

The Animal Concepts Debate: A Metaphilosophical Take

Josefa Toribio

RESUMEN

En este artículo considero el debate sobre los conceptos de los animales no humanos desde una perspectiva metafilosófica. Comparo ejemplares de puntos de vista sobre los conceptos y de posesión de los mismos plenos y austeros. Una respuesta deflacionista a esos puntos de vista mantiene que tanto el teórico austero como el pleno hacen afirmaciones cuando, respectivamente, afirman y niegan que “los animales no humanos tienen conceptos”. Argumentaré que la respuesta deflacionista está, usando una analogía con el debate sobre el contenido no conceptual putativo de la experiencia perceptiva, fuera de lugar. El argumento gira en torno al tipo de explicación intencional que puede apoyar el punto de vista austero sobre la posesión de los conceptos. Para que la respuesta deflacionista fuera defendible, los que apoyan el punto de vista austero necesitarían tener compromisos sustancialmente más débiles con el poder explicativo de sus explicaciones de los conceptos y de su posesión de los que realmente tienen.

PALABRAS CLAVE: *animales no humanos; deflacionismo; contenido no conceptual.*

ABSTRACT

In this paper I approach the debate over non-human animals' concepts from a metaphilosophical perspective. I compare exemplars of a full-fledged and an austere view of concepts and concept possession. A deflationist response to these views maintains that the austere and the full-fledged theorist each makes claims that are true when they, respectively, assert and deny 'nonhuman animals have concepts'. I will argue that the deflationist response is misplaced, using an analogy with the debate over the putative non-conceptual content of perceptual experience. The argument turns on the type of intentional explanation that the austere view on concept possession can support. For the deflationist response to be sustainable, adherents of the austere view would need to have substantially weaker commitments to the explanatory power of their account of concepts and concept possession than, in fact, they do.

KEYWORDS: *Non-Human Animals; Deflationism; Non-Conceptual Content.*

I. INTRODUCTION

In the research programmes that fuel the field of non-human animal cognition, rival views are regarded as tentative hypothesis about the nature and features of nonhuman animals' minds, and are weighed up by usual criteria of empirical tractability. That is to say, conceptual analysis has not been the primary methodology. Match with ordinary practice and folk intuitions don't play an important role in this assessment, as there is a huge discrepancy in the pre-theoretical insights we have about which species could appropriately be the subjects of propositional attitudes, the kind of propositional attitudes that seem right to ascribe to members of those species, and the propositional content that could justifiably follow the verbs of such propositional attitudes. Many people feel inclined to ascribe beliefs to e.g. their cats and dogs, but not to their pet fish or the ants in their gardens. Some are willing to grant that e.g. their dog *knows* that the bone is buried under the tree, but would be less persuaded to think that their dog *fears* that the bone is buried there. And again, although it may sound reasonable to claim that a dog believes that its master is at the door, it doesn't seem warranted to claim that a dog knows that its master will return the day after tomorrow [Wittgenstein, (1967) §174]. Pre-theoretical intuitions thus seem to be ill-suited as contrastive criteria for theory choice with regard to the mental life of nonhuman animals (henceforth animals).

When addressing the question of whether animals can be in intentional states of the kind we regularly ascribe to humans and, in particular, when considering the question of whether animals have concepts, all the weight of the theory choice falls on the criteria used to define concept and concept possession. Rationalist minded philosophers, like Davidson (1985), deny on purely *a priori* grounds that animals can have any concepts, insofar as, in order to possess a concept, they argue, one should be the kind of organism that can hold propositional attitudes, and propositional attitudes are governed by criteria of normativity and holism that preclude their ascription to non-linguistic creatures. At the other end of the spectrum, empiricists like Hume (1968, 176), and cognitive ethologists, like Griffin (1992), hold that the differences between the concepts that both human and nonhuman animals do possess are due just to their different perceptual systems.

