

Concepts as Beliefs About Essences

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1. The Problems

As all of you know, Putnam (1975) and Burge (1979) have made a convincing case that neither meanings nor beliefs are in the head. Most philosophers, I think, have accepted their argument. Putnam explained to us that a subject's internal notions often do not fix their reference by themselves, but are helped by its natural and social environment; and Burge explained to us that having a belief, even in the *de dicto* sense, is really a relational property which may be changed by merely changing the implicit *relatum*, the linguistic community.

To accept this, however, does not necessarily mean to accept all the consequences Burge has drawn from these insights. On the contrary, these consequences have met much more reluctance. Many share the view, and I definitely do, that there must be something in the head, not only a brain, but also a mind, indeed a mind with internal or intrinsic representational or semantic properties. This view was also backed up by arguments, having to do mainly with psychological explanation and the causation of individual behavior on the one hand and knowledge of oneself on the other. Of course, these arguments have been disputed; but as far as I am concerned, the dispute has not shattered my prejudice, and I think I am at least in good company. Here, I would simply like to presuppose the correctness of this view without any further comments.

Thus, all those sharing the prejudice set out to characterize what's in the head, i.e., to characterize so-called narrow contents. Now, narrow contents are rather expressed by, or associated with, whole sentences. But sentences are composed of

parts, a singular and a general term in the most primitive case, and hence narrow contents also seem to be composed in some way. I would like to reserve the term "concept" for that entity which a subject expresses by, or internally associates with, singular and general terms (and maybe other expressions as well). Having a concept is hence defined to be an internal, non-relational property. I am aware that the term "concept" is often used in other ways as well; but the way I use it is certainly prominent. So, the terms "narrow content" and "concept" stand essentially for the same thing; the only difference, which I do not observe strictly, lies in the associated kinds of expressions.

For internalists like me the existence of concepts and narrow contents is thus out of question; the question is rather a constructive one: how precisely to conceive of them? This is, as the title indicates, the topic of my paper. However, one has to grant that the offers are so far rather problematic than impressive. Let me briefly mention the three major proposals:

First, there have been noticeable efforts to revive the classical meaning theories by Frege and Russell after and in response to the insights of Kripke (1972), Putnam (1975), and Burge (1979); these efforts are, unsurprisingly, due to the so-called Neo-Fregeans and Neo-Russellians.¹ With respect to belief and the semantics of belief sentences the Neo-Russellians have to be classified as externalists since the relation to a singular proposition cannot be understood in an internal way. The stance of the Neo-Fregeans with their allusion to modes of presentation is less clear; however, insofar they entirely subjectivize modes of presentation, they promote an internalist position.

Second, the dominant view concerning the mind-body problem has recently been, and perhaps still is, functionalism, which says that internal mental states are functional states, i.e., to be identified with the role or place they occupy within a large functional net spanned between perceptual input and behavioral output. Insofar mental states have narrow content, their content is then also to be characterized in a functional way. This gave rise to the program of the so-called conceptual or functional role semantics² which may hence be taken as a further attempt to establish internalism.

¹ The Neo-Fregeans are represented, for instance, by Evans (1982), the Neo-Russellians by Soames (1987).

² Cf., e.g., Harman (1982) and Block (1986).

Third, one may build upon the epistemological reinterpretation of Kaplan's character theory (1977) which Kaplan himself did not fully endorse and acquired prominence through Fodor (1987), though it is first recognizable in Stalnaker (1978) and in Perry (1977). According to the character theory, semantics has to recursively specify a character for each expression which assigns to it its extension relative to a context (of utterance) and an index (or point of evaluation). And according to the epistemological reinterpretation, the diagonal of the character of an expression represents the cognitive significance of this expression, or, to put it internalistically, the concept associated with this expression.³

Here I shall pursue only the third approach via the epistemologically reinterpreted character theory. The reason is simply that the alternative approaches are in too bad a shape. To my knowledge, functional role semantics has never transcended a metaphorical stage; it is just a figure designed for philosophical reflection and not for concrete theory construction. And the Neo-Fregean approach is not in a substantially better shape; for instance, it is not clear how modes of presentation associated with simple and complex expressions build up in a recursive way. By contrast, the character theory has a clearly specified formal structure which is easily connected with linguistic semantics; in particular, characters combine recursively in much the same way as intensions do in intensional semantics. All my philosophical experience tells me that such formal virtues are not to be underestimated – because formal structure always provides some clear hold; of course, formal virtues are also not to be overestimated – because formal structure always leaves open many important interpretational questions.

However, there are problems with the character theory as well. If one considers their interpretational questions, two serious problems emerge, as Schiffer (1990) and Block (1991) have forcefully made clear. The first problem is that the character theory seems to be either inadequate or superfluous. Schiffer argues that the character theory cannot avoid having recourse to functional roles or states. But then it seems to be only a detour; one could have explained narrow contents rather by directly appealing to functional roles. I call this Schiffer's problem. The second problem set up by Block is that the character theory can apparently take only one of two inadequate forms. Either it must specify narrow contents by reference to lingu-

³ Perhaps I should also mention the extremely dense account of Lewis (1986, sect. 1.4) which is related to all three approaches mentioned, but not identical with any of them; to consider it seriously would, however, require a separate discussion.

istic expressions themselves, i.e., it falls prey to syntacticism. Or, this seems to be the only alternative, it must specify narrow contents in a profoundly holistic way, i.e., it falls prey to an unacceptable degree of holism. I call this Block's dilemma.

Thus, whatever its formal virtues, it seems that the character theory cannot get off of the ground unless it offers some good response to these challenges. This is, more specifically, the task I want to address here.

2. The Problems Concretized

So far, I have sketched the landscape I am belaboring in a very rough and general way. However, we have to refer to some specific statement of the epistemologically reinterpreted character theory; otherwise it is hard to understand what at all is going on. Therefore I want to briefly present some essentials of Haas-Spohn (1995) which offers the best account of the character theory I know of, or at least the account I know best. This presentation will show that her account is also susceptible to the two problems just mentioned.

