even though this may not be something that either of them knows. And in general, what they jointly know is what is a consequence of what they individually know.<sup>29</sup>

Now when knowledge of singular propositions in question, the relevant notion of consequences must, of course, be taken to be manifest consequence. Suppose that Smith has some knowledge which he would express in the words 'Cicero is a Roman' (though not in the words 'Tully is a Roman') and that Jones has some knowledge that he would express in the words 'Tully is an orator' (though not in the words 'Cicero is an orator'). Then they can be said jointly to know the singular proposition that Cissy is a Roman and the singular proposition that Cissy is an orator, and even the singular proposition that Cissy is a Roman and Cissy is an orator, but not the singular proposition that Cissy is a Roman orator, since their knowledge of the singular propositions concerning Cissy are not appropriately coordinated.

Consider now the more difficult case of Peter and Charles and their knowledge of Paderewski. Suppose that Peter has some knowledge which he would express in the words 'Paderewski<sub>M</sub> is a Pole' (though not in the words 'Paderewski<sub>S</sub> is a Pole') and some knowledge which he would express in the words 'Paderewski<sub>S</sub> is famous' though not in the words 'Paderewski<sub>M</sub> is famous', and that Charles has some knowledge that he would express in the words 'Paderewski is a man'. Then it is plausible that we can attribute to them joint knowledge that Paderewski is a male Pole and that Paderewski is a famous man. But can we attribute to them joint knowledge that Paderewski is a famous Pole?

Here are two ways of thinking about the matter. We wish to make two minds one. On one view, this means that each external link should become an internal link. The single compendious mind will then take the person Paderewski in his various bits of knowledge concerning Paderewski as the same - the knowledge will be 'coordinated'. And so he will know that Paderewski is a famous Pole. On the other hand, one might think that, in making the two minds one, one should be faithful to the internal coordination within each mind. We want to be able to see the content of each individual mind as a restriction on the content of the compendious mind. In this case, we cannot turn all the external links into internal links, since that Peter would have to be credited with having coordinated knowledge that Paderewski is a Pole and that Paderewski is famous. What we should do instead is to convert external links into internal links in any way compatible with the internal coordination within each mind. Thus the single compendious mind gives way to a multitude of relatively compendious minds; and what the individuals jointly know is what any of the compendious minds would know.

We apply these considerations to the case at hand by taking the individual's knowledge to be knowledge of the semantics for his language and by taking coordination to concern the

---

<sup>29</sup>There are various notions of collective knowledge. And what I am here called joint knowledge lies at one end of the spectrum. It provides the weakest (or close to the weakest) sense in which several people can be said to know something. At the other end of the spectrum lies the notion of *common* knowledge.

common name ‘Paderewski’ (rather than the person himself). The semantics for the joint language can then be identified with what is jointly known by those who know the semantics for their individual languages. Under the first proposal for what is jointly known, the joint semantics will essentially recapitulate the semantics for the common language: Peter’s two individual names for Paderewski, for example, will become strictly coreferential. But under the second proposal, individual differences will be preserved and strict coreference will coincide with the notion of same-use that we previously characterized. We thereby obtain a semantic underpinning for our proposed solution.

It may be helpful, in conclusion, to attempt to present a general picture that underlies these various considerations. Under the current view, we need to distinguish between three different levels of language. On the one hand, there is the common language. This contains the common names (‘Cicero’, ‘Paderewski’ etc) and is governed by a simple referential semantics. This is a language we all speak. Peter, for example, uses the common name ‘Paderewski’ both when he refers to the musician and when he refers to the statesman. However, it is insensitive to individual differences of use. There are then the individual languages. These can be regarded as the attempt to ‘coordinate’ our own use of language with the common language by means of rules of coreference that link the individual names with the common names. They provide, in effect, a more or less accurate ‘perspective’ on the common language. Finally, there is the communal language. This is the result of putting together the individual languages. It provides a communal perspective on the common language, one that is the result of putting together the individual perspectives in a way that is compatible with each individual perspective.

The common language (with its syntax of common names) is one that we all share, but the communal language (with its syntax of individual names) is one that we participate in or contribute to it. We must understand the individual languages by reference to the common language, since they represent our attempt to coordinate our own use of the language with the common use. But we must understand the communal language by reference to the individual languages. It is a ‘quilt’ that results from appropriately piecing together each of the individual languages. The common language is in a sense objective, while the communal language is not objective, but inter-subjective. It is the common language that is best suited to providing objective information but it is the communal language, with its orientation towards each individual’s perspective, that is best suited to describing what people say or believe.

These various distinctions take on a very clear meaning in the present context and, in particular, there is a clear conception of what the common language should be taken to be. But they may well have application to other, less clear-cut, cases.

### §9 Consequences

Not yet written. Topics I wish to discuss include: (i) the way in which stipulation of coreference does and does not establish a synonymy; (ii) the way in which my solution is *not* contextualist; (iii) the fact that the notions of same-saying and correct reporting are entirely semantical in character; (iv) the breakdown in our talk of ‘use’ or ‘content’ or ‘meaning’ in connection with the puzzle cases; (v) the way in which my solution provides support for ‘semantic relationism’, the doctrine that there are semantic relationships among expressions that are not grounded in their intrinsic semantic features.