

*iconical, causal aspects - Kripke against Frege Russell*

matter not only of the semantic but also of the pragmatic dimension of semiosis. There has to be a sign-interpreter (see figure 5.1, right side of the triadic scheme of semiosis) in order to identify the real denotatum of a sign (figure 5.1, left side of the triadic scheme of semiosis).

But even Morris's pragmatics, that is, his account of "sign-mediated behavior," cannot show what identifying the referent of a proper name (or identifying an individual referent of a general name) really is.<sup>11</sup> For he can at best describe an external causal chain of behavior that is supposed to connect the original object of denotation with the "organism" that uses the name (see figure 5.1, left side: "empirical semiotics"). But, as J. Searle has recently shown once more in a brilliant discussion of the "causal theory of reference,"<sup>12</sup> an external description of the causal chain of behavior can never ensure that the meaning-intention of the user of a name correctly refers to its denotatum. In case of a so-called historical causal chain between the original baptism of a thing and the actual use of the proper name, the intentional content of the name may very well have changed at a certain stage of the chain, notwithstanding the continuous causal connection of verbal behavior. This happened with many proper names—as with the name "Madagascar," which before Marco Polo referred to some part of continental Africa—and, I guess, with many general names whose etymological meaning is different from its actual meaning.

Thus it becomes clear, it seems to me, that a pragmatics of identifying denotata must be an account of causal and intentional chains simultaneously. It must be able, in principle, to trace the use of a name down to a situation where the meaning of the name—be it a proper name or a general—can be ostensively introduced, or reintroduced, in such a way that the user can intentionally and reflectively identify an existing and hence also causally effective referent. This is precisely the way Peirce has explicated the function of identifying real denotata with the aid of *indexical signs*.<sup>13</sup> One should think that identification of real referents as denotata of signs is eventually a case of complete integration of all three dimensions of the triadic sign-function or semiosis. For, in the situation of identifying a denotatum as an instance of a general name, the meaning-intention of the sign-user must not only coincide with the perception of the existing and causally effective referent but also fit in with the syntactico-semantic framework of a language. Thus identifying a denotatum is a case of an encounter with the real world that is at the same time mediated by language and language-constitutive. Therefore it may serve as a paradigm-case for understanding, what I would call, the pragmatic completion of the linguistic turn in philosophy within the framework of a transcendental semiotics.

Thus far my semiotic account of the problems of sign-reference has been very roughly sketched. It passed over many intricate problems and, in order to suggest the possibility of a transcendental-semiotic integration of pragmatics and semantics, it neglected intentionally the differences between different special cases of identifying denotata: thus for example, the difference between a subsumptive identifying of an exemplar of a well-known species and, on the other hand,

introducing a new general name, in order to be able to subsume a hitherto unknown phenomenon under this head; or the difference between these procedures and identifying the referent of a proper name.

In what follows, I will discuss these problems a bit more thoroughly from the point of view of the following question:

Is it really true that in all these cases a complete integration of the semantic and the pragmatic dimension of language comes about? That is to say, may one still claim, according to the linguistic turn, that mediation by language is a nontranscendable condition of the possibility of our identifying of something as something and thus of our intersubjectively valid knowledge of the world?

One could conceive of objections to this claim from two perspectives: On the one hand, one could think that identifying the real denotatum is a matter of the mental intentionality of a subject of perception that is independent from, or goes beyond, the meaning of the signs of a language-system. Thus the problem of identifying would lead us back to a mentalistic philosophy of intentionality, say in the sense of Brentano's philosophical psychology or of Husserlian phenomenology. This seems indeed to be the opinion that underlies certain tendencies of a new philosophy of intentionality. On the other hand, one could rather argue that intentionality and linguistic meaning in the sense of intentionality belong together, whereas reference to the real denotatum would lead us beyond both of these notions—say toward grasping the real essence or nature of things which causally determines the meaning of signs qua extensionality of names. This latter contention seems to make up the point of the post-Wittgensteinian realistic semantics of Saul Kripke<sup>14</sup> and Hilary Putnam.<sup>15</sup> And this conception could also be considered incompatible with the linguistic turn of philosophy, it appears.

In the face of these diverging trends of the present theory of meaning qua reference, I shall try to show two things: First, there are indeed different empirical affinities, and hence priorities, of the three angles of understanding meaning, namely extensionality, intentionality, and intentionality, with regard to the problem of reference. But, notwithstanding these differences there is also an internal relationship between the three concepts of meaning, such that it is not allowed, in the last resort, to separate them from one another. In other words, although the theory of reference leads beyond semanticism (in the Carnapian sense and in a narrow sense of linguistic meaning or usage) it does not lead beyond the transcendental-semiotic postulate of an integration of semantics and pragmatics of language. I shall try to show this in a triangle-discussion, so to speak, with regard to the relations between the three concepts of meaning.

*(Referential) intentionality and intensionality*  
To begin with, I want to argue that it is not possible to separate the notion of referential intentionality, say in perceptual identifying of something as something, from the notion of public meaning qua intentionality of (proper or general) names. This holds in my opinion, although it is often possible and necessary to ascertain a difference between the factual intentionality of

*Searle 142.*

*Third pass: Evans.*

*Drei Eck-Diskussion*

1.

perceptual reference and the conventional meaning qua intentionality of those words in the light of which the identification of the referent is possible. In this context, the factual intentionality may both fall short of the public meaning qua intention or even transcend it in grasping the real essence of things. What does this mean?

From a logician's point of view, I think, Frege was right to make an abstract distinction between *Sinn* and *Bedeutung*—or, for that matter, intentionality and extensionality—of names, on the one hand, and the psychologically relevant concept of meaning-intentions, for example, "ideas" in the sense of John Locke, on the other hand. He thereby was able to separate methodically between ideal, "timeless," and "intersubjectively valid" meanings, to be dealt with in the formalizable context of logical truth transfer, and particular subjective mental states, to be dealt with in empirical psychology. If one were to argue that, after all, different people can be in the "same" psychological state—say by grasping the same intersubjectively valid meaning—Frege could answer, I suggest, that this is just a postulate from the point of view of the logical semantics of *Sinn*. Indeed, a psychologist would never find empirically the same state of mind in two different people—or even in the same human being at different times—but only, at best, sufficiently similar states of intending the same public meaning; the latter being, so to speak, the regulative principle of their thought and the necessary institutional fiction of their possible communication by language. That is to say, public meanings of sign-types of language, to be explicated as intentions, are indeed the ideal standards of paradigms of meaning-identity and hence of intersubjective (sometimes called "objective") validity of meaning. Platonism, always recurrent among mathematicians and logicians, is just an ontological hypostatization of the abstractive notion of public meaning or intentionality, I suggest. This much from a logician's point of view.