What is a character? A character is a function which assigns to each context of utterance or context, for short, an intension, where an intension is a function from points of evaluation or indices, for short, to extensions. Thus, equivalently, the character of an expression is a function which assigns to each context and each index the extension the expression has at this context and this index. The characters of complex expressions build up recursively in the way we are used from intensional semantics.

A possible context c is here just a centered world, i.e. a triple $\langle s_c, t_c, w_c \rangle$ such that the subject s_c exists at time t_c in the world w_c and may (but need not) utter the relevant expression. And an index i consists of all items which may be shifted by operators of the given language; here it will suffice to put only a possible world w_i into the index i .

Sentences, in particular, are true or false at contexts and indices, according to their character. This entails a notion of truth at a context simpliciter: A sentence is true at the context c iff it is true at c and the index which consists of the context world w_c itself. The function assigning to each context the truth value the sentence has at the context is called its diagonal. Similarly we may define the diagonal of other expressions. Note that this definition works only if for each item of indices

there is a corresponding item of contexts, as it is according to the explanations just given.

Now I can say what the epistemological reinterpretation of the character theory is supposed to be. Basically, it simply consists in considering possible contexts at the same time as possible doxastic alternatives of some subject. Thus, what a subject believes is always to be in one of the contexts of a certain set of contexts. And if a subject believes a sentence to be true, it believes to be in a context in which the sentence is true; that is, the sentence's diagonal is then a superset of the set of the subject's doxastic alternatives. All this agrees well with the characterization of contexts as centered worlds since, as is well known, centered worlds are needed for the representations of beliefs *de se* and *de nunc*.

Now, to be a bit more specific, consider a certain natural language L like English and some referring expression α of L ; you best imagine α to be a proper name like "Aristotle" or a one-place predicate like "water" or "tiger". Then Haas-Spohn (1995) explained the character of α in L in the following way:

$\|\alpha\|_L(c,i)$ = the object or the set of objects at the index i which is the same or of the same kind, i.e. has the same essential properties as the object or the objects from which the usage of α in the language L originates in the context c .

The crucial term is here "the usage of α in L ". In the context c it stands for the whole communicative pattern associated in L with the expression α . However, what is essential to this pattern is not all of its ramifications it actually has in the context, but only the methods of identifying or recognizing the reference of α which are available to the community speaking L . These methods may be those of Putnam's experts for gold as opposed to the laymen, or those of Evans' producers of a name⁴ who are acquainted with its bearer as opposed to the consumers of the name, or indeed those of almost everybody in the case of chairs and tables in which nobody has privileged knowledge. Thus, such usages are in principle well described in the relevant literature, but it is important to see that they are rather something like communal concepts.

⁴ Cf. Evans (1982), ch. 11.

Two points are important about such usages as conceived by Haas-Spohn. The first point is that the expression α itself is not essential to its usage; the very same usage may be associated with another expression as well. This entails in particular that different languages may have the same usage of different expressions; this is crucial for their translatability.⁵

The second point is that the extension, the object or objects from which the usage originates, is also not essential to the usage. Thus, in different contexts or context worlds different objects may fit the same usage. In our world it is H₂O which fits the usage of "water". But for all we know, or have known 250 years ago, it may as well be XYZ from which our usage of "water" originates. Likewise, in the actual context world our usage of "Aristotle" originates from the actual Aristotle. But there may be another context world in which somebody else had the same career as our Aristotle and has triggered the same usage of "Aristotle". In this way, then, the extension of α may vary with the context; and so, Kaplan's strategy of explaining the informativity of identity sentences between overt indexicals may be carried over to hidden indexicals like "water" or "Hesperos". This makes clear that a usage is here intended to be a communal concept which is, so to speak, internal to the relevant language community.

The above explanation of the character of α in L is, however, still incomplete; I have not specified its domain. Concerning the indices, we may assume that all indices or all possible worlds belong to the domain. Concerning the contexts, however, the explanation presupposes that the very usage of α in the language L exists in the context; in other contexts the character of α in L is undefined simply because there is no origin of the usage if there is no usage.⁶ Thus, if we understand a language to be the collection of all the usages of its terms, the recursive explanation of all the characters of its expressions works only for those contexts in which the whole language exists.

So, what is, finally, the diagonal of the expression α in the language L ? It is the function which is defined for all contexts in which the usage of α in L exists and which assigns to each context the extension α has according to its usage. This makes clear how heavy the burden is the notion of a usage has to carry, and in view

⁵ In fact, it is the other way around. Translation merges the usages of different languages and thus makes them identical. Cf. Haas-Spohn (1997), sect. 3.

⁶ And the counterfactual question what the origin would have been if the usage existed does not make good sense.

of this the explanation just given may well be felt to be insufficient. We shall have to return to this.

For the moment, however, I want to attend to another crucial point. Since usages are communal concepts which, as explained, summarize not what everybody knows, but what all together know about the relevant extensions, they are unsuited for describing concepts and narrow contents which I intend here to be internal to a given subject; the subject need not fully know about usages or communal concepts. As you will recall, this was indeed the basic point of Burge (1979): that a subject may have incomplete linguistic understanding or knowledge and still be amenable to *de dicto* belief ascriptions. So the question arises how to account for this common situation.

A natural idea, indeed the one Haas-Spohn (1995) pursued, is the following, which I present it here because it makes Block's dilemma very perspicuous: If a subject's knowledge of its own language may be incomplete, and indeed severely incomplete without clear lower boundary, then, it seems, we have to completely abstract away from such knowledge and to add it again for each subject according to its individual measure. But what survives such abstraction? It seems the only thing we can hold fixed is the knowledge of the grammar, i.e. of the words themselves and their ways of composition. Thus we end up with what Haas-Spohn (1995, sect. 3.9) defines as formal characters which belong to a grammar G , the syntactic skeleton of a natural language:

$\|\alpha\|^G(c,i)$ = the object or the set of objects at the index i which is the same or of the same kind, i.e. has the the same essential properties as the object or the objects from which the usage of α in the context language l_c originates – which is the language of s_c at t_c in w_c , and has the grammar G .

