

# **Another Linguistic Turn?**

## **Review of *Language, Thought and Consciousness: An Essay in Philosophical Psychology* by Peter Carruthers**

**Lawrence Kaye**

Philosophy Department  
University of Massachusetts at Boston  
100 Morrissey Blvd.  
Boston, MA, 02125  
USA

kaye@umbsky.cc.umb.edu

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**REVIEW OF:** *Language, Thought and Consciousness: An Essay in Philosophical Psychology* by Peter Carruthers, Cambridge University Press, (1996) hbk., xv + 279 pp. + ref., index; ISBN: 0-521-48158-9.

Carruthers' book is an impressive attempt at explaining consciousness via the role of language in cognition. His central thesis about linguistic thought is that occurrent human thought occurs in natural, spoken languages. And the central thesis about consciousness is that a thought's being conscious is a matter of its being "reflexively available" to further thinking -- roughly, that we are able to have thoughts about the original thought. Since it is occurrent thought that typically allows us to have thoughts about thoughts, natural language thoughts are, in Carruthers' view, an essential part of human consciousness -- it is their representational ability that makes us conscious.

This is serious big-picture theorizing; Carruthers draws on a number of contemporary views in the philosophy of mind as well as on research in cognitive psychology (developmental work, in particular) and weaves these views and results into a complex theory of the architecture of central cognition and of the relationship of this architecture to the nature of consciousness. Cognitive scientists who are annoyed by the obsessively detailed analysis that philosophers often engage in or by our tendency to work

exclusively from the armchair, ignoring empirical research, will find this book reasonably free of both of these bad habits.

On the other hand, explaining consciousness is an incredibly difficult task; not surprisingly, Carruthers has failed at it. As I will discuss below, his theory of consciousness, as it stands, is clearly mistaken. However, I will also suggest that a redeveloped alternative to the reflexive theory may succeed in explaining a major aspect of consciousness, and that would be no small matter.

## 1. The Language(s) Of Occurrent Thought

The first half of Carruthers' book is devoted to the development and defense of the view that some conscious thoughts (our "occurrent thoughts" or "inner talkings to ourselves") actually occur in our natural, spoken languages (e.g., English). This is not a thesis about an exclusive medium of thought -- Carruthers is willing to accept that there is imagistic thought as well. Rather, he sees himself opposing Fodor's (1975) theory that there is an innate language of thought, viz., "mentalese".

According to Carruthers, Fodor's view embodies the "communicative" conception of spoken language, namely that languages such as English merely serve to communicate meanings that are primarily expressed and contained in thoughts of a different medium -- mentalese for Fodor. By contrast, what Carruthers calls the "cognitive" conception of language is the view that spoken languages not only serve to communicate the contents of thoughts, but that they also typically *express* thoughts -- that thoughts as well as utterances occur in these languages.

His defense of the cognitive view proceeds through an appeal to introspective evidence -- he argues, correctly, that introspection tells us that our linguistic thoughts are expressed in natural languages and that there is no *prima facie* reason to reject this evidence. He then confronts Fodor's alternative mentalese theory. Here, the main line is that the natural language view is a preferable theory to the mentalese view. First, Carruthers attempts to show that Fodor's pro-mentalese arguments are either weak or indecisive. He then spends some time developing a semantic view for the mentalese hypothesis, but ultimately finds the resulting account unacceptable. Two possible semantic views for the spoken language theory are then presented, apparently demonstrating that the spoken language theory is preferable to the mentalese theory.

The entire line of argument in this part of the book is flawed, for a number of reasons. First and foremost, Fodor's mentalese theory is *not* meant to be a theory about conscious thought -- Fodor has, to my knowledge, remained mute on the issue of whether or not occurrent thoughts are in mentalese. Rather, the mentalese theory focuses on content and acquisition. Fodor maintains that aspects of thoughts such as complexity and compositionality require that thought be linguistic. But, he argues, the only model of concept acquisition that there is -- the empiricist reductive view -- is unworkable since

few concepts reduce to others. It follows that most of our concepts are innate, comprising an innate language of thought, viz., mentalese.<1>

Carruthers is apparently trying to group Fodor's view with other outlooks that hold that thought involves a non-linguistic medium, such as those who believe that thought is purely imagistic, or those philosophers (such as Searle) who think mental content is not language-like. But this grouping is highly misleading at best, for mentalese is supposed to be at least as powerful as any spoken language -- semantically, it is *the* fundamental language. Fodor thus holds a very cognitive view of *one* language, viz., mentalese. Actually, the communicative vs. cognitive conceptions of language are better illustrated by contrasting the predominant view of analytic philosophy, namely, that natural languages exist independently of individual speakers (in communities, or platonically, perhaps) with the view of Chomsky (1984) who sees language as primarily determined by each speaker's linguistic knowledge; communication and "language behaviors" are viewed as secondary aspects of language.

