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Are Concepts Public?

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Abstract

Jerry Fodor has argued that concepts ought to be public in order to figure in psychological explanations and in accounts of linguistic communication, and that no theory of concepts as structured abilities of categorization can account for publicity. Recently Andy Clark and Jesse Prinz opposed this latter claim, and suggested that the publicity constraint is less demanding than Fodor thinks. In this paper I support Clark and Prinz's position through disambiguating the publicity constraint, and arguing that linguistic communication enhances concept publicity rather than requiring it.

Keywords: Concepts; publicity; categorization; communication.

Two Roles for Concepts

Cognitive scientists and philosophers generally agree on assigning two main roles to the notion of concept, namely, concepts figure in psychological explanations of intentional action, and they are involved in accounts of linguistic meaning. In the last two decades Jerry Fodor has provided various versions of an argument for the thesis that concepts ought to be public in order to have a psychological role and a linguistic role. His further claim is that the publicity constraint would rule out most contemporary accounts of concepts; in particular it would rule out any theory that describes concepts as structured abilities employed in categorization¹. The opposite thesis has been recently put forward, in particular by Andy Clark and Jesse Prinz, who claim that non-atomistic theories can adequately cope with both the psychological and the linguistic role of concepts, as the publicity constraint is far less demanding than Fodor maintains². In this paper I support Clark and Prinz's position, but I will claim that their arguments are insufficient, and more has to be said about how and why the psychological and linguistic role of concepts can be compatible with the idea that concepts are structured categorization abilities that may vary across different individuals. I will start with running through the standard formulation of the publicity argument, and identifying three different senses in which concepts can be said to be public. Equipped with that distinction, I will then recap Clark and Prinz's objections to Fodor, and say why they are insufficient in order to defend SAC theories. In the rest of the paper I will point to the fact that linguistic

communication enhances and secures publicity of concepts more than it requires it, at least according to one sense of 'publicity'. Under this hypothesis, the publicity-argument schema can be partially reversed, as publicity is a consequence of linguistic communication rather than a precondition for it. Given that concepts are already public to some extent, their role in psychological generalizations can be explained, without succumbing to the strictures of Atomism.

Fodor's Publicity Arguments

Here's a condensed version of Fodor's publicity arguments: 'If everybody else's concept WATER is different from mine, then it is literally true that only I have ever wanted a drink of water, and that the intentional generalization 'Thirsty people seek water' applies only to me. (And, of course, only I can state that generalization; words express concepts, so if your WATER concept is different from mine, 'Thirsty people seek water' means something different when you say it and when I do³).

The first paragraph of the quotation is about publicity and the psychological role of concepts. Intentional or commonsense psychology aims at explaining and predicting people's behavior in terms of their beliefs, desires, hopes, and so on. Its method consists in redescribing a particular action or state of an individual (like my seeking water, or my mental state of wanting to have water) as a case of a law-like generalization about the relationship between people's beliefs, and their desires or needs (like 'Thirsty people seek water', or 'Thirsty people who know that water quenches thirst want water'). In order to have generalizations about propositional attitudes, it ought to be possible that different individuals have the same belief or desire. Therefore, it ought to be possible that concepts as components of attitudes are *public*. In short, no intentional psychology without publicity of concepts.

The second part of Fodor's quotation above connects publicity with the linguistic role of concepts. Words express concepts, and they mean the same to different people only given that different people can share concepts. Therefore, it must be the case that concepts that words express are public. No linguistic communication without publicity of concepts.

Fodor employs the publicity arguments as justifications for the first premise of an argument against SAC theories, with three simple steps:

1. Concepts must be public.
2. According to SAC theories concepts can't be *public*
3. SAC theories are not adequate.

¹ 'SAC theories' from now on. I mean the acronym to stand for some varieties of inferentialism on the philosophical side, and theory-theory, prototype theory, exemplar theory on the psychological side. See Fodor and Lepore 1982, pp. 18-19; Fodor 1998, pp. 27-29; Fodor 2004a;

² Clark and Prinz 2004.

³ Fodor (1998), p. 29.