And in continuation of the parallel, the domain of a formal character consists first of all indices and second of all contexts in which the subject of the context speaks a language with the expression α or, indeed, with the whole grammar G . From this formal diagonals are again easily derived.

These formal diagonals describe the minimal semantic knowledge accompanying the syntactic knowledge of the grammar. To know the formal diagonal of α requires from me simply to know that α refers to whatever it is used for in my language.

Thus, formal diagonals qualify as concepts or narrow contents at least in some respects. Insofar knowledge of grammar is internal, knowledge of formal diagonals is internal as well. Moreover, there is no problem of intersubjectivity. All subjects having acquired the grammar G have thereby acquired the same formal diagonals. However, if we explain concepts in this way, we clearly fall prey to syntacticism, the one horn of Block's dilemma, since the words themselves and only the words are essential to concepts so understood. Because of this, the understanding is intuitively too narrow and too wide at the same time. It is too narrow because it entails that speakers of different grammars must ipso facto have different concepts. And it is much too wide because any two persons associating whatever they want with the same word ipso facto have the same concept. Thus, by moving to the abstract formal characters we have lost the two virtues usages or communal concepts seemed to preserve.

This is no surprise because so far we have only taken the first step of abstraction. However, a subject has beliefs about usages in its language just as about any other empirical matter, and only these beliefs add substance to the formal diagonals. So, we have to take also the second step and to add the subject's individual beliefs to the picture. Our first attempt to do so will turn out to be too coarse, but without it we cannot understand the refinements later on.

For the representation of beliefs I propose to follow the standard line formalized in doxastic logic. There, a subject's doxastic state is simply represented as a set of so-called doxastic alternatives, and each proposition which is a superset of that set is then believed in that state. This representation has well-known problems: it neglects the fact that beliefs come in degrees; it cannot account for mathematical, but at best for empirical beliefs; but even there the representation assumes implausibly that propositions are believed regardless of how they are expressed by logically equivalent sentences; and so on. However, rival accounts are beset with other and no less grave problems. So let us stick to this representation.

In order to understand it properly, however, we need to know better what doxastic alternatives are supposed to be. I already said that a doxastic alternative is simply a possible context $c = \langle s_c, t_c, w_c \rangle$. But what precisely does it mean that c is a doxastic alternative of a given subject s at a given time t in the world w ? This is usually said to mean that all the beliefs of s at t in w do not exclude that s_c is s itself, t_c the present time t , and w_c the actual world w . More fully, this is to mean the following – this is the best explanation that I could find:

s ' doxastic state at t in w is deep-frozen, so to speak, s may then fully investigate the world w_c in the sense that it may take the perspective of every individual in w_c during its entire existence (so far it has a perspective at all), that it may learn all the languages there are in w_c , that it may subject each part of the world w_c to any investigations and experiments it can think of, etc. etc., after all this it makes the most considerate judgment about w_c , and the assumption that it is now s_c at t_c in w_c does not contradict the deep-frozen state, or, in other words, its maximally informed and considerate judgment is just an extension and not a revision of the deep-frozen state.

Indeed, I badly miss such an explanation in textbooks on doxastic logic and similar texts.

How this relates to linguistic ascriptions of beliefs is a difficult question which would entangle us in well-known complications; we better leave it aside. However, it is important to see that to have a given set of doxastic alternatives or a given belief set, for short, is a perfectly internal, non-relational property; according to the explanation given, the fact that the possible context c is, or is not, a doxastic alternative of s at t in w , does clearly not depend at all on anything in w outside s at t .

How, then, may beliefs so represented be used for constraining and substantiating formal diagonals? The simplest way is to restrict the domain of formal diagonals to the belief set of the subject. The extensions of the subject's terms do not consist then of any objects whatsoever so-called in the various contexts, but only of objects conforming to the beliefs of the subject. Thereby, all the substance we have lost by introducing abstract formal characters has returned in the subjectively appropriate measure. Thus ran the proposal of Haas-Spohn.

Since formal diagonals as well as belief sets are internal, the restricted formal diagonals are internal as well. And hence they also qualify as concepts as intended here. However, we are now obviously stuck with the other horn of Block's dilemma. If a subject's concepts are formal diagonals restricted to its belief set, any change in its beliefs changes its concepts; this is indeed an extremely holistic conception of concepts. Likewise, any two subjects are almost guaranteed to have different concepts; this makes communication and psychological generalizations seem like a mystery. Moreover, it follows that I cannot form any false beliefs with my con-

cepts; to correct a mistaken belief is automatically to change ones concepts. All this seems unacceptable.

This may suffice as a concrete exemplification of how Block's dilemma arises for a theory of internal concepts. So far, we have apparently avoided Schiffer's problem – functional roles nowhere entered the picture –, but we did so only by doing very badly on Block's dilemma. White (1982) has already anticipated a way out of Blocks's dilemma. His framework is quite similar to the one presented here. The domain of the partial characters he defines consists of what he calls contexts of acquisition which are pairs of a possible world and some functional state the subject acquires in the world. In order to avoid the emptiness of syntacticism White restricts the domain of the partial character of a given expression to equivalent contexts of acquisition having one and the same functional state as a component, and by associating a separate functional state with each expression White has *prima facie* avoided holism. However, these very sketchy remarks show already that it is the functional states which are doing the work here, and that the possible escape from Block's dilemma immediately leads us into Schiffer's problem.

3. How to define concepts: a proposal

Should we give up, hence, trying to explain concepts and narrow contents via the epistemologically reinterpreted character theory? No, we have not yet tried hard enough. So far, we have considered only two extreme options: the minimal option that the concept a subject associates with an expression contains only the trivial belief that the concept refers to whatever the word is used for, and the maximal option that the concept contains all beliefs of the subject, in particular all the beliefs the subject has about the reference of the concept. This leaves open a huge range of middle courses which deserves inquiry.