Moreover, Carruthers appears to simply miss Fodor's main argument for mentalese. He reads Fodor as arguing that concept acquisition must be a matter of explicit hypothesis formation and testing. Fodor does say this, but only because he thinks that hypothesis testing is the only viable model of learning. Rather, the point of the argument is to show that the only going model of concept acquisition requires conceptual reduction; and conceptual reduction notoriously fails. Carruthers suggests that concept acquisition can be a matter of acquiring practical skills "like riding a bicycle." (p. 67) Learning the meaning of a word is learning how to use it correctly. But the problem with this view is that concepts do not reduce to practical abilities. E.g., knowing the concept GOVERNMENT or ELECTRON does not appear to be a matter of having some set of government-related or electron-related abilities.<2> The point about non-reduction is just as problematic for a use theory of meaning.

What is really needed is a means of seeing how a theory of concept acquisition could not entail reduction. Lacking this, Carruthers must admit that mentalese may be required for semantic acquisition, thus making his account only a very weak alternative to Fodor's view, and hardly worth the communicative/cognitive contrast. Essentially, the result is a dispute about how *much* of cognition involves mentalese vs. spoken languages.<3>

There is also a serious misunderstanding of the ways in which Fodor, and mentalese theorists generally, can explain the semantics of spoken -- i.e., non-mentalese -- languages. Carruthers first examines the possibility that Fodor will endorse a Gricean account, on which the meanings of utterances are conceptually reduced to intentions to produce beliefs in audiences. After criticizing and rejecting this view, Carruthers considers Searle's account on which utterance meanings are conceptually reduced to intentions to express beliefs; he finds this "marriage of Fodor and Searle" acceptable. However, the entire discussion is wasted, since Fodor not only has not, but need not, endorse either Grice's or Searle's view, or any other view that conceptually reduces spoken language meanings to mental state meanings. Instead, Fodor is free to subscribe to an empirical connection view -- by this I have in mind the view that everyone holds of

second language acquisition. I.e., nobody thinks that if a native English speaker learns Japanese, then there must be some sort of philosophical, conceptual reduction of Japanese semantics to English semantics. Rather, we think that the speaker has learned a mapping of Japanese elements onto already known English semantics. It is up to empirical linguistics and psychology to determine exactly what is learned and how. Fodor is free to hold the same view of first language acquisition vis-a-vis mentalese semantics, leaving the inquiry to empirical cognitive science.

Yet another set of serious misunderstandings occur when Carruthers gets around to considering Fodor's mentalese hypothesis together with Fodor's covariance semantics.<4> Carruthers rejects the combination of these views on the grounds that the covariance semantics is unable to account for misrepresentation -- a well-known and widely discussed criticism of the covariance view -- and instead endorses his preferred spoken language account in conjunction with either a conceptual role semantics or Peacocke's (1992) canonical acceptance condition semantics -- two different sorts of relational semantics. Carruthers acknowledges that Fodor, in turn, rejects a relational account of meaning because of the problem of holism (the "problem of holism" -- Carruthers' phrase -- being that if belief content (meaning) is holistically determined then no two people will ever share any of the same beliefs), but seems to think that holism (for the relational theory) can be addressed more readily than misrepresentation (for the covariance theory), thus making his combination of views preferable to Fodor's set of views.

Now, perhaps the most serious error here is Carruthers' assumption that the covariance semantics is somehow required by the mentalese theory. The truth is that Fodor simply favors both of these accounts. But it seems consistent to endorse a mentalese view together with a conceptual role semantics (i.e., roles of mentalese elements) or to endorse a spoken language view together with a covariance semantics.<5> Thus, a critique of covariance semantics -- and Carruthers adds little to the standard criticisms -- does nothing towards supporting the spoken language view.