Given the tight connection between language and concepts, the plethora of empirical results, and the lack of a determinate verdict with regard to their interpretation, the worry is that the question of whether animals possess concepts may not be a substantive question. This seems to be the view of e.g. Chater and Heyes, who after examining different theories of concepts drawn from philosophy, cognitive psychology, comparative psychology and cognitive ethology, conclude: "... we simply do not know how to turn the claim

that nonlinguistic animals have concepts into an empirically substantive question” [Chater and Heyes (1994), pp. 237].

The argument behind Chater and Heyes’ view can be recast in a metalinguistic form along the following lines: there is no unique proposition that the thesis ‘animals possess concepts’ (hereafter *C*) expresses. Some of *C*’s semantic candidates make *C* account for the close relationship between language and concepts in humans; some turn *C* into a claim applicable to animals, and some, but not others, make *C* express a proposition that is empirically tractable by behavioural methods. But there is no single semantic candidate for *C* that can simultaneously fulfil these criteria, so the debate is useless [cf. Chater and Heyes (1994), p. 210].

Chater and Heyes’ position illustrates a particular kind of deflationism on the subject of animals’ concepts. The deflationist that interests me here is, to be precise, someone who believes that *C* expresses different propositions in the mouth of different theorists, and that the theorist who asserts *C* and the theorist who denies it each makes claims that are true given what they mean by *C*. Hence, the deflationist concludes, the dispute between those who affirm that animals possess concepts and those who deny it is just a verbal dispute.

By contrast, I will argue that, even if it is true that *C* can mean something different when used by different theorists, it doesn’t follow that all the semantic candidates for *C* are equally appropriate. We do have reasons to doubt that the propositions expressed by affirming and denying *C* are both true. Hence it would be a mistake to treat the dispute as merely verbal. In addressing the question of whether animals possess concepts, I contend, we engage in a productive and philosophically illuminating task.

It is instructive to compare the debate over the possession of concepts by animals with a recent discussion launched over the case of perceptual (non)–conceptualism – one that also invites a deflationist reading. I shall draw on a particular aspect of this discussion to set up my argument against the deflationist’s view on the issue of animals’ concepts. I will not try to settle either issue here. My approach to the topic is metaphilosophical. My aims are to, first, show that it is a mistake to view the animal concepts debate as turning on a merely verbal dispute and, second, to clarify just what is at stake when discussing the topic of concept possession in animals.

II. THREE APPROACHES: FULL-FLEDGED, AUSTERE AND DEFLATIONIST

In this section, I outline a version of each of the two main types of theories of concepts. Theories of the first type view concepts as abstract entities. I’ll refer to them as *full-fledged* theories. Neo-Fregean accounts of concepts and concept possession are good examples of full-fledged theories. On

a full-fledged view of concepts, animals do not possess concepts. Concepts are, within theories of the second type, mental representations. I reserve the term ‘austere’ to refer to this second class of theories.¹ Austere theories are popular among empiricist philosophers, psychologists, cognitive ethologists and cognitive scientists, who defend the view that animals possess concepts.

Neo-Fregeans hold that (i) an account of concepts is an account of concept possession and (ii) that possessing a concept is an ability or set of complex abilities that the subject deploys whenever entertaining thoughts containing that concept. Peacocke’s Principle of Dependence is explicit in this respect: “[t]here can be nothing more to the nature of a concept than is determined by a correct account of the capacity of a thinker who has mastered the concept to have propositional attitudes to contents containing that concept” [Peacocke (1992), p. 5]. Concepts are understood as ability-types, and, hence as the objective, abstract, entities that the Fregean gloss requires. At the same time, there is nothing more to the nature of those ability-types than their instantiation in the form of the set of abilities a subject exercises when entertaining thoughts containing that concept. For example, the concept AND is just the ability to draw certain inferences (to be able to e.g. infer P from $P \& Q$). This is an ability that is shared by everyone who possesses the concept AND. Since it is shared, and thus independent of any single individual, it is abstract. Nonetheless, some creatures have this ability and some creatures don’t.² Concept possession, for the full-fledged theorist, is thought-based, and thought is governed by the principles that inform Evans’s (1982) Generality Constraint. Full-fledged theorists follow Evans in defending the idea that genuine instances of thinking are *necessarily* subject to the strong version of the Generality Constraint [see e.g., Davies (1992); McDowell, (1994); Peacocke, (1992, 2001)]. According to this version, the attribution to a subject of a contentful state of the form a is F commits us to the idea that the subject must be able to represent a as G and b as F , for any other object b and property G of which he has a conception [Evans (1982), p. 104, ft. 21].