Block (1991, p. 40) has coined a nice picture by distinguishing between the lexicon entry and the encyclopedia entry of an expression. The encyclopedia entry of an expression corresponds to our maximal option; intuitively, however, it is rather the lexicon entry which corresponds to the associated concept. The picture may, at the same time, damp the hope for progress because Block's distinction resembles the analytic/synthetic distinction and because it may therefore seem that all the ob-

jections against drawing the latter distinction which Quine so forcefully initiated apply to the former distinction as well. But let us look more closely:

As far as I see, there seem to be two main ideas, with ramifications, for driving a middle course towards an adequate notion of concepts:

One idea is somehow to appeal to communal standards, for instance to define a concept to contain a social minimum of beliefs about its reference or extension which is required for being recognized as a partner in communication; this is the idea of a stereotype Putnam (1975) promoted. One may doubt whether such social standards of semantic competence exist in a discernible, salient way; but to the extent they do they certainly provide a useful notion for some purposes.

However, this idea is the wrong one for our present purposes. If concepts are explained with reference to communal standards, then concepts are group-relative and not individualistic; all competent speakers in the group have then the same concepts. This seems unwelcome because, if concepts are to be something internal to the subjects, we should allow for variation across subjects. There is a further decisive objection which I shall explain later on because it applies to other proposals as well.

The other main idea, which sounds appropriately individualistic, is to appeal to the subject's recognitional capacities, i.e., to define a subject's concept of an object or a property to consist of those features on the basis of which the subject recognizes the object or instantiations of the property. What this means, however, depends crucially on how we understand recognition here.

There is space for interpretation since the strictest and simplest understanding of recognition does not work at all. The strictest understanding would be to say that a subject is able to recognize an object if and only if, under all possible circumstances, it is always and only the object itself which the subject takes to be the object. This is much too strict because we are hardly ever able to recognize objects in this sense; there are always circumstances under which we mistake even the best known objects. Recall also how absurdly narrow Russell's acquaintance relation was. The same holds, *mutatis mutandis*, for the recognition of properties. Thus, recognition has to be understood in a much weaker way. There are, again, various options from which varying notions of what concepts are result.

Our recognitional capacities may first be seen in our normal means of recognition which work, according to our familiarity, fairly reliable in the circumstances we usually encounter. Something like this comes presumably next to our intuitive

notion of a recognitional capacity. But it is very vague, of course. And one must be clear that according to this explanation a recognitional capacity may be very varied. For instance, I may identify my son on the basis of my belief that he is somewhere in the crowd before me and that nobody else in the crowd is likely to wear the same kind of satchel. But does it therefore belong to my concept of my son that he has that kind of satchel?

There seem to be two ways of gaining more specificity here. One way is to narrow down a subject's means of recognizing an object or an instantiation of a property to the way the object or the instantiation looks to the subject under various circumstances. This line leads to what are called the subject's perceptual concepts. The other way is to raise a subject's recognitional means from those it normally applies to the best and most considered means at its disposal.

So far, all this is very sketchy. But there is an argument which tells us even at this sketchy stage which direction to pursue more thoroughly. The argument is this: Clearly, we want our beliefs to be closely connected with our concepts; the contents of our beliefs should recursively build up from the concepts involved. If we translate this into the language of characters and diagonals introduced in the previous section – which is neutral to the present discussion, as far as I see – we get the following content of a belief such as that a is F in the form a truth condition, i.e., of a function from contexts to truth values:

A subject's belief that a is F is true in a context c if everything and at least something that conforms to the subject's concept of a in c also conforms to the subject's concept of F in c .⁷

This condition, however, seems to yield inadequate results when based on anything else but the subject's best and most considered means for recognizing a . For instance, if the subject's concept of a would consist in some communal stereotype of a , then the subject could possibly believe that a does not satisfy its stereotype or that many things different from a satisfy this stereotype, and then the above truth condition assigns truth or falsity to the belief that a is F in contexts in which the subject would intuitively not count it as, respectively, true or false. Likewise in the

⁷ This is not the form the condition can ultimately have. Obviously, the problems encountered here are very similar to those the counterpart theory of Lewis (1968) faces with its recursive clauses; see, e.g., Hazen (1979).

case where the subject's concept of a consists of the criteria normally used to recognize a . Again, it seems possible in this case that the subject knows or believes in a given situation that a does currently not have the features normally used for recognizing a or that things different from a satisfy the criteria normally used for recognizing a , and then the above and the intuitive truth condition for the subject's belief that a is F diverge again. The only way to avoid this discrepancy seems to be to base the subject's concept of a on its best means for recognizing a , as I have proposed. The same holds, *mutatis mutandis*, for the property F .

Note, by the way, that this proposal nicely parallels with what I have said about what Haas-Spohn called the usage of a name " a " or a predicate " F " in a given language L . There I noted that the literature tends to base such usages or communal concepts on the best judgmental standards available to the community of L . Hence it seems appropriate to do likewise in the individual case.

One may fear, though, that the best recognitional means available to a subject with respect to an object a or a property F come close to what Block called an encyclopedia entry, because it seems that the subject optimally uses all its beliefs concerning a or F for recognizing a or an F . This is not so, however. On the contrary, and this is absolutely crucial, there are many possible contexts in which the subject would recognize something as a , though it lacks there many properties the subject believes a to have; the subject has its ways, whatever they are, of distinguishing contexts which contain a , but with other than the believed properties from contexts which do not contain a at all. The following explanation captures this subjective distinction, or the subject's best recognitional means, or indeed the subject's concepts in a more explicit way:

Let α be a name and $c^* = \langle s, t, w \rangle$ a possible context. Then the concept $\beta_{s,t,w}(\alpha)$ which s associates with α in w at t is the function which assigns to each possible context $c = \langle s_c, t_c, w_c \rangle$ the set of objects which, according to s ' judgment in w at t , might be the object α denotes in c^* . In analogy to the above explanation of doxastic alternatives the fact that $x \in \beta_{s,t,w}(\alpha)(c)$, or that, as we might say as well, x is a doxastic counterpart in c of what α denotes in c^* , is more fully understood in the following way: s may fully investigate the world w_c during its entire existence including x from all subjective perspectives available in w_c , and

then the most considerate judgment about x is compatible with x being what α denotes in c^* according to s ' judgment in w at t .