Epistemologically, however, the abstractive separation between public meaning-intentions and subjective meaning-intentions must be suspended; the logical semantics of a Fregean or Carnapian type would lose its meaningful function if we did not suppose that the ideal, intersubjectively valid meanings of language-signs can be grasped, in principle, by every human being qua subject of meaning-intentions. Otherwise we could not understand that different people can agree, in principle, on the intersubjective validity of an argument. Furthermore, it must be possible for every subject of meaning-intention to contribute by his or her meaning-intentions to the public meaning-intentions. Otherwise we could not understand that human experience can constitute the content of public meaning-intentions of language-signs: only the human subject of meaning-intentions may realize the reference-dimension of public meanings by identifying real denotata. In short, what we have postulated before, an integration of abstract semantics by pragmatics, implies suspending the abstractive separation between public meaning-intentions and subjective meaning-intentions.

However, after what we have said about the difference, in principle, between ideal timeless meaning-intentions and empirical concepts of mental states, it must also be clear that the subject of grasping ideal meaning-intentions by

away  
what  
between  
third  
and  
first  
world

meaning-intentions cannot be a possible object of empirical psychology (or another discipline of empirical pragmatics). In other words, in order to cope with traditional third world Platonism of intersubjectively valid meaning-intentions by a philosophy of meaning-intentions, one needs to reintroduce the Kantian idea of a "transcendental subject." (Every human being must be able in principle, so to speak, to take over the role of the transcendental subject of cognition and meaning-intentionality.) This is what Husserl clearly understood, I suggest, in contradistinction to the present revivers of so-called philosophical psychology (who sometimes even dream of reducing intentions to something in the brain).

But Husserl, in accordance with the tradition of mentalistic transcendentalism prior to the linguistic turn, went so far as to suppose that a transcendental ego-consciousness that would survive the "bracketing" of the world (including language and communication with other subjects) could constitute, in principle, all timeless meanings by its intentionality. In contradistinction to this methodological solipsism, it has to be pointed out, in my opinion, that the single subject of intentionality even for his or her self-understanding as "I" has to presuppose public, intentional meanings that must be always already carried by language-signs. The subject of intentionality can at best claim to share public meanings by sign-interpretations or to contribute to the publicly sharable meanings of language by his meaning-intentions. The transcendental subject-function of the single subject of intentionality lies precisely in his or her proposing (carrying forward) those meaning-claims—for example, in the context of argumentative discourse—whose intersubjective validity may be confirmed by an indefinite community of sign-interpretation. Therefore the indefinite community of sign-interpretation, in accordance, it seems to me, with certain suggestions of Charles Peirce and Josiah Royce, is the definite transcendental subject of meaning-intentions (and hence virtually of intersubjectively valid knowledge).<sup>16</sup>

The point of this semiotic transformation of transcendentalism lies in its accounting for the empirical facts, I suggest. Thus it is in good accordance with the fact that in modern societies the meaning-intentions of the single subjects of sign-interpretation, or of cognition in the light of sign-interpretation, will usually—that is, in case of the laymen—fall short of the public meanings (intensions and extensions) that are valid in the language-community, whereas sometimes—in case of the creative experts—they will even transcend them in addressing, so to speak, the indefinite community of sign-interpretation. Both facts are possible, I suggest, since (because) intentionality, in contradistinction to public meaning qua intentionality, is needed for realizing pragmatically the semantic dimension of sign-reference by identifying real denotata. In order to illustrate this point further, let us now consider the relationship between intentionality and extensionality.

intensions and extensions

2.

The classical doctrine with respect to this problem says that the (ideal) intention of a name determines its possible extension, and this should hold quite independent of the factual intentions of human beings. Again, this tenet appears

to me to be correct as a logician's argument against any version of psychologism. And in this sense one could be inclined to say that "meanings," that is, *intensions* and *extensions* of terms, "are not in the head," to use Putnam's phrase.<sup>17</sup> Putnam, however, does not use this slogan in order to defend the classical tenet of logical semantics against psychologism but rather, I suggest, in order to question the classical position as a psychologistic one from an epistemological and ontological point of view. For him *extensions* of terms may be different from *intensions* and *intentions* (both of them being taken as mental states and thus far as "something in the head"); and in this case *extensions* have priority over both *intensions* and *intentions*, since the latter two express only subjective states of knowledge, so to speak, whereas the *extensions* virtually represent the real essence of things.<sup>18</sup>

Now, in the fact of this challenge, a first thought might be that, nonetheless, there must be after all some internal relationship between the *extensions* and the *intensions* and *intentions*, respectively. For how should it otherwise be possible to speak meaningfully about *extensions* as meanings that are "not in the head." If the *extensions* were not determined at least by possible *intensions*, they could not be conceived as *extensions* of terms or names; and if they were completely different from our possible meaning-intensions, which may function in our perceptual identifications of real denotata, then we could not know anything about them and could not even *mean* them.

I think indeed that at least on the level of possible intentions, intensions, and extensions an internal relationship between the three concepts of meaning must be realizable. But we have already seen that this type of relationship does not dispense us from considering, and accounting for, important differences between the *factual* realizations of the three dimensions of meaning. Now, with regard to Kripke's and Putnam's point, this problem may be illustrated by a case in which we do not succeed in subsuming a given material—let us say, some extraterrestrial stuff—under the head of a general concept. How should we identify in this case the strange stuff as subject of a sentence by which we could state the very impossibility of its determination with the aid of a possible intension of a term? If it were true that given things, that is, individuals and supposed exemplars of natural kinds, could only be identified with the aid of possible intensions of terms—as it indeed was the assumption of Leibniz and in a sense of Hegel—then we would need to know everything about the strange thing—its complete intensional definition—in order only to say that we do not know anything about it. For in order to say this, we would need to identify the thing with the aid of our conceptual knowledge about it.