Carruthers also fails to see the importance of the analyticity problem for a relational semantics. The (neo-)Quinean line is that if a relational (e.g., conceptual role) theory is to be non-holistic, then we need an analytic/synthetic distinction, but there is none, so relational theories must be holistic. Carruthers responds that we can sort out the analytic vs. the synthetic by using "standard philosophical thought experiments." (p. 131) One trouble with this approach is that intuitions notoriously vary between speakers, and some cases appear to be indeterminate. Worse, though, is the fact that if a relational semantics is to be non-holistic,<6> then there must be account of why only some relations count as semantic, viz., an account of what *makes* the semantic relations semantic. Intuitions may point to some relations and not others, but until an explanation of why just those relations are the semantic ones is given, the view has not metaphysically distinguished semantic from non-semantic relations. A successful account would provide what we might term deep metaphysical reasons why only some relations are semantic. That has proven to be an extremely daunting task; simply saying that a relational view could be non-holistic is mere hand-waving until a metaphysically deep account is given.

These confusions render Carruthers development of the "language" part of the book (Chapters 2-4) unsatisfactory. Since he does not present a (plausible) non-nativist view of concept acquisition, and does not add anything new in regard to the search for a semantics for thought, it would have been better to simply rest the case for the spoken language view of thought on introspection. And this evidence does indeed provide a strong case for the view that our thoughts are expressed in our spoken languages.

## 2. Consciousness

In the second half of the book (Chapters 5-8), Carruthers turns to the explanation of consciousness. Chapters 5 and 6 consist of critical presentations of alternative accounts. The results are mixed. Carruthers' brief discussion of dualism under the title "Cartesianism" is an obvious strawman that no philosopher, certainly not Descartes, has ever held. The Cartesian is saddled with the view that conscious states are undefined semantic primitives. Of course, such an account fails to explain consciousness! But that hardly shows that all varieties of dualistic views of consciousness are false.

On the other hand, there is a particularly clear and concise response to Dennett's (1991) critique of the "Cartesian Theatre" view of consciousness (pp. 183 ff.) And there is a nice critical review of different varieties of higher-order thought theories of consciousness.

However, there is little, if any, discussion of (broad) explanations of consciousness by psychologists. But it seems clear that the explanation of consciousness is something that psychologists as well as philosophers are engaged in -- indeed, Carruthers' model of cognitive architecture (Chapter 8) is by his own admission an exercise in speculative empirical psychology. In particular, it would have been useful to see an extended discussion of Baars (1988) view here.

The somewhat narrow focus on philosophical views also causes Carruthers to miss a major contrast in approaches; while most philosophical views tend to be representationalistic, where to have a conscious thought X is to represent the representation of X, most psychological views tend to favor an access model, where having a conscious thought X is a matter of access to the representation of X. In fact, as I will argue shortly, Carruthers view actually wavers between a representational and an access model -- a more thorough discussion of the latter would thus have been quite useful. <7>

Another major complaint that readers may have with Carruthers approach to consciousness is that a fair amount of his discussion rests on an initial case, the "absent-minded driver" that, rather than being a bit of pure evidence, involves a very biased, theoretical treatment that stacks the deck in favor of a linguistic judgment view:

When driving home over a route I know well, for example, I will often pay no conscious heed to what I am doing on the road. Instead, I will be thinking hard about some problem

at work, or fantasising about my summer holiday. In such cases it is common that I should then -- somewhat unnervingly -- 'come to', with a sudden realisation that I have not the slightest idea what I have been seeing or physically doing for some minutes past. Yet I surely must have been seeing, or I should have crashed the car. Indeed, my passenger sitting next to me may correctly report that I saw the vehicle double-parked at the side of the road, since I deftly turned the wheel to avoid it. Yet I was not conscious of seeing it, either at the time or later in memory. My perception of that vehicle was not a conscious one. (p. 135)

Now, it is simply not clear to me that most people share the type of experience that Carruthers describes -- I think, rather, that this is a great exaggeration of a lesser phenomenon -- we often do things without recalling over very brief spans; yet, swerving to avoid a car is something that would snap most of us back to awareness (remind me never to ride with this guy!).