Similarly, if ϕ is a one-place predicate, the concept $\beta_{s,t,w}(\phi)$ which s associates with ϕ in w at t is the function which assigns to each possible context $c = \langle s_c, t_c, w_c \rangle$ the set of objects which, according to s ' judgment in w at t , might have the property ϕ denotes in c^* – where the latter phrase is more fully understood as above.

I would like to develop some consequences of this explanation, and in particular we have to discuss the extent to which it helps with respect to Block's dilemma and Schiffer's problem. Before, however, it may be useful to clarify the content of this explanation with some illustrative remarks; concepts thus explained do have some unexpected features.

First, concepts are usually not egocentric. Thereby I mean that, usually, things can conform to my concept associated with α or ϕ in a context c without there being anything in c which could be me. Hence, insofar modes of presentation and acquaintance relations have been thought to be usually egocentric, they are not concepts in the above sense.

Second, to which extent is the look, sound, or feel of things important for their conforming to my concepts? It depends. Often it is conditionally important. Consider my concept of my son. Clearly, there could be many possible things in possible contexts which look perfectly like my son without possibly being my son according to my concept of him. Conversely, however, something could hardly be my son according to my concept without looking very much like him. I said hardly. Of course, my son could look very differently from his present look, not only actually, but also according to my concept of him. But if I encounter in a possible context c such a differently looking object, it could only be my son if there is something in the context c explaining why that object started or emerged to deviate from my son's look so well known to me. In this sense, the look of my son (and the sound of his voice, etc.) is a conditional part of my concept of him. In a similar way, the look of species, substances, and also individual things is a conditional part of my concepts of them; for instance, no doxastic counterpart of my black ball-pen could be red during its entire existence. But there are other cases as well. It seems, for instance, that the look of things is not essential for their conforming to the concept I associate with the word "table"; what is essential is only what is done

with the things in the relevant context. If there are culturalized beings in the context which use a given object only for sitting down *at* it, then that object counts as a table according to my concept, even if it never looks like a table; and conversely if something looks like a table, but is only used as something else, say, for sitting *on* it, then my concept does not count it as a table, but, say, as a seat.

Third, to which extent does the place of objects enter into my concepts of them? Again, it is very often conditionally important. According to my concept of him, my son could be anywhere in the universe. However, the context must then provide some plausible story how he got there; any object, be it intrinsically as similar to my son as possible, could not be my son if it is far away from Earth, or Germany, for that matter, during its entire existence. The same holds for many concepts of many other objects; after all, most objects I know are on the surface of Earth. The same may even hold for predicates. One may think, for instance, that a species which develops somewhere else in the universe, but, as it happens, intercross with our tigers, does nevertheless not consist of tigers; if so, one's concept of tigers includes their emergence on Earth.

Hence, very many of our concepts are, so to speak, geocentric. This entails a question what our concept of Earth may be. It seems to be quite poor. According to my concept, at least, the history of and on Earth so richly known to me is highly contingent to Earth; almost any planet of comparable size, age, and composition revolving around a sun of comparable size, age, and composition in the Milky Way could be Earth. And, of course, my concept of the Milky Way is even poorer, saying only that the Milky Way is some spiral galaxy.

Fourth, their causal origin is essential to many objects. This is also reflected in our concepts of them. For instance, nothing which is not a child of my wife and me could be my son, and since I also believe so, my concept of my wife and myself enters into my concept of my son. The same holds for my wife and me. Of course, my concepts of the ancestors get soon very dim, still all of them are part of my concept of my son. In fact, my son could not exist without history being pretty much as it is. Thus, a lot I believe about history enters into my concept of my son. This makes for a perhaps unexpected richness of that concept. In the same vein, my concept of things is quite poor when I know very little about their causal preconditions, as is the case, for instance, with Earth. In fact, what I just said about the conceptual role of location presumably reduces to the present point about causal origin. My son could not be born outside Germany or Earth, unless my wife and I, or our parents,

etc., travelled. The same holds, *mutatis mutandis*, for tigers and other kinds for which their causal origin is essential.

Fifth and last, are concepts mutually connected by communication? Yes, of course; there is a clear relation between the concept I associate with a certain expression and the concepts others associate with that expression, a relation which Putnam (1975) has described as division of linguistic labor. Consider my concept of an elm, to take one of Putnam's examples. Elms might exist without mankind; in such a context, the extension of my concept of an elm would contain elms, beeches, and, maybe, other deciduous trees, since by myself I cannot distinguish elms from beeches and, maybe, other trees. This may entail that my perceptual concept of an elm is the same as that of a beech, but it does not entail sameness of the two concepts in my sense. On the contrary, there are contexts in which the extensions of the two concepts differ. That is, there are contexts in which there is a linguistic community which generally resembles my actual community as I know it and which I observe during my full investigation of these contexts to apply the term "elm" only to certain trees and not to others (to which I might have been inclined to apply it as well). Then there are two possible cases: Either, these applications of the term "elm" contradict my concept of an elm so flatly – say, the community applies it to coniferous trees – that I conclude that this could not be my linguistic community after all and that its judgment cannot help mine in this matter; in this case, my judgment is as bad and the extension of my concept of an elm as wide as before. Or, alternatively, the linguistic community in the context behaves like mine in every relevant respect and in particular with respect to the term "elm" so that I conclude that this community could be mine and I may trust its judgment; in such a context, the extension of my concept of an elm is as narrow as the usage of the community⁸ and certainly different from the extension of my concept of a beech.