Concept possession thus requires, for full-fledged theorists like Peacocke (1992), that the agent be capable of discerning objects from bags of features. The agent should be able to grasp objects in a distinct way – to think of an X as an X – and such ability should not depend upon contextual and perceptual information.³ Although not necessarily tied up with language, possessing a concept does require the possession of certain inferential abilities – the kind of inferential abilities the Generality Constraint makes explicit. Even those full-fledged theorists, who by relying on empirical results in developmental psychology and cognitive neuroscience argue that animals are capable of rudimentary non-linguistic thinking capacities, maintain that such non-linguistic thinking is non-conceptual [Peacocke (1992); see also Bermúdez (2003)]. On their view, concepts are constitutively tied to rationality and knowledge. Possessing a concept is linked to a special sensitivity to

rational and analytic relations that makes it appropriate to hold subjects accountable for their cognitive capacities. This notion of rationality is thus to be distinguished from the idea of context-bound, practical rationality, oriented toward intention and action.⁴

So much for full-fledged theories. The kind of austere theories that are theoretically interesting are those that conceive concept possession as something more than a set of discriminative abilities. For if possessing the concept *X* only required a creature's ability to behaviourally discriminate *X*'s from non-*X*'s – a position defended by some psychologists, for whom concepts may be said to be “essentially pattern-recognition devices” [Smith and Medin (1981), p. 8] – then nearly all animals would have concepts. On this untenably austere reading of ‘concept’ and ‘concept possession’, there wouldn't be much theoretical space for the opposite view, but just because the thesis that animals have concepts would be trivially true. The dispute becomes philosophically interesting only when austere theorists assume slightly more demanding views on concept possession while avoiding linking concepts and concept possession to the ability to have propositional attitudes. One of such proposals is Colin Allen's, for whom [Allen (1999), pp. 36-7]:

An organism *O* may reasonably be attributed a concept of *X* (e.g., TREE) whenever:

- (i) *O* systematically discriminates some *X*s from some non-*X*s; and
- (ii) *O* is capable of detecting some of its own discrimination errors between *X*s and non-*X*s; and
- (iii) *O* is capable of learning to better discriminate *X*s from non-*X*s as a consequence of its capacity (ii).

Austere theorists of this kind do not typically regard the Generality Constraint as even a contingent truth about conceptual thought. On their view, possessing concepts affords only restricted plasticity with regard to changes in environmental features and need be of no use for long-term planning or action. They view concepts as mental representations linked to forms of categorization that, while based on perceptual information, transcend particular perceptual stimuli. “Concepts are the mental representations constituting the nodes in such categorization schemes” [Allen (1999), p. 36]. Conditions on concept possession such as Allen's (i)-(iii) conditions are thus not to be considered as necessary and sufficient of what it is for an animal to possess a concept. They are provided as a guide for reasonable attribution. Allen insists that:

[t]he question of when it is reasonable to attribute a concept to an animal is a distinct question from that of what it means for an animal to possess a concept, just as the question of when it is reasonable to believe that someone is a murderer differs from the question of what it means to be a murderer. Meeting conditions (i)-(iii) above may provide good grounds for attributing concepts to animals, even though these conditions need be neither necessary nor sufficient for concept possession, just as finding a victim's blood on a pair of socks may provide good grounds for believing the sock owner to be a murderer even though blood on sock is neither a necessary nor sufficient condition for being a murderer [Allen (1999), p. 37].