But the real problem here is that the claim that such experiences are non-conscious invokes a theoretical view: only states that we pass (linguistic) judgement about or states that are available to judgement are conscious. That is a theoretical description since there is at least one alternative account that does not imply that the above- described states are non-conscious. Specifically, Carruthers description overlooks a major concept in psychological theory, the idea of attention. An alternative account, at its simplest, might be that while Carruthers was conscious in some minimal sense of what he was seeing -- i.e., he was having qualitative perceptual experiences and responding to them -- his attention was entirely focused on other matters, and only these other matters were stored in memory. (It is likely that attention is required for memory storage.) The reason such an account might be preferable to Carruthers' is that we are sometimes only vaguely aware of experiences or aspects of our visual field (e.g., peripheral happenings) and can draw no clear judgments about them. Thus, I might remember seeing a car ahead of me but not recall its make or color. Did I consciously experience a car of no determinate color or shape? Of course not! Rather, it seems preferable to say that I was not attending to these features and thus don't remember them, even though I did have a qualitative (and thus, in some sense, conscious) perception of them.

### **3. Reflexive Thinking Theory**

Let us turn, then, to Carruthers own theory of consciousness, which he terms the "reflexive thinking theory." The basic idea is that mental states are conscious in virtue of the fact that these states are available to further acts of thinking, and these further thoughts are also available to further acts of thinking. By this Carruthers seems to mean that we are potentially able to have occurrent (i.e., linguistic) thoughts about conscious mental states, and thoughts about the occurrent thoughts, etc. [8](#) Specifically, he proposes that conscious mental states (or "records of them") are held in a short term memory buffer that allows these states to be the object of further thoughts.

One key feature of the view is the idea that such thoughts about thoughts are merely potential. This avoids problems with representational overload -- there's surely not enough space in cognition to house all the needed thoughts about all of our conscious states, so it is clearly unreasonable to theorize that thoughts about thoughts must be actual in order to yield consciousness. Incorporating this potentiality makes Carruthers' theory -- although he does not exactly put it thus -- an interesting combination of representational (or "second-order") models and access models of consciousness: It is the access to potential representation by occurrent thought that makes mental states conscious.

The reflexive theory has several strong and surprising implications. First, since it requires representations of thoughts, the view implies that all conscious beings must have a theory of mind, that is they must have the conceptual resources for representing the to-be-conscious mental states, such as the concepts of thought, belief or experience. Carruthers claims that this is not a problem for his account, since it is independently plausible that a theory of mind is innate in humans. However, it is clear that animals lack such a theory, and evidence suggests that the theory has not yet been mastered by (or has not fully emerged in) infants, so Carruthers concludes that animals and infants are not conscious.

Second, the reflexive view together with the theory that occurrent thought occurs in spoken languages implies that spoken language is essential for human consciousness since without the representational role of spoken language occurrent thought, we would not have conscious mental states.

As I will now show, however, the reflexive theory as presented is actually ambiguous between two different views, only one of which is plausible. And that version of the reflexive view does not have any of the above implications.

Consider what Carruthers says about a sample case of a conscious perceptual experience (of a glass):... my perceptual state makes it possible for me to entertain indexical thoughts about the glass (for example, 'that glass is nearly empty'), and also thoughts about my experience of the glass (for example, 'It seems to me rather as if that glass were made of plastic") (p. 195)

The problem here is that these are not both examples of thoughts about thoughts -- indeed, neither may be, as I will explain shortly. The first thought contains an indexical element that is tied to the original perception, but it is not *about* that perception. "That glass" refers not to a mental state, but to the thing the first (perceptual) state referred to, viz., the glass. Rather than being a thought about a thought, this is a thought that uses or borrows part of the content of the first thought. (And such content borrowing need not be confined to the subjects of thoughts, for instance on seeing a glass, one might think "that's a nice shape for a glass" referring to one of the properties represented by the perception.)

So on Carruthers' presentation of his theory, there are two distinct types of availability to further acts of thinking, first, indexical content ties (which may include duplication of content) and second, representations of the original thoughts. It would appear that one could not have the second without the first, since to represent a thought would seem to

require the ability to access and duplicate the content (e.g., "my belief that p" requires access to the content p). However, it also seems clear that one could have the first without the second -- in particular, it appears that a being that lacked the concepts of thought types (e.g., belief, perception, etc.) could still have the indexical ability.