In this way, the division of linguistic labor is reflected in subjective concepts. This entails in particular that referential and deferential aspects are often inextricably mixed in subjective concepts; the simple reason is that subjects often trust the judgment of their fellows more than their own. Of course, the degree to which semantic deference enters into subjective concepts may considerably vary. For instance, I may be convinced that I know as well as anybody else what tables are, or, if I am an expert on this, what penicillin is; in such cases my own most considerate judg-

⁸ Note, however, that it would be compatible with my concept of an elm that this counterfactual community applies "elm" only to beeches.

ment is hardly helped by others, and the deferential component of my concept of tables or of penicillin largely vanishes. At the other extreme, my concept of Indian deity, say, is so poor, that I would follow almost any opinion if it presents itself as a consistent expert's opinion; in such cases the deferential component of concepts is overwhelming.

Ease of formulation has seduced me into a sloppiness which needs to be addressed. Instead of the clumsy phrase "the concept the subject associates with an expression α " which I have explained, I have often used the phrase "the subject's concept of an object or a property". Is that the same? Certainly not, though the confusion did no harm so far. Let me approach the difference by pursuing another question:

Can we construct the belief set, or the set of doxastic alternatives, of a subject from its concepts as explained? Because the belief set is a very rich entity it would be nice to see it as somehow composed. However, the answer is negative. Whenever the subject linguistically expresses one of its beliefs, the narrow content associated with this expression yields a set of doxastic alternatives which is a superset of its belief set; to guarantee this was my reason for explaining concepts in the way I did. But the conjunction of all such beliefs does not yield the belief set. This would be so only if the subject could linguistically express all its beliefs. This, however, would be a most unusual capacity. For instance, I know many details of the look of my son for which I have no words; think, e.g., only of the infinite variety of the form of eyelids. So, there are certainly beliefs which are not composed of concepts associated with linguistic expressions.

This raises the question whether there are also concepts not associated with linguistic expressions. The answer must be yes, I think. Take my son again. Clearly, my concept of him is associated with a name; but what I have just said about it entails that it at least involves inexpressible properties. Indeed, I believe that all phenomenal qualities are such inexpressible concepts. "Looking thus" – where "thus" refers to a certain phenomenal quality, say, a color – has an extension in every context, namely the set of things in the context world looking just this way, and hence forms a concept in the sense explained. But even if that phenomenal quality is red, or bright red, or whatever, this concept is not expressed by the phrase "looking red" or "looking bright red", as I have argued in (1997) and (1997/98); the reason is, in nuce, that even such concepts as associated with "looking red" have a defer-

ential component, whereas the concept of looking thus is in no way deferential and hence different. Similarly, we may also have concepts of objects we cannot denote.

The next question to pursue would concern the range of such prelinguistic, inexpressible concepts. Although this would be most interesting in relation to speechless animals, I cannot venture this here. I mention all this because it seems that such inexpressible concepts are most easily characterized in an external way as concepts of a certain object or property. Thereby, we have returned to the question what makes a concept a concept of a certain object or property. I shall not attempt a general answer. Causal relations between the object or instantiations of the property and the concept are part of the story, and the many things said about belief *de re* are certainly relevant here as well. However, in the case of a concept associated with a linguistic expression it seems correct to say that it is a concept of the actual intension of that expression, which is an object in the case of a name or a property in the case of a predicate. Hence, in this case it seems legitimate to talk, as I did, of the concept associated with "*a*" or "*F*" and of the concept of *a* or *F* in the same way. A relevant difference emerges only in the case of inexpressible concepts to which the former phrase does not apply and the latter phrase applies in a yet unexplained way. Therefore, I better leave aside this problematic case for the rest of the paper.

4. How much of a help is the proposed definition of concepts?

Let me move slowly from explaining to defending my proposal. I said I want to drive a middle course between the minimal and maximal option both of which we found to be inadequate. So, which beliefs are contained in the concept a subject associates with the expression α if they are more than that α has an extension and less than all beliefs about that extension? There is a simple and informative characterization of these beliefs which I have announced already in the title of my paper and which runs as follows:

G is an essential property of *a* if and only if it is metaphysically or ontologically necessary that *a* is *G*, i.e., if nothing which is not *G* could be (identical with) *a*; for instance, being human or having the parents I have are essential properties of me. This is the common definition; it is certainly full of niceties, which we better skip over, however. We can extend it to a relation between properties: *G* is essential for *F* if and only if it is metaphysically necessary that every *F* is *G*. For instance, being

unmarried is essential for being a bachelor (though it is not essential for bachelors, no bachelor is essentially a bachelor), or consisting of hydrogen and oxygen is essential for being water.

Now, one may express my definition of concepts also in the following way: The concept a subject associates with "*a*" is the conjunction of all concepts *G*, or the strongest *G*, such that the subject believes that *G* is essential for *a*. Similarly, the concept a subject associates with "*F*" is the conjunction of all concepts *G*, or the strongest *G*, such that the subject believes that *G* is essential for *F*.

When one compares this with the original definition, it is rather obvious that this is an equivalent characterization. Indeed, it is trivial in view of the fact that being identical with *a* is the strongest essential property of *a*, and being *F* is the strongest property essential for being *F*. The characterization would become more interesting if we would introduce restrictions on the metaphysical side, for instance by excluding identity from genuine properties and relations, or on the epistemological side, for instance by postulating that all concepts are ultimately qualitative in some suitable sense. I would in fact be prepared to make such restrictions, but it would take us too far to go into this issue.

Let me rather briefly check whether this characterization agrees with my above depiction of concepts. What I have said about beliefs about causal origin often being part of concepts, fits perfectly, of course. I have also asserted that the look of objects or kinds often enters into our concepts of them. But, as a rule, looks are certainly inessential. However, I qualified my assertion. Often, the look of an object or of a kind displays its essence provided that it is allowed to unfold its normal look; and it is only this complex concept which is part of the concept of an object or a kind. Finally, what about the deferential component of concepts? What others believe about an object or a kind is certainly not essential to it. Sure, but in so far I trust others, I believe what they believe, and if I take the experts' beliefs about essences as trustworthy and they believe essences to be such and such, I also believe these essences to be such and such. So, the present characterization agrees well with the earlier observations.