It was this paradoxical situation, which was exposed by New-Hegelians like Bradley and Royce, that provoked Charles Peirce to his explication of the semiotical and epistemological function of indexical signs—like "this," "there," "here," "now," "then," "I," "you," etc.—in the context of identifying real objects of perceptions as subjects of any further determination with the aid of general concepts.<sup>19</sup> And it was one of the main points in Kripke's and Putnam's

realistic semantics, I suggest, to connect this indexical function of identifying with the function of names (i.e., proper names and general names of natural kinds).

That is to say, Kripke and Putnam tried to detach the determination of the *extension* of names from the *intensions* or conceptual contents of names by instead connecting it with the *indexical* function that a name takes on by the "original baptism" of an individual—say "Aristotle"—or an (exemplar of a) natural kind—say "gold" or "water" or "fish." In the case of identifying individuals by proper names, the determination of the extension by baptism would comprise everything that is identical with this (indexically identified) individual in every possible world. And this would detach the extension of the proper name from any definite description that could constitute its intension on the basis of the fates (destinies) of the baptized individual in some possible world. In the case of a natural kind, the determination of extension by baptism would comprise everything that is identical in its real essence with this (indexically identified) stuff in every possible world. And this determination would detach the extension of the general name—say of "water" or "gold"—from any conceptual content that could constitute the intension of the term. In both cases, the name or term whose extension is indexically defined would be a "rigid designator," since its extension would be independent from the different and changing conceptual contents that constitute the intensions of (proper or general) names, that is, identical in every possible world.

Now, against these proposals of indexical determinations or definitions of the extensions of names or terms, the following objections could be directed in the name of the postulate of the internal relationship between all three concepts of meaning. First, it may be said that only with the aid of *indexical* words, that is, without any support by *intensional* determination, it is not possible, on Aristotle's and Peirce's account, to identify an individual or an exemplar of a natural kind. Indeed, an individual entity that is baptized in such a way that its name could only be defined indexically by the word "this (there)" (Aristotle's *tódein*) or, for that matter, even a supposed natural kind that is baptized in such a way that the extension of its name could only be defined by the phrase "everything that is identical in its essence with *this*": Such a thing would be a good example for an unknowable *Ding an sich*. Now, this interpretation is obviously not in accordance with Kripke's or Putnam's intention to rehabilitate an epistemological and ontological realism and even *essentialism* with the aid of a new semantics. Indeed, this method would also not fit in with Peirce's idea of ensuring—by indexical definition—that something encountered as real, but unknown thus far, may be progressively determined conceptually as subject of a sentence. What then would be the right method in order to make use of a semantics of indexical definition of names?

I think the first requirement of the method would be to make sure that the indexical definition that is connected with the "original baptism" can be remembered and transferred by communication. For as we have pointed out before in accordance with Searle, the "original baptism" and the communicative

transfer of the name must not be confused with a causal reaction and its transfer, which could be the object of an external description of a "causal chain" of behavior. (Thus far the talk of a "causal theory of meaning" is at least misleading.) Now, in order to provide for the fact that the causal transfer goes along with its control by an intentional transfer of meaning, we need a formulation of the indexical definition connected with the original baptism that goes beyond the above report about the encounter with the *Ding an sich*. How could it read?

In order, for example, to refer by baptism to an individual in such a way that the indexical definition can be remembered and transferred by communication, it would at least be necessary to determine the extension of the attached proper name by a phrase somehow like this: "the child that was baptized at the time  $t$  at place  $p$  by person  $p$ ." Now this is a definite description that provides a Fregean *Sinn* that at least initiates the *intensional* determination of the extension of the proper name by further definite descriptions. In the case of the "original baptism" of some (supposed) exemplar of a natural kind that cannot yet be subsumed under the head of a general concept—say by the name "baboo"—it would not even suffice to provide a definite description like: "the material that was baptized at time  $t$  and place  $p$  by person  $p$ ," for this would not provide a sufficient determination of the extension of a (supposed) natural kind by indexical identification of its real essence. In order to achieve this, one either has to complement the indexical definition of "baboo" by some picture (say by a photograph) or to provide some description of the phenomenal qualities (and relations of qualities) that point to the structure of the given material, such that one could arrive at a definition somewhat like:

"baboo" means everything that is identical in its structure with that material that was baptized at time  $t$  and place  $p$  by person  $p$ ; and the structure of "baboo" may be described by the following list of phenomenal qualities: . . .

But if this proposal should be relevant, then it would appear as if the intended detachment of the indexical definition of the extension of the name from its intension has already been proved impossible. This verdict, however, would be precipitous in a sense. For what has been shown thus far is only (again) that there must be an internal relationship between the indexical definition of the possible extension and the definition of the possible intension of the name. But this does not prevent us from providing a definition of the extension of a name that by its indexical dimension is partly independent from our present concepts (i.e., from the factual intensions of the words of our language) and thus open to a further intensional determination, say, by the progress of science.

In this sense it may indeed be claimed that pragmatically the extension of all proper names (especially as they are used in history) is not defined definitively by definite descriptions (not even by a cluster of them!) but at least also by the open dimension of the indexical definition of proper names as "rigid designators." And it seems to be clear that only this type of (pragmatical and semantical) definition ensures the possibility of progress in historical research—say about

the real biography of Plato or Aristotle. (This interpretation would not exclude, I suggest, that our definition of the meaning of "Plato" and "Aristotle" by a cluster of definite descriptions could provide a necessary condition for our use of these proper names. The proper names as rigid designators would lie in the fact that historical persons have attracted our cognitive interest not just by their being born and baptized, but by their having continued their real existence not in a possible world, but in our factual world of history.)

Similarly, it may be claimed that pragmatically the extension of all general names of natural kinds (especially as they are used in natural science) is not defined definitively by the factual intensions (i.e., the conceptual content) of our terms but at least also by the open dimension of the indexical definition of the general names or terms as "rigid designators." And again only this type of a (pragmatical and semantical) definition ensures the possibility of scientific progress.

In order to illustrate this latter point, I will briefly discuss Putnam's theory of a "linguistic division of labor,"<sup>20</sup> which, it seems to me, is a very important empirical illustration for the possibility and necessity of an overcoming of the methodological solipsism of the traditional epistemology. The point of Putnam's theory may be summarized in the following way: At least in modern societies which are characterized by a differentiated social division of labor there must prevail a corresponding linguistic division of labor. This means that for almost every part of the first-hand knowledge of things by experience, and hence for the corresponding knowledge about the extensions of general names, there are experts who by far outrun the laymen. These experts therefore really determine the public meaning of words.