What we must ask then is if the representational ability is required for consciousness, or if it is instead plausible to think that only the indexical ability is needed in order to have conscious thought. Carruthers' own perceptual case supports the latter. For consider, first, that his example of a thought about the experience is not clearly a representation of the perceptual state. Instead, it appears to be a cautious inference from the perceptual state; as Austin long ago taught us, "it seems" is a way of expressing uncertainty, over an inferred belief in this case. Or, if the original perceptual state has the content "glass made of plastic" then this example is rather a duplication of the original content, translated into linguistic form.

A genuine representation of the perception would be something like "I'm now having a perceptual experience of a glass", or even better, "I'm now experiencing a visual image of a glass." The trouble with these examples, though, is that they are not the sort of thoughts that ordinary people have -- notions like "perceptual experience" and "visual image" are theoretical notions from philosophical or psychological views of perception. In particular, these reflect the Lockean, indirect theory of perception which says that our primary perceptual experience is of perceptual (e.g., imagistic) representations. However, notoriously, most ordinary folk are naive realists who believe (falsely) that in perception they are directly aware of the external world. And many philosophers (and perhaps many readers) also hold a similar (dubious) view.[9](#) Such persons would appear to either not have the appropriate concepts for representing their perceptual states, or else have them (probably in a much less sophisticated form than the concepts of the indirect theory) but have beliefs that prevent them from using the concepts to represent their perceptual states. Yet this surely does not make their perceptions unconscious! So in order for the reflexive theory to have any chance of being correct for conscious perceptual states, it must be the indexical ability and not the representational one that constitutes consciousness.

A similar, albeit weaker, point can be made about occurrent thoughts. Consider someone such as Paul Churchland (or John B. Watson) who does not believe in thoughts. One wants to say that they have thoughts, including conscious thoughts, even though they do not believe it. But sincere disbelief in thoughts presumably means refraining from representing one's thoughts as such. Now, it may be argued that such people actually do have the potential to potentially have such representation; yet, it is difficult to see how such potential -- potential potential, in effect -- would matter since it is blocked or undermined by their theoretical beliefs. So if such a person does indeed have conscious occurrent thoughts, the obvious explanation is that it is the potential for reflexive content indexicality rather than the potential for reflexive representation that makes it so.

It also seems clear that qualitative thoughts may be conscious without having any basis for linguistic representation of them. Here is a nice experiment for readers to try -- close

your eyes and shine a bright light on your eyelids. You will (visually) experience *orange* and nothing but *orange*. Now, those of us familiar with the epistemological tradition in philosophy may describe this as "having an orange experience" or, perhaps "orange sense-data now" but clearly most ordinary people are not inclined to make such judgments -- again, apparently, largely because they both lack such concepts and do not know how to explain the workings of perception. Yet it is extremely obvious that no such judgement capability -- no such concepts as (LOCKEAN) EXPERIENCE or SENSE-DATA are required in order to have the conscious orange experience in question. Examples abound for the other senses as well -- people frequently find it extraordinarily difficult to describe a certain bodily sensation ("kind of like a pulling twinge...or something like that..."), sounds, tastes, odors, and kinaesthetic sensations. But it certainly does not follow that the experiences of these qualities are not conscious. Thus, the linguistic representation version of the reflexive theory would appear to be simply false.<10>

This is not to say that we do not have the ability to represent our thoughts, and to represent linguistically many of the qualities presented in our representations. Rather, I am arguing that this ability is not what makes thoughts conscious, but instead it is simply the potential of indexical reflexive thinking that makes for consciousness. And if this is right, then Carruthers' surprising conclusions about consciousness are undermined. For the moment, let us just consider his claim that infants and animals are not conscious. While it is not plausible to think that they have linguistic representational abilities or a developed theory of mental states, it does seem reasonable to think that they have the ability to hold thoughts in short-term memory. And while it is not clear exactly how indexicality might work with imagistic states, still, it seems that there is nothing in principle to rule out indexicality, and more generally, content duplication, in beings without language. For instance, the image of the glass in front of you might be copied and used in a depiction of grasping the glass, which might in turn be used for guiding actual grasping of the glass. So it seems that (just as all the rest of us believe) infants and animals *are* conscious after all, albeit in a much less sophisticated way than adult humans are.