Viewed under the present characterization, is my proposal for defining concepts not a familiar one? I am not aware of this. So far, I only found it mentioned in Block (1995, sect. 4) where he attributes the view to two lines in Fodor (1987), discusses it on one page, and dismisses it right away. The paper is about one example, namely the concept a teenie associates with the word "grug" which denotes

beer in his assumed dialects. The teenie knows very little about grug; for instance, he knows that it comes in six-packs. Block simply assumes that this belief is part of the teenie's concept of grug, and he is certainly right to claim that it is not essential to grug to come in six-packs. But Block has a different notion of concepts here. His notion seems to be the one I have already mentioned, namely that concepts are something like normal means of recognition, and the teenie's poor means of recognizing grug refer to its packing. However, I have already argued that this is not the best notion of a concept, and indeed I would flatly deny that the belief that grug comes in six-packs is part of the teenie's concept of grug. So, as I say, there does not seem to be much of a discussion of the line of thought I am proposing here.

To which extent does this proposal promote the individualist's project? Six points are worth discussing:

First, my proposal provides something of a definition at all; this is more than one usually finds in the literature. It does so essentially because it firmly rests on the epistemologically reinterpreted character theory which has by far the best formal grip on these matters. Of course, the definition uses a wildly counterfactual definiens. But philosophers are certainly bound to ride the horse of counterfactuality much more boldly than most others, and I cannot see that the counterfactual definiens is in any way incomprehensible; it just drives common counterfactuals to the extreme.

Due to the first point we can assert secondly that concepts have a recursive structure following the recursive structure of the expressions with which they are associated. I mentioned in footnote 6 that there are non-trivial points in which the recursion of concepts and narrow contents diverges from what we are used from extensions and intensions. Still, in the main the recursion of concepts as I have defined them follows common theorizing and hence exists. Not a negligible advantage.

Third, let me emphasise once more that concepts defined in my way are individualistic; to have such and such a concept is an internal, non-relational property. Which function from contexts to extensions a subject associates with an expression depends solely on its internal cognitive state, does not presuppose the existence of anything outside the subject, and does in no way change when the environment of the subject changes without affecting its internal state. That this is so seems just obvious to me, and in a way I wonder how the obvious could seem so difficult.

Of course, defining concepts and contents in a narrow way is one thing, and describing them is another. We have to build a theory how concepts combine to con-

tents, how contents become attitudinized, how perception acts upon the attitudes, how the attitudes result in action, etc. etc. Thus we say how this huge array of counterfactuality integrates into factuality, and conversely this makes this array accessible from the facts we observe on the street and in the lab; of course, theory is vastly underdetermined by the data, here as everywhere. I have not said a word about how that theory goes and which ways of describing all these internal entities go along with it; but this would clearly be a different task which does not impair the internality of its starting point.

Such a theory, when fully constructed, assigns to each concept, content, attitude, etc. a functional role within the huge net of all these entities. But this assignment is the result of the theorizing; the functional roles are not used to define these entities to begin with. Thus, my fourth point is that my proposal has not led us into Schiffer's problem; the proposal is so far independent of any functionalist conceptions.

The next question, then, is how we fare with respect to Block's dilemma. Here, it is, fifthly, very clear that we have perfectly avoided the syntacticist horn of that dilemma. Which expression a subject associates with a concept is fully contingent and does in no way add to the identity of the concept. This entails in particular that members of different linguistic communities may nevertheless have the same concepts. Of course, the deferential component of a subject's concept refers to its own linguistic community, and this distinguishes at first concepts in different languages. However, translation has the effect of merging the experts of the communities and thus of merging their usages or communal concepts, and thereby differences of subjective concepts due to deference vanish as well.

Whether we are equally successful with respect to the holistic horn of Block's dilemma is less clear; this is the sixth and final point we have to discuss at more length. I shall not attempt to clear up the term "holism"; there seems little agreement on its precise meaning. However, it is very clear that concepts as I have explained them are thoroughly interconnected. It would be extremely important to study the architectonics of concepts in detail – a task much beyond the scope of this paper. However, there is no reason to expect the conceptual connections to be unidirectional, i.e. that there is a set of basic concepts from which all the other concepts are defined step by step, as Carnap (1928), for instance, has tried to establish in an exemplary way. Rather, all kinds of circular dependencies among concepts are to be expected. In so far concepts will certainly turn out to be holistic.

The essential reason for this holism is that ontology is holistic, in the first place. There is rich ontological dependence among objects and properties; I mentioned the example that many objects and maybe even properties ontologically depend on Earth, i.e., could not exist or be instantiated, if Earth would not exist. Hence, if essences are thoroughly intertwined, beliefs about them, i.e. concepts, will be so as well.

However, if we follow Block's and Fodor's definition of holism concepts as I have explained them are not holistic. Block (1991) says "that narrow content is holistic if there is no principled difference between one's 'dictionary' entry for a word, and one's 'encyclopedia entry'" (p. 40). The whole point of my paper, however, was to propose such a principled difference. The lexicon entry for a word contains only one's beliefs about the essence of its reference, whereas the encyclopedia entry contains all other beliefs about the reference as well

The case is similar with Fodor (1987). What he says about holism does not exactly fit my present discussion. He there defines that "meaning holism is the idea that the identity – specifically the intentional content – of a propositional attitude is determined by the *totality* of its epistemic liaisons" (p.56). This does not exactly fit, first because Fodor addresses only the narrow content of propositional attitudes and not that of subsentential expressions, and second because the term "epistemic liaisons" refers to confirmatory or justificatory relations between propositions – something I have not discussed at all. If, however, we straighten out the definition a little bit and see the epistemic liaisons of a word in the beliefs in which it occurs, we are back at Block's definition.