Now this theory is rather ambiguous with regard to our problem of the factual relationship between *extensions* or *intensions* as determinations of linguistic meanings. For, in one sense, the theory is in good accordance with the classical assumption that the extensions of terms are determined by their intensions. The experts, it may be claimed, are just marking out the public standards about the intensions of which the extensions are logically dependent; and thereby they may even determine, in a sense, the use of words by laymen, although these have no first-hand knowledge about the extensions of most terms. (This interpretation is indeed supported linguistically by the structuralist theory of "fields" of meanings or "word-contents." For this theory may explain to a certain extent how laymen as competent native speakers may in a certain sense correctly use words about which they have neither an adequate knowledge concerning the intensions nor the extensions. This holds good, e.g., with regard to my own use of the word "gold" or "hemlock," and even of words like "elms" and "beeches.") In brief, the common use of a language just provides, so to speak, a pragmatic proliferation of the collective knowledge about intensions of words and thereby enables laymen to dispose in a sense of the knowledge of the experts.

Still there is another interpretation of the theory possible in light of the realistic semantics of Kripke and Putnam. The experts, it may be said, are not only competent for the factual standard determination of the intensions of terms

and thereby for the public use of language, but they are also in charge of those (partly) indexical definitions of the extensions of terms as rigid designators that keep the dimension of intensional meaning of terms open to further determination; and they will usually even be a little bit ahead of the collective standard determination of intensions by their "tacit knowledge" by experience with respect to those extensions of terms that are not yet covered by the collective standard intensions. Thus far it may indeed be claimed that, insofar as scientific progress is determining the use of modern languages, there is a factual priority of the exploration of the extensions of words over the fixation of their intensions.

Again this statement does not of course refute our general claim that there is an internal relationship between possible ideal extensions and intensions of terms and that on the level of this relationship the logical postulate of the determination of extensions by intensions must hold. But this claim must not be confused with the claim (suggested by abstract logical semantics of constructed language-systems) that the extension of the words of a living language may be determined once and for all by the well-defined intensions of the terms of a semantical system. For a constructed semantical system simply cannot keep up with the pragmatic difference between the factual intensions and the factual extensions of the words of a living language, which has to keep up with the growth of human experience and especially with the progress of science. This shows only that the pragmatic difference between intensions and extensions requires a pragmatic completion of the linguistic turn of philosophy in order to overcome the abstract fallacy of logical semantics in the Carnapian sense, as we have suggested previously.

Now the pragmatic difference between extensions and intensions of the words of a living language must obviously be realized by acts of identifying real denotata of words, that is, by referential intentionality. This fact leads us to the last problem of our triangle-discussion of the relationship between the three paradigm concepts of meaning: What about the internal and factual relationship between Kripke's and Putnam's indexical definition of the extensions of names and the concept of referential intentionality?

*Extensions and (ref.) intentionality*

After what we have said before about the role of intentionality in the (semantic and pragmatic) context of indexical identifying, it seems to be clear that not only the possible but even the factual intentionality of our indexical references must be able to keep up with the determination of meaning as extension. For it is just by the intentional content of our indexical definitions that we can open up a dimension of extensional meaning that transcends the factual intensions of our terms. At first sight, this point appears to be a twist in Searle's recent argument against Putnam's contention that "meanings are not in the head."<sup>21</sup> And I would indeed agree that the intentional content of an indexical definition must reach precisely as far as the extension of a term that is defined by the indexical definition; otherwise it could not determine the empirical conditions of its satisfaction. Thus far it may be claimed that meaning is "in

the head." (But this meaning of the metaphorical phrase can only be justified, in my opinion, if we at this point presuppose a transcendental-epistemological, and not an empirical-psychological, concept of intentional-meaning. The metaphorical paradigm or, respectively, prefiguration of what I called a transcendental conception would be Aristotle's or, respectively, Thomas Aquinas's dictum "anima quodammodo omnia." It seems clear that Putnam did not have this conception in mind when he thought of "meanings in the head.") He rather thought of contents of mind in an empirical-psychological sense; and thus far he is right in claiming that "meanings are not in the head.")

But Searle not only claims to be right with regard to the meaning-equation of "intentional content" and "indexical definition" but also with regard to the meaning-equation of "intentional content" and (factual) intension and thus thinks it possible to defend the traditional thesis that the intension determines the extension on this presupposition. Thus far his argument against Putnam may be summarized as follows:

*Premise* (Searle along with Putnam): Two people, say Jones on Earth and his *Doppelgänger* twin Jones on twin Earth have type-identical mental states in saying: "I have a headache," but the extension of "I" in their verbalized thoughts is different because it is determined by indexical definition.

*Conclusion* (Searle against Putnam): In both cases the intension determines the extension since the intentional contents (i.e., the self-referential concepts Jones and twin Jones have of themselves) are also different.

It seems clear to me that Searle would be right in arguing this way against Putnam, if—and only if—it could be allowed to equate the different situation-bound indexical meanings of "I" in the two different utterances of, respectively, Jones and twin Jones with two different general concepts, and hence—in the case of our example—with two different intensions of the same sign-type. Searle, it seems to me, is seduced into making these assumptions by considering the indexical, self-referential self-conceptions of Jones and twin Jones—which are indeed different according to the different intentional contents of their verbalized thoughts—as different concepts and hence intensions of the term "I." But this seems to me to be semiotically untenable since it in fact obscures the fruitful and indispensable distinction between general concepts or intensions of terms, whose meaning must not be situation-bound, and indexical definitions. And it thereby obscures the good point in Putnam's distinction between the indexical definition of the extension of a term from a situation-bound point of view and the conceptual contents or intensions of terms.