Carruthers also makes the bold claim that his reflexive thinking theory "can explain the subjective feeling of experience", (p. 217) i.e., it can explain "phenomenal consciousness" or "qualia". His idea is that for qualitative states, e.g., the redness of perceptual experience, to be conscious, we must have recognitional concepts of those subjective qualities, which is required by the representational version of the reflexive thinking theory. So to be aware of the quality of redness is to have a perceptual (e.g., imagistic) representation of redness and then represent it as a state that carries information about redness. Carruthers' opts for a purely relational (functionalist) account of the *property* of the representation:

When I recognize in myself an experience as of red, what I recognize is, in fact, a perceptual state whose normal cause is worldly redness, and which underpins, in turn, my capacity to recognise, and to act differentially upon, red objects. (p. 214)

But this is, at best, a highly controversial view, on which color experience are in our heads, and colors are the states of the world which regularly cause associated experiences. There is, however, a strong case against thinking that there are metaphysical properties such as "redness" in the world, or against any other sort of dispositional account of color, for that matter (cf. Hardin, 1993).

Moreover, Carruthers has not explained the subjectivity of experience because as we have seen the reflexive theory is plausible only as a non-representational, purely indexical view. But the indexical view does *not* imply that we need a recognitional concept of, e.g., the concept of redness in order to be conscious of redness. Indeed, the above orange/light example suggests that no linguistic concept of orange experience is needed in order to have this conscious experience. And, there is thus no reason against thinking that animals and infants also have qualia and thus subjective experience.

So Carruthers has failed to explain subjective experience -- human or otherwise, and has thus at best only explained part of consciousness. But this is hardly a complete failure. First, it appears that the indexical version of the reflexive theory is a plausible candidate for explaining one aspect of consciousness, roughly, the informational aspect. And second, it appears that the model of cognitive architecture that Carruthers has assembled from empirical psychology and introspection, including the innate theory of mind, spoken language occurrent thought, and the ability to have both reflexive indexicality and representation, does have a lot to offer towards partially explaining what it's like to be a (conscious) human, even though the qualitative aspect of consciousness has not been explained. And moreover, Carruthers' considerations can help us see how conscious experience will be substantially different in beings without language or representational reflexivity. All of these are extremely important contributions to a theory of consciousness, assuming a better- developed version of the indexical reflexivity model can stand up to critical evaluation.

## 4. The Thesis of Natural Necessity

Carruthers does not see the reflexive theory as his principal result. Rather, his main conclusion is what he calls the thesis of natural necessity, which weaves together the two main strands of the book:

Some human conscious thinking (viz. conscious propositional thinking) is such that, of natural necessity, it involves public language, in virtue of the given architecture of human cognition together with causal laws. (p. 252)[11](#)

The idea is that, given the fact that the medium of occurrent thought is public (spoken) language, and given the reflexive theory's requirement (in Carruthers' version) of representational potential, then since many propositional thoughts require language for their expression, such thoughts will also require language, viz. spoken language, in order to be potentially represented and thus conscious.

We can, however, dispense with this claim fairly quickly. First, it can reasonably be called misleading. By natural necessity, Carruthers does not mean the sort of conceptual necessity that philosophers are usually seeking to uncover, e.g., that necessarily if one knows  $p$  then  $p$  is true. Rather, this is the same sort of necessity that is supposed to attach to all physical, e.g., scientific, laws, such as  $f=ma$ . When one further adds the constraint that this necessity holds only in virtue of the fact that the primary representational system for complex contents in humans is language, then the thesis is rather like saying, given the type of organs that we have, it is naturally necessary that the stomach is where digestion occurs. Better to just state the thesis and not add the necessity claim at all -- adding it simply invites the confusion with a stronger thesis that we might expect philosophers to make, viz., that for any being whatsoever to be conscious, public language is required.

Second, this thesis appears to be false on the purely indexical version of the reflexive theory. For to be conscious on that view is to have the thought in question available for further thoughts about the same content or parts of it, e.g., by indexical connection. But it is simply not clear that language is required for this to occur -- there is nothing to support that claim. Now, it may be true, as Fodor has argued, that many of our thoughts require language for their expression, owing to the complexity to their contents and the like. But the indexical version of the reflexive view does nothing to uphold or further develop this point.

Therefore, even though both the thesis that thoughts occur in spoken languages and (some version of) the reflexive theory may be true, they may be relatively independent truths that are not at all intimately related in the way that Carruthers thinks they are. In particular, the connection between occurrent linguistic thought and consciousness may simply be that much conscious human thought occurs in spoken languages because that is the dominant medium for thinking in humans.