Premise 2 is supported by the following line of thought. According to SAC theories concepts represent our knowledge of the kinds of things in the world; they allow us to identify a new object we may meet, like a dog or a fountain pen, and they allow us to infer unseen properties of the object, such as its likely behavior or function. Whatever its format may be (a prototypical image, memories from perception, a set of beliefs, or a ‘mixed bag’) knowledge of the world employed in categorization is likely to vary across individuals⁴. Both in recognizing things as dogs (category identification) and in recollecting dog-examples and their properties (category production) I will use different pieces of information than you would, as my acquaintance of dogs, my experiences and theoretical knowledge of them is different from yours. This, according to Fodor, suffices for concluding that SAC theories cannot guarantee publicity of concepts. Given that most psychological and philosophical theories *are* SAC theories, Fodor’s argument, together with the publicity arguments, is intended to make a clean sweep of the contemporary debate on concepts.

Senses of ‘Public’

What is for concepts to be public? The very central notion of this debate stands in need of clarification. I will start with a preliminary assumption. Concepts represent objects or kinds of things, but we can have more than one concept for each object or kind of things. Thus, Venus is a unique planet but one could have two distinct representations of it – for example, the concept of the morning star and the concept of the evening star - and eventually learn, through reading her Frege, that the morning star *is* the evening star. This fact explains why we are prone to take some identities as discoveries. I will assume that each concept has an *intentional content*, or a referent, and a *cognitive content*, intended as whatever may differentiate two concepts of the same object or kind of things. This assumption is hardly controversial given this minimal characterization of cognitive content, which allows for a broad range of different positions, from the idea that a concept encodes all our information about a certain kind of things, to the view that different representations of the same property differ at most in syntactic traits.

Now, the publicity of concepts can be intended (at least) in three different senses. In the first and strongest sense, concepts are public if different individuals (or different time-slices of the same individual) have concepts with the same referent and the same cognitive content. Identity of referent and cognitive content makes concept-sharing quite trivial. Secondly, publicity can be intended as sameness of reference and *similarity* in cognitive content. The idea, here, is that everyone has her own concept of, say, ducks or Modernism, but the sets of information and categorization abilities each of

⁴ Only real definitions (in Locke’s sense) wouldn’t vary across individuals. Such an option, however, is precluded to Fodor, who follows Quine in holding that it is impossible to pick up defining beliefs about some kind of things from non-defining ones. For the opposite view, and a defence of publicity via definitionalism, see Rey (1983).

us associates to such concepts partially overlap. In a third sense, publicity of concepts can be taken in the weakest form, as identity of referent only. According to this latter sense, we share concepts as long as we have concepts of the same kinds of things, or better, in a broadly teleological perspective, we are equipped with representational and categorization devices aimed at keeping track of the same range of objects and properties. Publicity as mere coreferentiality or functional identity rests on the assumption that humans as cognitive agents are in contact with the same world, from which they tend to select out the same saliences and regularities.

Sketchy as it might be, the above characterization of the three different senses of ‘publicity’ would suffice for suggesting that the cogency of the publicity arguments, and of Fodor’s argument against SAC theories, crucially depends on which of the three senses is involved. In fact, Fodor’s quotation in the last section shows that ‘publicity’ is intended in the first sense, namely as identity of both referent and cognitive content across different subjects – according to Fodor, differences among concepts of different people would spoil publicity. Once we have granted Fodor that concepts are public only if they are identical in referent and cognitive content across different individuals, his argument against SAC theories runs smooth, as no SAC theory can guarantee that two different individuals associate exactly the same categorization abilities when dealing cognitively with a certain kind of things.

On the contrary, Fodor’s argument against SAC theories doesn’t work if ‘publicity’ of contents is taken in the second or in the third sense, that is, as identity of referent and similarity of cognitive content, or as mere coreferentiality. Let’s focus on the second sense here. In such a case, it is no more obvious that SAC theories can’t allow for the possibility that you and I employ similar categorization abilities in order to recognize – say - dogs, and to conjure up their properties when not perceptually available. After all, it is intuitively plausible that you and I share some piece of information about dogs, which we both make use of in our categorization tasks. Such similarity in cognitive content may show up in a variety of situations, for example, we are both likely to run away from a large growling dog, and we won’t feed a hungry dog with a stick of celery.

To the suggestion that publicity of concepts may be intended as similarity in cognitive content, Fodor opposes a straightforward argument for the claim that concept similarity presupposes concept identity. The argument runs as follows. Similarity between coreferential concepts of any couple of different individuals is a weighted function of the propositions about the referent that they both believe. Concepts that compose such shared beliefs are either identical in the two individuals, or just similar. If they are identical, then concept similarity presupposes concept identity. If they are just similar, the supporter of publicity as similarity of cognitive content is in need of a further argument⁵.