But things are indeed different with regard to the intentional content of the utterance of an indexical definition. This content, which must only be partly indexical, in order not to be cognitively blind, as we have argued previously (see above, p. 146), may also be called intensional. Thus far Searle may be entitled to argue,

first, that if by "intension" we mean intentional content then the intension of an utterance of an indexical expression [my emphasis] precisely does determine

extension; and, second, that in perceptual cases two people can be in type-identical mental states . . . and their intentional contents can still be different; they can have different conditions of satisfaction.<sup>22</sup>

But this point is, of course, in accord with the claim of realistic semantics that it is possible to transcend the intensional scope of our concepts (i.e., of the factual intensions of our terms or, respectively, words) by indexical definition of the extensions of terms as rigid designators. This becomes clear from Searle's interpretation of Putnam's example concerning the meaning of "water" on Earth and on twin Earth which according to Putnam is supposed to be intensionally identical, but extensionally different. It reads:

This indexical definition given by Jones on earth of "water" is defined indexically as whatever is identical in structure with the stuff causing this visual experience, whatever that structure is. And the analysis for twin Jones on twin earth is: "Water" is defined indexically as whatever is identical in structure with the stuff causing this visual experience, whatever that structure is. Thus, in each case we have type-identical experiences but in fact in each case something different is meant. That is, in each case the conditions of satisfaction established by the mental content (in the head) is different because of the self-referentiality of perceptual experiences.<sup>23</sup>

Still this example is paradoxical precisely from the point of view of Searle's concept of "intentional content." For it obviously supposes that Jones and twin Jones may actually mean different things although they know nothing about this difference. If we universalize this supposition, we arrive at the conclusion, already suggested previously, that the indexical definition of the extension of the real (i.e., its definition in the vein of Kripke's and Putnam's causal and realistic theory of meaning) amounts to a definition of the unknowable *Ding an sich*. For we would arrive at a situation where people could not know anything about that which they must define purely indexically, namely, the extension of the general name of the real which could read: "whatever is identical in essence with that which is causing (Kant says "affecting") this (i.e., my present) experience (e.g., of resistance), whatever that structure is." According to Charles Peirce, such a purely indexical definition is nonsensical because it cannot show, in principle, how the meaning of "identical in essence with . . . this . . ." could be conceptually interpreted. Thus it reduces the meaning of the real to the limit case of a bumping (of the will of the I) against something in the night (the resistance of the non-I).

Now this is obviously not supposed to be the meaning of Putnam's or, respectively, Searle's example. But it has to be noticed that Searle's insertion of the phrase "in structure" (instead of "in essence") in the indexical definition and his emphasis on the "self-referentiality" of "perceptual experiences" does not change the paradoxical situation. On the contrary, the paradoxicality of the example rests precisely on the suggestion that Jones and twin Jones are considered to have the same experiences, as far as their knowledge reaches, but different indexical (even self-referential) intentions.

This shows in my opinion that the given example, taken abstractively, demolishes the good sense of both Kripke's and Putnam's realistic semantics and Searle's theory of intentionality. In order to avoid an abstractive fallacy and make visible the good point of both theories, it is necessary, I suggest, to consider the example not as a paradigm case but as a limit case within the historical context of the development of human knowledge and of the meaning-content of human languages. The given example must not be universalized as such but considered from the point of view of those people who already know (say, by a better theory of water than that of Jones and twin Jones) that Jones and twin Jones in fact referred to different natural kinds (say, different species of water and something else).

But, in order to conceive of the possibility of such a development of knowledge and of language, the example of the limit case is misleading since it cannot show, in principle, how the fact that Jones and twin Jones were referring (on Searle's account, even somehow intentionally) to different materials can be discovered and thus how the supposition of the semantic theories can be verified. This becomes clear if we imagine the case where Jones detects—say, as a member of a scientific expedition—that the "water" on twin Earth is something quite different from "water" on Earth. This would possibly be an occasion for an "original baptism" in Kripke's sense.

As I suggested previously, in such a case the indexical definition of the extension of the name must not only contain phrases like "identical in structure" and "causing this visual experience, whatever that structure is," but it must be supplemented by a picture or a description of the structure of the visual (or, for that matter, nonvisual but sensual) experience, say, by a list of the qualities (and relations of qualities) that appear to make up the structure of the causally effective entity that is pointed to by "this."

It has to be noticed that such a supplementation of the indexical definition of the extension of the name would not mean that the discoverer could already provide a conceptual definition by which he could subsume the phenomenon under the head of some class. But he could indeed make his indexical definition of the extension epistemologically relevant. For he would provide a meaning to the intentional content of his definition of the name that is neither purely indexical (and hence cognitively blind) nor completely conceptual (and hence not open for the still unknown real extension of the name qua rigid designator). But if this characterization of the role of the representation of the phenomenal (qualitatively given) structure is relevant, then the whole dichotomy of indexical definition and conceptual definition (in the sense of a possible subsumption) does not suffice in order to deal adequately with the problem of the intension of the intentional content of a baptism-protocol. It does not sufficiently explain how we can introduce into the scientific discourse a newly discovered object of experience as subject to further determination. The theories thus far discussed do not yet suffice, it appears, to explain semiotically and epistemologically the pragmatic difference and the possible continuum of meaning between extensions, intensions, and intentions.

In what follows I shall therefore try to review the whole triangle-discussion in terms of a transcendental semiotics that draws heavily on some basic conceptions of Charles Peirce. And, before entering into this conclusive discussion of the problem of reference, I want to recall our leading question (see above, p. 135) as to whether it may be shown that the identification of real referents as denotata of our signs amount to showing that the linguistic turn of philosophy may be completed by a pragmatic turn, that is, by a pragmatic integration of the semantic dimension of sign-reference (see figure 5.1, left side!).

In order to introduce the tools of a Peircean semiotics into the discussion of our problem, let us return to our example of the "original baptism" of a piece of extraterrestrial material by the name "baboo." As I pointed out previously, the baptism cannot be done by just pronouncing the name "baboo" as a physical reaction to the causal affection by the strange stuff, but it has to provide something like a *baptism-protocol*; that is, a little story about the procedure of identifying the referent of "baboo" which makes it possible to remember and to communicate the new name in such a way that its referent can be intentionally reidentified as that which was intentionally identified as cause of his experience by the first discoverer. In a Wittgensteinian vein one could say: The "original baptism" has already to be performed along the lines of a public rule of identifying that can be followed in a sense by the first discoverer as well as by all potential reidentifiers. Thus far I would claim that the procedure of identifying within the context of the "original baptism" is already a step beyond the privacy of a prelinguistic procedure of ascertaining evidence for just one consciousness in the sense of methodological solipsism (from Descartes and Locke through Husserl). It is already the entrance into the range and realm of a public language game (Wittgenstein) and of the indefinite community of sign-interpretation (Peirce).