Austere theorists thus believe that true psychological explanations of intentional behaviour need not be the result of having an independently specified set of concept-constitutive properties. Their argument can be viewed as an argument by inference to the best explanation.

These sketches of the two types of theory, though brief, will be sufficient for the argument that follows. The choice of exemplars for each type of theory is principled. On the one hand, using Peacocke's account over e.g. Davidson's (1985) or McDowell's (1994), as representative of full-fledged theories, I allow for a view on concepts and concept possession that is demanding enough to make the dispute philosophically interesting. Importantly though, Peacocke's account remains neutral on the issue of language and it allows for the attribution to animals of other intentional states that need not require the possession of concepts. Opting for Allen's position as an exemplar of the austere view illustrates, on the other hand, an empirically oriented view on concepts that makes direct contact with the literature on animal cognition, yet it challenges the idea that concept attribution can be based just on behavioural discriminative capacities.

The third contender in my analysis is, as mentioned in the introduction, a particular kind of deflationist, namely, someone who thinks that when the full-fledged theorist denies, and the austere theorist asserts *C* ('animals possess concepts'), each makes claims that are true given what they mean by *C*, and hence that the debate is merely verbal.

I will draw on a closely parallel debate in order to show that, while the deflationist option might seem superficially attractive, it is not, in fact, a viable contender.

III. A LESSON FROM A PARALLEL DEBATE: NON-CONCEPTUALISM

The animal concepts debate, as I conceive of it, has close parallels with some recent arguments concerning the content of perceptual experiences. That discussion also invites a deflationist view of the relevant kind. But

there, as I will go on to argue in the animal concepts debate, while superficially attractive, the deflationist option is in fact flawed.

Perceptual conceptualists [e.g. McDowell (1994)] defend the view that perceptual experiences and propositional attitudes such as beliefs have the same kind of (conceptual) content. This kind of content obeys Evans' (1982) Generality Constraint. Perceptual non-conceptualists, by contrast, maintain that the content of perceptual experiences does not obey the Generality Constraint and it is thus of a different (non-conceptual) kind. The content of a subject's perceptual experience – they usually argue – is non-conceptual because the subject need not possess the concepts involved in a correct characterization of such content.

The non-conceptualist's appeal to the relational properties of perceptual experiences as a way of arguing for the intrinsic (non-conceptual) nature of their content has been taken to show that perceptual non-conceptualism admits two different interpretations [Byrne (2005); Heck (2000); Speaks (2005)]. On the first interpretation or "content view" [Heck (2000)], also called "the absolute non-conceptualist thesis" [Speaks (2005)], being non-conceptual is considered a monadic property of the content itself – the property of not obeying the Generality Constraint. Non-conceptual content is taken to be, on this view, content of a genuinely different kind. On the second interpretation, by contrast, perceptual non-conceptualism is understood as a thesis about the relation that holds between the subject undergoing a perceptual experience and its content. On this version, labelled the 'state view' [Heck (2000)] or the 'relative non-conceptualist thesis' [Speaks (2005)], being non-conceptual is considered a dyadic property instantiated by a subject if and only if she need not possess, at the time of the experience, the concepts that a correct characterization of the content of the experience would involve. Being non-conceptual is thus understood, on the state view, as a property of the subject's states, as opposed to a property of their content.⁵

The distinction between state and content non-conceptualism raises the spectre of deflationism over the perceptual (non)-conceptualism debate.⁶ What seems to be most characteristic of perceptual non-conceptualism is the thesis that the subject need not possess the concepts involved in a relevant characterization of the content of her experiences. But thus formulated, the deflationist argues, the thesis says nothing about which kind of content that is. It thus seems consistent to hold that the content of perceptual experiences and the content of beliefs are of the same kind (i.e., conceptual), but that for a subject to undergo a perceptual experience, the subject need not possess the concepts involved in a correct characterization of such (conceptual) content.