⁵ Fodor (1998), pp. 30-32.; Fodor and Lepore (1992), pp. 18-19.

Publicity Does Not Require Identity

The above argument can be defeated by denying its main premise. Similarity between coreferential concepts of different people need not be a function of the beliefs they share. The reason is that for a SAC theorist concepts need not be individuated in terms of beliefs, that is, in terms of other conceptual contents. To say that concepts are structured abilities employed in categorization is not yet to say that concepts are always composed of other concepts. There is no requirement that thinkers conceptualize the resources they employ in categorization. Sorting can be (and in fact is generally) thought of in non-intentional terms, as coming on top of nonconceptual abilities of discrimination. Even an inferentialist, who holds that each concept is implicitly defined by a set of basic inferences involving it, would grant that some of those inferences crucially involve nonconceptual contents, like perceptual modes of presentations of objects and properties⁶. In general, a SAC theorist would explain similarity of cognitive content as a function of shared nonconceptual components in the structure of coreferential concepts of different individuals – features, prototypical images, exemplars, percepts stored in memory. Neither of these routes to concept similarity, however problematic they might reveal in themselves, presupposes concept identity. Pace Fodor, then, publicity as concept identity is not the only viable sense of the notion.

So far I have pointed out that the publicity arguments and the argument against SAC theories contain a fallacy. In the terms I have introduced, the fallacy consists in assuming a strong sense of publicity as identity, which is unsupported by a convincing argument. Once the fallacy is spotted, Fodor's arguments invite a commonsense reply. I quote from Clark and Prinz:

‘...we have quantifiable similarity of concepts, because we can talk about two people representing a cat using some of the same features...why should we insist that concepts are shareable in a strong sense? We need to explain coordinated behavior. For example, we need to explain why people point to the same object, when they use the word ‘mule’. We need to explain why people go to chiropractors when their backs hurt...None of these similarities require perfect identity of concepts⁷’.

Clark and Prinz's reply to Fodor is that publicity as similarity of cognitive content suffices for explaining the psychological role of concepts. Intentional psychology taken as the explanation of rational, goal-directed behavior is allowed to generalize over different people's beliefs, granted that the representational structures we imply in categorization - i.e., our concepts - are functionally identical and cognitively similar, in the sense outlined above.

The question now is, can *that* be granted? How can a SAC theorist support the claim that people in fact have similar concepts? Notice that the question doesn't arise for an atomistic informational semantics, like Fodor's. On that view,

concepts have no structure, and they are individuated only by what they refer to, so to possess a concept for dogs is ipso facto to have the same concept of dogs that everybody else has⁸. Neither the question arises for a definitionalist, who holds that some specific subset of categorization abilities – namely, a definition – is constitutive of having a concept for a certain object or property. According to Definitionism, people's concepts of a given kind are trivially similar because they all include the definition of that kind⁹. Nevertheless, the problem of explaining publicity as similarity is open for the great majority of SAC theories. Clark and Prinz's position is intuitively plausible – we find it plausible that individuals that interact in socially complex activities like we are, come to develop similar categorization procedures for most concepts. Still, such a position stands in need of a supporting argument, as Fodor remarks¹⁰. The rest of this paper will be devoted to my attempt at filling the gap.

Reshaping the Publicity Arguments

Prinz and Clark's remarks against Fodor's conclusion may be developed in a more complete position featuring the following three theses:

1. Concepts, or at least many of them, are public in the minimal or functional sense; people share concepts because they tend to be equipped with, or form concepts of the same kinds of things.
2. For communication to be possible, concepts have to be public in the functional sense.
3. The use of concepts in interpersonal communication explains in most cases how coreferential concepts of different individuals come to have similar cognitive contents.

With thesis 1, publicity of concepts becomes a datum to start with, and not a requirement to conform to, provided that it is intended as mere functional identity. Functional identity places no special constraints on what concepts have to be like, as virtually any theory could allow for the possibility that different individuals have functionally identical concepts. In particular, it is compatible with a SAC theory. According to thesis 2, different people can communicate provided that they have concepts of the same things. Publicity of concepts is acknowledged to be necessary for communication; contra Fodor, however, the weaker, and merely functional sense of publicity is sufficient. Thesis 3 claims that the role of concepts in linguistic communication explains why concepts can have a role in psychological explanations. In communication we exchange information about the things we refer to, and thereby we develop similar cognitive contents for our concepts of those things. Prinz and Clark's problem – that of providing support for the claim that different individuals have similar cognitive contents – is approached here by taking the role of concepts in communication as an *explanans*, rather than as an *explanandum*. Having identified and isolated the three

⁸ Syntactic modes of presentation excluded, see Fodor (1998), chapter 1.