But it has to be noticed that the rule of the language game of "original baptism" in the sense of Kripke precludes the possibility that the meaning of the name "baboo" might be explicated in terms of some factual use of language. Since the meaning of "baboo" is that of a rigid designator whose extension is the same in any possible world, it must transcend, in a sense, the range of any language game that is centered around the rules of a factual use of language. But this, it seems to me, is an essential feature of every explication of meaning on the level of the scientific (or philosophic) language game, a feature that is only made visible in a special way by the case of introducing a new and partly open meaning by the procedure of "original baptism." In principle, no explication of the meaning of a scientific term—say of "heavy" or "simultaneous" on the level of physics, or of "justice" or, for that matter, "meaning" on the level of philosophy—can be reached by just describing a given use of language. Rather we need an experiment of thought by which we could imagine how the term that is to be explicated could or had to be interpreted and hence used on the ground of all conceivable experiences or practical consequences. This point of Peirce's "pragmatic maxim," in my opinion, constitutes the difference and the superior-

ity of a normative transcendental-pragmatic approach to meaning-explication over a Wittgensteinian pragmatics of language use, not to speak of Morris's behavioralist pragmatics.<sup>24</sup>

Let us then try to give a Peircean account of the procedure of identifying that goes along with the discovery and original baptism of what is called "baboo." The discoverer, I suggest, might say to his companion (or, if this is not possible, to himself) something like this:

This thing over there—under the big tree in the foreground—looks so and so (to be specified by describing the perceptible qualities and relations of qualities that make up the phenomenal structure). On the basis of these perceptible qualities, I don't know how to determine *what* it is (i.e., under which general concept it could be subsumed). That is, I find it impossible at present to provide a conceptual subsumption of the given stuff on the basis of an abductive inference of the form: "This there is so and so; what is so and so might be an exemplar of 'A'." Hence, in order to provide for the possibility of a later determination on the basis of a reidentification, I will give it a name: I hereby baptize the given stuff by the name "baboo." I thereby define the extension of "baboo" as "being everything that is the same as this over there which now causes my present experience by presenting the following phenomenal structure (to be specified by a picture or by a list of phenomenal qualities)."

The semiotically interesting feature of this account of an original baptism, and that which goes beyond our former accounts, lies in its recourse to two classes of nonconceptual signs (in Peirce's terminology, "indices" and "icons") whose function is connected in our baptism-protocol in some way with the function of signs of general concepts (i.e., "symbols" in Peirce's terminology). Thus all three classes of signs together will constitute, so to speak, the *intension* (in Searle's sense) of the "intentional content" of our protocol. Let us illustrate that in more detail:

The use of linguistic indices (or rather quasi-indices, as has still to be shown) like "this" is needed, in order to testify to the existence of the given stuff and its causally affecting and, at the same time, being intentionally identified by the sign-user. The use of further linguistic indices like "over there" and "now" or "at present" concretizes the situation—reference of the protocol by indicating the space-time relation of the phenomena to the sign-user and vice versa. Finally linguistic indices like "I" and "hereby" (and possibly "you" for addressing a companion) indicate the performance of the speech-act of baptizing as part of an explicitly or implicitly communicative situation that may serve as the point of departure for a further process of communication about the object of the original baptism.

Thus far the recourse to *indices* reconfirms our prior analysis of the "original baptism" as utterance of an "indexical definition." But, in our example, the function of the linguistic indices is supported and supplemented by the function of icons (e.g., photographs) or what could be called linguistic quasi-indices in the sense of a Peircean semiotics. This function obviously makes up a new feature of

our Peircean account which is not easy to explicate. Linguistic icons are used in the descriptive parts of our protocol; and they are functioning, so to speak, inside the conceptual predictors by which the discoverer is describing the given qualities (and relations of qualities) that make up the phenomenal structure of the material that is to be baptized.

This function of linguistic icons belongs to the indexical definition of "baboo" insofar as the qualities that make up the phenomenal structure are not described as pure phenomena of relation-free "suchness" (i.e., of "firstness" in the sense of Peirce's theory of categories). That is to say, the phenomena are not described as merely possible qualities, but as qualities given for the consciousness of the discoverer whose attention is drawn to them by the function of the "indices." (The function of the *indices* corresponds to Peirce's category "secondness" which expresses a dyadic or two-place relation, e.g., the encounter between the I and the non-I.)

But the function of the linguistic icons belongs also together with that of the conceptual predictors, inside which they are functioning as quasi-icons in describing the qualities of the given phenomena. By this quasi-iconic function the conceptual predictors of the description are, so to speak, recharged with a meaning-evidence that they can only acquire in the situation of perception but lose as abstract conceptual predictors. This means that the quasi-iconic function of predictors in the context of description (e.g., perceptual judgments) does not so much serve to subsume a given phenomenon under the head of a general concept or class but rather, in advance of that abstractive logical operation, to grasp and present the given quality (or perceptible structure) of the referent. Therefore linguistic icons cannot function in the context of abstract—true or false—propositions about facts but only inside of perceptual judgments about what is actually given with "phenomenological" or "phaneroscopic" evidence—as in our example of the carefully described qualities of the strange stuff that cannot be subsumed under the head of some concept or class as yet.

It is this function of the linguistic icons that obviously makes it possible to support and supplement the indexical definition of the extension of "baboo" by a description that is not yet a conceptual subsumption but that makes the indexical definition cognitively (and hence epistemologically) relevant by preparing, so to speak, for a later conceptual subsumption. Thus far this element of our semiotic account goes beyond the purely indexical account of the definition that belongs to the original baptism, but it is obviously in accord with Kripke's and Putnam's approach as well as with Searle's conception of the "intension" of the "intentional content" of the "utterance of the indexical definition." It covers indeed both the causal and the intentional aspect of referential identifying, and it especially supports the Kripkean claim that by baptism the real essence of individuals and of natural kinds is somehow grasped by and integrated into the names qua rigid designators—in contraposition to the nominalistic claim that all description with the aid of general concepts amounts merely to a linguistic arrangement of terms in the service of pragmatic purposes.

This point of convergence of our semiotic approach with that of essentialistic realism is certainly in agreement with the general spirit of Peirce's emphatic antimodalism. But in the face of this fact the crucial question of our present approach arises in a new and acute version: the question whether this semiotic approach must not rather represent a contraposition (with regard) to the linguistic turn of contemporary philosophy. This has in fact been claimed for Kripke's and Putnam's realistic theory of reference; and if this approach may be integrated into and, so to speak, "*aufgehoben*," in a Peircean semiotics, then the question arises, how the latter may be interpreted as a pragmatic completion of the linguistic turn, even in the sense of a transcendental semiotics.