Let *PC* be the sentence 'perceptual experiences have conceptual content'. Traditionally, the perceptual conceptualist [e.g., McDowell (1994)] would maintain that *PC* is true, while the perceptual non-conceptualist [e.g., Peacocke (1992)] would deny it. But the deflationist now claims that percep-

tual conceptualists and non-conceptualists express different propositions with *PC* and so, when the conceptualist asserts and the non-conceptualist denies *PC*, each says something that is true given what they mean by *PC*. The conceptualist is saying that the content of perceptual experiences is of the same kind as the content of beliefs, while the non-conceptualist claims that the subject need not possess the concepts that a relevant description of the content would involve. But those two claims, the deflationist argues, are not mutually inconsistent. Hence, the debate, thus construed, is merely verbal. Talking about beliefs and perceptual states, Speaks contends:

[D]o both kinds of states have conceptual content, or do both kinds of states have non-conceptual content? I suggest that we have been given no reason to regard this as anything other than an empty terminological question. Different theorists attach different connotations to the word “conceptual”; but it has no clear theoretical use as a description of kinds of content [Speaks (2005), p. 377].

Now, the deflationist position is clearly untenable here. It only works by picking out a semantic candidate for ‘conceptual content’ that is totally alien to the notion of conceptual content present in the traditional arguments of both sides of the perceptual (non)-conceptualism debate [e.g., Peacocke, (1992) and McDowell (1994)]. Traditional conceptualists and non-conceptualists are both neo-Fregean about *conceptual* content. The conceptual content of a thought, they agree, is a proposition, whose basic components are concepts – understood as ability types. Both conceptualists and non-conceptualists are the full-fledged theorists in the animals’ concepts discussion. When the perceptual non-conceptualist denies *PC*, he is thus claiming that the subject is not able to exercise, in experience, the kind of cognitive abilities that the Generality Constraint makes explicit. If the deflationist were to appeal to this neo-Fregean notion of content as the semantic candidate for ‘conceptual content’ in *PC*, his proposal would be incoherent, as he would be ascribing to the non-conceptualist the absurd proposition that a subject could exercise cognitive abilities that she doesn’t possess. To avoid the ascription to the non-conceptualist of such an obvious inconsistency, the deflationist opts out of the neo-Fregean account, and he does so by drawing on a notion of conceptual content that is cashed out as either functions from possible worlds to truth-values or Russellian propositions. But neither of these two notions are appropriate semantic candidates for ‘conceptual content’ in a context where we expect conceptual content to account for intentional behaviour.

The issue of how perception justifies belief and action lies at the heart of the perceptual (non)-conceptualism debate. That sort of discussion thus demands a notion of conceptual content that could reflect the different ways the subject grasps the world as being, so as to allow for true explanations of intentional behaviour. But both possible worlds semantics and Russellian

propositions fail to do this adequately. The reasons are familiar enough. Sets of possible worlds are seriously flawed as a way of capturing the fine-grained content of belief. Beliefs that are true in the same possible worlds, such as e.g. logically equivalent beliefs, need not play the same explanatory role with regard to a particular piece of intentional behaviour. Russellian propositions do not do any better. They also fall short of capturing the different *ways* a subject grasps the objects and properties of the world. They fail as explanatory tools of intentional behaviour due to our inability to use them to explain the so-called Frege cases.

The deflationist is thus right in claiming that there are semantic candidates for ‘conceptual content’ that make *PC* express a different proposition when used by the perceptual conceptualist and the non-conceptualist. But, if I am right about the inappropriateness of the only two semantic candidates that would do the deflationist’s job, it doesn’t follow that each makes claims that are true when they, respectively, affirm and deny *PC*. *A fortiori*, it doesn’t follow that the perceptual (non)-conceptualism debate is a merely verbal dispute.