⁹ See fn. 5 above.

¹⁰ Fodor (2004b), pp. 102-104.

⁶ See Peacocke (1992).

⁷ Clark and Prinz (2004), p. 61-2.

different senses of 'public' in the previous sections, the dialectic of Fodor's publicity arguments cannot be preserved, but comes out as significantly altered.

Let's see the two theses in more detail. According to thesis 1, different people can be said to share a concept as far as they are *cognitively locked onto the same property or individual* (as a current philosophical jargon would express it). If you and I both had a cognitive encounter with the Eiffel Tower, we share the concept EIFFEL TOWER - we can think about that building, store information about it, recollect its appearance in memory, and in many cases we are able to tell whether a given object is the Eiffel tower or not. Having a concept of the Eiffel tower is nothing more than possessing *some* means of keeping track of the Eiffel tower in the world, and of representing it in thought, no matter *which* ones. In this sense, it is highly plausible that we share many concepts. Similarity of our perceptual apparatuses, and the corresponding representational advantage of some features of the environment over others, would already suffice for granting us a wide basis of shared concepts in the minimal sense intended here (take concepts of colors, basic shapes, medium-size animals and artifacts, etc.). In order to demystify publicity of concepts, however, I need not go through specifying how many or which concepts people actually share, as that would more appropriately be the topic of a research programme in psychology. Thesis 1 just amounts to claiming that being cognitively directed to the same world-feature counts as having concepts in common. This is perfectly plausible if we consider concepts as structured abilities of categorization. Categorization occurs when the same kind of input is associated with a certain cognitive output, no matter how such an association is accomplished. Thus, for example, categorization as the Eiffel tower (i.e. tokening of the concept EIFFEL TOWER) occurs whenever a cognitive system appropriately responds to the presence of the Eiffel tower, no matter what amount of information or structured knowledge mediates such a response. As Millikan (2000) puts it, concepts are structured abilities of categorization typed by their ends, not by their means.

As long as we accept that different individuals, with different background knowledge and beliefs, can have functionally identical concepts, we have as much publicity as it is needed for linguistic communication to start, as it is claimed in thesis 2. In a linguistic exchange, when speaker and hearer use the word 'Eiffel tower' they may well associate different images and information to the corresponding concept, but still they can point to the same object. The hearer can grasp the speaker's referent if she is equipped with a cognitive means of identifying and representing that very object, namely, if she has a functionally identical concept – the minimal condition for understanding what someone else is saying, is knowing what she is talking about¹¹. Again, this minimal publicity requirement places no special demand on the form of a theory of concepts; in particular it makes no case against SAC theories. Surely communication would run smoother between people with

strongly identical concepts in Fodor's sense (if there are any); this, however, does not suffice for the conclusion that publicity as strong identity is necessary for linguistic communication, as Fodor's publicity argument was meant to conclude.

Communication and Similarity of Content

In fact, as we move from philosophical settings and logical possibilities to everyday contexts, a situation in which speaker and hearer can count only on sameness of reference of their concepts is quite hard to find. Usually people *do* have similar concepts - as in Clark and Prinz's suggestion quoted above – namely, concepts with shared (conceptual or nonconceptual) features. Thesis 3 claims that linguistic communication *explains why* different individuals come to have similar concepts, rather than requiring concept similarity. Linguistic communication shapes and modifies our concepts so that concept similarity is greatly enhanced, and learning a first language plays a fundamental part in this process. People do not associate words to concepts randomly; instead, they learn through training and communicative attempts which concept go with which words. Starting from early childhood we gain and transmit information about the objects we are cognitively directed to by means of language, engendering a social process of converging on concept's cognitive contents:

'the result of that process is that different people within a community relate words to very similar concepts. Even though my concept of dog is an internal mental representation, it has been shaped to be the concept for the word "dog" by many years' interaction with other English speakers'¹².