My answer to this question would be: A transcendental semiotics based on the Peircean transformation of Kant's "transcendental logic"<sup>25</sup> provides a third way beyond and apart from the traditional alternative of nominalism and essentialistic realism or, for that matter, of commonsense realism and transcendental criticism. It does so especially by a conception of semiotics that is capable of going beyond and mediating between the semanticist version of the linguistic turn, which is based only on the function of conceptual symbols (if not on the notion of abstract syntactico-semantic frameworks), and, on the other hand, the position of prelinguistic ontology and transcendental philosophy (including Kantianism and Husserlian phenomenology). I can suggest this point in the present context only with regard to the problem of reference or, respectively, of the triangle-discussion of the three concepts of meaning.

Thus far I have wanted to suggest—along with Peirce—that the function of linguistic indices and icons, on the one hand, transcends any possible function of conceptual signs by fixing or restricting the language to causally effective real objects of perception and to their structural qualities. This function of the nonconceptual sign-types of language, which is bound up with the context of the perceptual situation, may indeed account semiotically for the indispensable evidence-basis of human cognition: That is, in Peircean terms, the dyadic relation ("secondness") of the I's clash with the causal affections of the non-I and the monadic (relation-free) suchness of the given phenomena ("firstness"). Thus far Peircean semiotics refutes the precipitate contention (of logical semantics and semanticist philosophy of science, including even Popperianism) that evidence may be reduced to just a psychological feeling and hence means as much as nothing for epistemology in the face of the fact that all intersubjectively valid results of perception are impregnated by linguistic interpretation or, respectively, by theories. Peircean semiotics indeed saves from modern semanticism the truth-core of a Husserlian phenomenology of evidence and especially of the Aristotelian claim that perceptual judgments are incorrigible in a sense, that is, with regard to given qualities in the sense of secondness and firstness. (Peirce offers also an evolutionist explanation of this property of perceptual judgments: They function as boundaries (borders) and vehicles of transition between, on the one hand, natural processes of sign-information, not to be influenced by man, and, on the other hand, processes of sign-interpretation that



make up the subject or topic of the normative semiotic logic of science.)<sup>26</sup>

On the other hand, however, Peircean semiotics also provides crucial arguments for the transcendental-pragmatic completion of the linguistic turn. For, in contradiction to Husserl's prelinguistic version of phenomenology, Peircean semiotics holds that evidence of given phenomena in the sense of "firstness" and "secondness" is not (yet) the same as (intersubjectively valid) knowledge, as long as it is abstractively separated from the symbolic interpretation which has to complete our cognition in the sense of the category thirdness, that is, of the conceptual mediation of the intuitively given phenomena with understanding or, respectively, reason. (Here Peircean semiotics amounts to a critical reconstruction of the epistemological development from Kant to Hegel.) Correspondingly, Peircean semiotics cannot agree either with a prelinguistic version of real-essence ontology or naturalistic causal theory of reference. For it must insist on the fact that even indexical and iconic signs, insofar as they function within the context of the "original baptism" (i.e., of indexical definition and, beyond that, of a structural description of the phenomenon), are linguistic signs, after all. This means that their function is interwoven with that of conceptual signs (i.e., symbols) in a twofold way.

First, it has to be noticed that the whole text of our baptism-protocol, that is, the text of our indexical definition and moreover the text of the accompanying structural description, must combine the function of all three classes of signs, namely, *indices*, *icons*, and *symbols* in Peircean terminology, in order to constitute the intension of the intentional content of that protocol.

Second, it is time now to make clear what it means to say that the linguistic indices and, respectively, icons are only quasi-indices and quasi-icons. In a sense one could say that in both cases they function only inside conceptual signs (i.e., symbols). Thus, linguistic indices like "this," "that," "here," "there," "now," "then," "I," "you," etc. do not function like indices outside of language, say smoke as an index of fire or the pulse as an index of blood-pressure. They rather include an element of conceptual thirdness, which even determines the type of their situation-bound secondness. Thus, the meaning of "this," in contradiction to "that," is somehow determined by the conceptual distinction between "thisness" and "thatness" which is not situation-bound. The same holds with regard to "here," in contradistinction to "there" etc. Nonetheless, Hegel was of course semiotically wrong when he acknowledged only this conceptual part, and thereby denied the situation-bound indexical part, of the meaning of these linguistic indices in his chapter on "Sinnliche Gewissheit" ("sensuous certainty") in his *Phänomenologie des Geistes*. Even his antagonist Ludwig Feuerbach, who insisted on the evidence of intuition, overlooked—like Hegel—the fact that there are linguistic signs, different from conceptual symbols, whose function is precisely to introduce and integrate the situation-bound evidence of intuition into the conceptual meaning of language.

Still, Hegel's talk of the "indetermined immediate," which, on his account, is denoted by the indexical signs, would be correct if it were not the case that the

indexical signs are capable, within the context of the actual situation, to direct our attention (and intention) to given qualities (i.e., "firstness"), possibly to qualities of hitherto unknown phenomena. This leads us to the other systematic-semiological connection of sign-functions that was recognized by Peirce: that of a quasi-iconical grasping and presenting of qualities (in the sense of firstness) inside the conceptual meaning of predicates (i.e., thirdness).

As has already been suggested previously, it is the internal connection between all three types of linguistic signs that is the basis of the openness of the living language to an enrichment of meaning by human experience, especially by the progress of the sciences. In this context, it has to be emphasized that the integration of iconic meaning into the conceptual intensions of predicates within the context of the intensions of baptism-protocols remains semantically effective beyond that stage. It operates as a normative steering-function towards reaching the ideal "logical interpretant" throughout the indefinite process of sign-interpretation that has to be postulated on Peirce's account of meaning-explication. Thus, one might conceive of the entire history of the word "heavy" from its introduction by an ostensive definition of the underlying quality through its further determination by Newton's and finally Einstein's theory of gravitation. And also the later stages of such a process are not merely determined by conceptual interpretation but also by new situational confrontations (e.g., of the experiential consequences of theories) with the phenomena and hence by new occasions for an integration of all three sign-functions.