## 5. Conclusion

It is not easy to fully assess Carruthers' book. As I have said, it is certainly an impressive project, and along the way there are a number of well-developed and worthwhile considerations, including reviews and application of developmental research to the issue of what type of language we think in, a good summative and critical review of representational models of consciousness and of Dennett's work on consciousness, and a plausible, speculative (partial) model of cognitive architecture. And there is the reflexive theory itself, although as I have argued, it must be developed in a way that is different from Carruthers' version. Unfortunately, as I have tried to show here, the book also contains a minefield of misunderstandings, and the ultimate conclusion -- the thesis of natural necessity -- is probably false.

In a modest moment at the start of the book, Carruthers admits that "Roughly speaking, the overall message of the book has the form, 'Hey!, Let's have a look over here! There's

a view which hasn't been taken as seriously as it should be lately." (p. 1) We can certainly credit him with pointing us in the general direction of some interesting views.

## Notes

<1>See Kaye (1993) for a more detailed explication of the argument.

<2> See Fodor's (1981) clever discussion of PAINT, pp. 285 ff.

<3>In Kaye (1993 and 1995) I develop a much stronger reply to Fodor by showing how a non-reductive theory is possible, in principle. This allows for the view that the only languages involved in linguistic thought are acquired, spoken languages. The result is a genuinely cognitive view of spoken language, since on this account spoken languages are the medium for all of the complex, high-level data- structures of thought.

<4>Covariance semantic theories (such as Fodor's) identify the meaning of a mental symbol with its lawful co-occurrence with things in the immediate environment. For instance, an extremely simple form of the view would say that "DOG" refers to dogs just in case a person tokens this symbol when and only when dogs are present. By contrast, relational semantic theories identify the meaning of a mental symbol with its relations to other mental states, such as its role within the full set of mental symbols (as in conceptual role semantics) or its relations to experiential states (as in Peacocke's semantics).

<5>The canonical acceptance view won't work at all, certainly not with a cognitive science oriented view, since 1) it is non- naturalistic and 2) it not only fails to account for the meanings of non-linguistic thoughts, it seems to draw upon the semantics of those states, e.g., the contents of "experiences" -- viz., imagistic perceptual representations. (Peacocke calls them "non-conceptualized" experiences, but this is surely not how current perceptual theories explain pre-conscious processing -- a host of representational states -- i.e., states with representational content -- precede any sort of conscious perceptual awareness.)

<6>Carruthers calls such views "weakly-holistic", which is confusing- -what he means is that the semantics is relational but not holistic.

<7>Carruthers considers Kirk's (1992) philosophically oriented access view and dismisses it on the grounds that the conditions Kirk sets on conscious states do not require that such states have qualitative feel, yet, Carruthers argues, that is surely the mark of conscious states -- there is something that it is like to have them. However, it does not follow that access plays no part whatsoever in consciousness. And, as I will show shortly, Carruthers own view does not explain qualitative feel, and is thus not a complete view of consciousness either. In fact, as we will also see, Carruthers' reflexive thinking theory is plausible only when redeveloped as (roughly) a pure access view.

<8>It's not that it has to be linguistic thought -- rather, Carruthers simply thinks that's how human cognition happens to be designed.

<9>In unpublished writings, I attempt to show that contemporary (Marrish) psychological theories of vision strongly support an indirect (roughly Lockean) view of perception. Obviously, this is not the place to present these arguments.

<10>Carruthers' presentation of the reflexive thinking theory also includes an explanation of what it takes to make a standing belief conscious, namely that it is "disposed to emerge as an act of occurrent conscious thinking with the very same content." (p. 195) But this account is clearly mistaken -- it ignores discussions by Lycan (1988, chapter 3) and Kaye (1994) about the difficulty with dispositional models of belief and the need for careful refinement. Many of a person's standing beliefs are about things that they rarely, if ever, think about -- so they are not disposed to think of them, if "disposed to emerge" refers to frequency. Or, if it doesn't, then Carruthers' view will end up counting many newly acquired beliefs as already standing beliefs, since people are disposed to *acquire* certain beliefs in certain circumstances. A better view, though probably still not quite right, is that a standing-state belief is conscious if it is disposed to emerge and be judged true, and has already been consciously entertained and judged true at some previous time, and has never been entertained and judged false in between.

<11>This is the weaker of Carruthers' two versions of the thesis -- there is no point in looking at the stronger one when the weaker one can be shown to fail.

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