The converging process on concepts' cognitive content is particularly evident for those concepts that can be acquired through language only, like ELECTION, POETRY, or MORTGAGE¹³. In such cases our concept's cognitive content develops from the socially received meaning of the corresponding word, and therefore cannot but be similar to that of our fellow speakers. In particular, philosophers like Putnam and Burge argued that speakers are usually disposed to uniform their concepts to the concepts of those they recognize as experts in a certain branch of knowledge (Putnam 1975; Burge 1989). The point can be extended to a wider range of concepts given that many of them, though not strictly language-dependent, have been acquired by children or adults without perceptually encountering the individuals or properties they refer to, but only by hearing about them (e.g. the concepts of Napoleon or Carthago, the concept of an atomic bomb, etc.)¹⁴. In all such cases, different individuals

¹² Murphy 2002, 392. See also Clark 1996 for a similar point.

¹³ I do not mean to defend any position in the debate as to whether the conceptual system is parasitic on the faculty of language, nor am I endorsing the view that languageless creatures lack concepts. The more modest point advanced above is that there are some concepts whose acquisition depends on mastering a complex notational system.

¹⁴ Millikan 2000, 84.

¹¹ Prinz 2003, 15.

come to have similar cognitive contents precisely because concepts are what they express through language.

There is at least one limitation to the above line of thought. It is not perfectly neutral, because it presupposes the idea that concepts can be learned, or at least, that they can be modified and developed through experience – specifically, through experience mediated by language. This is a concession to Empiricism, which conflates with strong nativist views about concept formation. It might be possible, however, that a nativist develop a different story of how language favors intersubjective convergence of cognitive content.

Conclusion

To sum up. As Fodor appropriately points out, the role of concepts in communication and in psychological explanations of intentional action is closely connected with the question whether different individuals can share concepts, or in other words, whether concepts are public. As it has been gradually cleared up, however, ‘publicity’ is an ambiguous term expressing at least three concepts in the present context, namely strong identity, similarity, and functional identity. Fodor concludes that conceptual atomism scores over SAC theories because it can allow for the possibility that different individuals have strongly identical concepts. According to the view I have been defending, on the contrary, functional identity is sufficient for accounting for the role of concepts in communication. Nonetheless, concepts have to be similar across different individuals for psychological generalizations to be feasible. While Prinz and Clark seem to take for granted that SAC theories can account for concept similarity, I have suggested that what favors publicity as similarity across different individuals is precisely the role of concepts in communication. The fact that we employ concepts in communication does not go as far as granting that we have similar concepts, but it goes quite a long way towards explaining why it is likely that we do. This move can help bridging the gap between Prinz and Clark’s suggestion that SAC theories can adequately account for publicity as similarity, and Fodor’s request of a supporting argument. The result is that the apparent burden of Fodor’s publicity arguments is significantly reduced, and the publicity of concepts ceases to be an exclusive achievement of atomistic theories.

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References

- Burge, T. (1989) Individualism and the mental. In P. French, T. Uehling and H. Wettstein (eds.). *Studies in Metaphysics: Midwest Studies in Philosophy*, IV, Minneapolis, University of Minnesota Press.
- Clark, A. and Prinz, J. (2004) Putting Concepts to Work: Some Thoughts for the Twentyfirst Century. *Mind and Language* vol. 19, n°1.
- Clark, H. (1996) *Using Language*, Cambridge (Mass.): MIT Press.
- Fodor, J. (1998) *Concepts. Where Cognitive Science Went Wrong*. Oxford: Oxford University Press.
- (2004A) Having Concepts: a Brief Refutation of the Twentieth Century. *Mind and Language* vol. 19, n°1.
- (2004B) “Reply to Commentators” *Mind and Language* vol. 19, n°1.
- Fodor, J. and Lepore, E. (1992) *Holism. A Shopper’s Guide*. Oxford: Blackwell.
- Millikan, R. (2000). *On Clear and Confused Ideas. An Essay on Substance Concepts*. Cambridge (UK): Cambridge University Press.
- Murphy, G. (2002). *The Big Book of Concepts*. Cambridge (Mass.), MIT Press.
- Peacocke, C. (1992). *A Study of Concepts*. Cambridge (Mass.), MIT Press.
- Prinz, J. 2003 *Furnishing the Mind. Concepts and Their Perceptual Basis*. Cambridge (Mass.): MIT Press.
- Putnam, H. (1975). *The Meaning of “Meaning”*. In K. Gunderson (ed.), *Language, Mind and Knowledge. Minnesota Studies in the Philosophy of Science* vol. 7, Minneapolis: Univ. of Minnesota Press.