On considering this semiotic theory of an integration of the conceptual and nonconceptual sign-functions, it becomes clear, I think, that this approach, which leads beyond abstract semanticism and saves phenomenological evidence, does not abandon, however, the linguistic turn in philosophy but rather completes it. It does so by means of a pragmatic integration of the semantic reference of linguistic signs that may be called transcendental-pragmatic for the following reasons:

First, the Wittgensteinian point of a transcendental semantics, which I have introduced at the beginning (see p. 132) as a criterion for the linguistic turn, has not been abandoned but only—indeed—widened by the paradigm of a baptism-protocol. This becomes clear only if we consider the intentional content of the original baptism, which may be expressed by a ceremonial speech-act of the first discoverer that sounds like this:

I hereby baptize the material over there by the name "baboo," defining the extension of this name as comprising everything that is the same as this over there which now causes my present experiences by presenting the following phenomenal structure . . .

We are here no longer—as in Wittgenstein's dictum—only concerned with a propositional sentence that describes a fact, but rather with an expanded performative sentence that reflectively describes and thereby also performs the speech-act of identifying, baptizing, and defining the given name. Thus, not

only an objectively given state of affairs (a Wittgensteinian "fact") is described, but rather a historical situation and a human response to it. Nevertheless, the transcendental point of the Wittgensteinian statement is preserved. For it is not possible, in principle, for the performer of the original baptism, who thereby has to provide the initial stage of an interpretation process, to go somehow beyond the limits of his language game. In order to achieve the same identification, baptism, and definition, he has to repeat the same performative sentence.

Second, as we have already intimated previously, the rule and the range of the language game of the original baptism are somehow continued throughout the further interpretation-process, notwithstanding the possible progress in meaning-determination, in order to ensure the possibility of an intentional reidentification. Now, if we universalize this point with regard to identifying and interpreting what is called the real, we must recognize that there is no possibility, at any stage of the process, to go beyond the limit of the pertinent language game. Just by pragmatically integrating the phenomenological dimension of sign-reference, the transcendental-pragmatic point of the linguistic turn has been strengthened and shown to be nontranscendable. This may be clarified further if we ask for the transcendental subject of the entire achievement of identification and interpretation.

It obviously is no longer the transcendental consciousness of the I in the sense of the traditional mentalism and methodological solipsism; although the transcendental consciousness of the I still retains the function of ascertaining evidence together with the function of intentionality and also of the synthesis of apperception in the sense of Kant. However, the transcendental subject in the sense of transcendental semiotics must not be defined with respect to the evidence of experience and meaning-intentionality but rather with respect to the possible intersubjective validity of meaning-interpretation and hence of possible knowledge. It has to be capable, in principle, of functioning as subject of an ultimate consensus about sign-interpretation and thus about all conceivable truth-criteria—as evidence of correspondence between intentions and given phenomena, coherence of sentences or theories, pragmatic fruitfulness of assumptions or strategies, etc.<sup>27</sup> In brief, it can only be the indefinite, ideal community of sign-interpretation, which on the level of the argumentative discourse could arrive at the "final opinion" about the real, as we must postulate by a "regulative idea" whatever the facts about the future might be. Considered as referent with regard to this subject of sign-interpretation, the real must no longer be defined as the unknowable *Ding an sich*, in the sense of Kant, but rather—with Peirce—as the indefinitely knowable that can never be factually known definitely. This definition in my opinion provides the point of an "Aufhebung" of commonsense realism into transcendental semiotics; for the point of the former—that the real is independent from anybody's thought about it—is quite compatible with the point of the latter: That the real as identifiable and conceivable must be the object of sign-interpretation. This position may also be marked by the label of a *meaning-critical realism*.<sup>28</sup>

#### THE INTEGRATION OF SEMANTICS AND TRANSCENDENTAL PRAGMATICS WITH REGARD TO THE PRAGMATIC DIMENSION OF SIGN-USE

Up to now we have considered primarily the problem of overcoming the abstractive fallacy of semanticism with regard to Morris's semantic dimension of sign-reference, that is, of identifying real referents as denotata of signs (see left side of figure 5.1). Since, however, this problem turned out to be one of a (transcendental)-pragmatic integration of semantics, we became already concerned with Morris's pragmatic dimension of semiosis, that is, with the use of signs by an interpreter (as a member of a community of interpretation) and in this context with self-referential intentionality (e.g., of the ceremonial speech-act of "original baptism"). In what follows, we shall consider primarily the problem of overcoming the abstractive fallacy of semanticism with regard to Morris's pragmatic dimension of semiosis, that is, with primary regard to intentionality and its expression by speech-acts as communicative acts (see right side of figure 5.1).

With regard to the dimension of sign-reference, the abstractive fallacy of semanticism came about by especially overlooking the problem of a pragmatic integration of semantics, for example, of dealing with the problems of intentional identifying of real referents and with the pragmatic difference between (factual) extension and (factual) intensions of linguistic terms. With regard to the dimension of sign-use, the abstractive fallacy of semanticism comes about rather by overlooking the possible semantical integration of pragmatics, that is, the linguistic aspect of the meaning-intentionality of speech-acts.

In order to understand this point, we have to remember that the original distinction of the semiotic dimensions in Morris's *Foundations of the Theory of Signs* was conceived primarily as a supplementation of Carnap's conception of abstract syntactico-semantical frameworks of constructed languages. Now, on these conditions, there is no need for a linguistic semantics of the pragmatic use of language, since a Carnapian semantical system allows only for propositional sentences whose function is merely that of a representation of states of affairs. But things are quite different with natural languages, which serve not only the purpose of representation but also that of expressing the pragmatic by nonpropositional sentences.

A good abstractive distinction between the different functions of a natural language was offered by Karl Bühler in his *Sprachtheorie*.<sup>29</sup> He distinguished between the representation-function of propositions and, on the other hand, the functions of self-expression and of communicative appeal. But even Bühler was not prepared to account for the latter two functions as those of linguistic "symbols" but only as functions of "symptoms" and "signals." Accordingly, he and Karl Popper, who follows him, consider the two pragmatic functions as the "lower functions" of language which man has in common with the animals, in contradistinction to the representation-functions of propositions as carriers of possible truth.<sup>30</sup> Thus far Bühler's and Popper's account is still in accord with Carnap's abstract semanticism, since it conceives of the function of