Let us thus look at what Fodor dubs the Ur-argument for meaning holism which runs as follows: "Step 1: Argue that at least some of the epistemic liaisons of a belief determine its intentional content. Step 2: Run a 'slippery slope' argument to show that there is no principled way of deciding *which* of the epistemic liaisons of a belief determine its intentional content. So either none does or they all do. Step 3: Conclude that they all do" (p. 60).

Fodor then discusses three versions of the Ur-argument and tries to argue that in all three of them step 1 has erroneously been taken for granted. Given the above straightening out I have no quarrel with step 1, however. Rather, step 2 is faulty. There may be vagueness or indeterminateness in the beliefs about essences or perhaps even in the essences themselves. But there is no slippery slope.

However, it is not important whether or not concepts should be called holistic according to my definition; holism as such is not bad. The question is rather whether or not the unacceptable consequences for which holism is blamed in this area are avoided by my definition.

So, one bad consequence of holism appeared to be that belief change ipso facto meant conceptual change. This, however, is not so at all with my proposal. Take my concept of my son, again. I acquire new beliefs about him all day long and forget many old ones. But, according to my explanation, my concept of him has in no way changed in the last years; all the beliefs I have acquired or forgotten concerned contingent matters and did not add to, or subtract from, my beliefs about his essence. The same holds, say, for my concept of tables. Almost every day I learn something about tables, for instance, at which places tablehood is instantiated. But my concept of tables is fixed since long.

Another bad consequence seemed to be that holism renders impossible intrapersonal and interpersonal psychological generalizations. This is an objection I never understood. Each individual constellation may be unique, but this does not prevent it from being subsumable under general laws. It was always clear that, strictly speaking, there is only one application for Newton's theory of gravitation, namely the whole universe. But this did not deprive it of its lawful character. Block (1991, p. 41) makes similar remarks to the effect that there is not really an objection here.

A further bad consequence of holism was said to be that it makes communication miraculous because the concepts of different subjects are almost guaranteed to differ, preventing them to understand each other. There are several remarks to be made about this point.

To begin with, I am not sure whether subjects need to have the same concepts in order to understand each other. It rather seems to me to be sufficient to know which matter the others talk about, i.e. to which objects and properties they refer. As long as this is secured, it does not do much harm when we have a different grasp of the objects and properties referred to; communication may also serve to assimilate the differing grasps. In this perspective, sameness of concepts is required only insofar concepts are constitutive for ontology. This may indeed be a relevant aspect if we talk about abstract matters where communication becomes difficult, as we philosophers know particularly well; but I do not think it has much relevance in everyday matters.

Still, it would be good to know the extent to which we have the same concepts according to my proposal. The answer is a mixed one. Take my son again. I know his grand-parents, you don't. So, what I have said earlier implies that we have different concepts of him. Take Bill Clinton, by contrast. I assume that all of us know him just from TV. Certainly, we have looked at TV at different times; hence, we believe different things about him. But I see no reason to assume that our concepts of him differ in any way; we believe quite the same about Clinton's essence. Take tables. Again, I see no reason why our concepts of tables should differ despite our differing beliefs about tables. If we compare the functions from contexts to extensions which we associate with the word "table", my guess would be that the variance keeps well within the range of vagueness of that word. Take elms, finally. I guess that many of us are more or less in the poor state Putnam describes. But I also assume that some of us were ashamed of this and have informed themselves. Insofar, then, their concept of an elm differs from that of the rest of us. So, there is neither a guarantee nor an impossibility of agreement in concepts.

However, one should observe that there is considerable conditional agreement. Your and my concepts agree in all contexts in which a language community exists which could be ours according to your and my concept of it. This is the effect of the ubiquitous deferential component of our concepts which confers judgment to the relevant experts of the community and which thus makes us agree about the concepts' extension in such a context.

These remarks do not add up to a satisfactory discussion of the question how communication is possible on the basis of concepts as beliefs about essences. But we may tentatively conclude that there is no clear evidence at all for a serious objection to be forthcoming here.

A final bad consequence of holism seems to be what Fodor (1987, p. 102) calls the disjunction problem, which is the problem how error is possible – which it clearly must be – according to one's theory of meaning, content, or concepts. Fodor poses this as a problem for a causal-information theoretic account of contents à la Dretske (1981) which he tries to get running. However, the problem of error also plagues holistic accounts. Suppose the Ur-argument quoted above from Fodor would be sound. Then all the epistemic liaisons of a content which I believe, i.e. hold to be true, would be constitutive of that content. Now suppose I change these epistemic liaisons. Could this result in a different balance of reason for that content and even in a different judgment, e.g., that this content is really false? No, because

it would be a new content which I would judge false; the old content would cease to exist. That is, the old content can exist only as held true. Similarly, if a concept is an encyclopedia entry in Block's sense. I believe all parts of that encyclopedia entry to be true. Now, for some reason, I want to change my mind and to discard some parts. Because they have proved wrong? No, we cannot put it this way. If I change my encyclopedia, I change my concepts, and my beliefs change content. So, again, I can put together my concepts only to form contents with a fixed truth assignment; all contents would be conceptual truths or falsehoods. These would be fatal consequences indeed.⁹ Of course, I often err by my own lights, and any adequate theory must be able to account for this.

It should be clear, however, from my comments on the first possible objection that my proposal has none of these absurd consequences and allows me to change my mind without changing my concepts. There is no error problem for my account.

So, to sum up: have we escaped the holistic horn of Block's dilemma? My discussion does perhaps not firmly establish a positive answer, but it showed, I think, that the prospects for my proposal are bright – all the more so as it was clear that the syntacticist horn of the dilemma was definitely avoided and that there was no danger of stumbling into Schiffer's problem.

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⁹ In fact, this issue was first raised in relation to the account of the meaning of theoretical terms in Kuhn (1970), pp. 111ff. and 198ff., and, for instance, Feyerabend (1965).

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