As I have done here, if ever so briefly, we need to ascertain whether the semantic candidates behind the deflationist’s reading are up to the task, and that kind of discussion is philosophically illuminating. It allows us to judge whether there are independently motivated arguments that support one candidate over the other, given our explanatory aim. Of course, I am not trying to settle the issue in favour of either participant in this debate.⁷ My aim is just to clarify what is at stake, and what is at stake is definitely non-trivial, namely, to discuss which notion of content is more appropriate for providing true explanations of intentional behaviour.

IV. APPLYING THE LESSON TO THE ANIMAL CONCEPTS DEBATE

There is a clear parallelism between the perceptual (non)-conceptualism debate and the discussion over concept possession in animals. The deflationist claims that austere and full-fledged theorists express different propositions with *C*, the thesis ‘animals possess concepts’, and so, when the austere theorist asserts *C* and the full-fledged theorist denies *C*, each says something that is true given what they mean by *C*. The austere theorist says that animals construct categorization schemes that transcend perceptual stimuli, while the full-fledged theorist claims that animals do not instantiate ability-types of the kind the Generality Constraint makes explicit. But, presses the deflationist, those two claims are not mutually inconsistent. Hence, the debate, thus construed, is merely verbal. However, as in the perception case, the deflationist position is not sustainable, and for the same kind of reasons. In the (non)-conceptualism debate, the reason is that the deflationist’s semantic candidate

for ‘conceptual content’ that occurs in *PC* is alien to the Neo-Fregean notion of conceptual content present in the traditional debate – a notion that finds support within a semantic project independently motivated by the need to provide adequate explanations of intentional behaviour. In the animals concept debate, both full-fledged and austere theorists also come to the debate motivated by the need to offer an account of concepts and concept possession that allows us to provide adequate explanations of animals’ intentional behaviour, i.e., of why animals behave in the way they do. But the deflationist can only consider the austere theorist’s utterance of *C* (‘animals possess concepts’) as a true statement by relying on a semantic candidate for ‘concept’ and ‘concept possession’ that makes the account fall short of achieving the right explanatory target.

The weighing up of the two views sketched in Section II may not seem to be so straightforwardly about the explanatory suitability of their key notions, but such an appearance is deceptive. Although both full-fledged and austere theorists adopt views on concepts and concept possession that attempt to underwrite their explanatory role vis-à-vis intentional behaviour, the nature of such an explanation is quite different in each case and, I shall argue, inappropriate in the austere reading of *C* that the deflationist needs to make his case.

Clearly neither the full-fledged nor the austere view is without problems. But rather than getting submerged in the dialectical moves and counter-moves that an examination of the problems would involve, I will focus on two aspects of the austere position that strike me as decisive to show the inadequacy of the semantic candidate for ‘possess concepts’ that invites the deflationist reading of *C*.

Allen’s distinction between providing a set of necessary and sufficient conditions for concept possession and providing a set of reasonable attribution conditions is the first point worth considering. It is by now standard to claim that sets of necessary and sufficient conditions for almost anything are extremely difficult to come by. But the way this difficulty is brought to bear on the truth of *C* is highly suspicious. The comparison Allen relies on illustrates the fallacy in the move. It is true that, as he claims, the question of when it is reasonable to believe that someone is a murderer is different from the question of what it means to be a murderer. But surely one couldn’t *reasonably* believe that someone is a murderer without having a sense of what it *means* to be one. The analogy fails here because we do have strong intuitions about what makes someone a murderer, while we notoriously lack such clear pre-theoretical intuitions with regard to the attribution of concepts to animals.⁸

The second and more important point I want to make concerns how we are supposed to understand Allen’s second condition regarding the animal’s capacity to detect its own discrimination errors and the role that concept attribution plays vis-à-vis the animals’ behaviour. In the experimental results

he rehearses, pigs are shown to be able to discriminate between stimuli consisting of pairs of objects depending on whether the two objects are different or the same in shape, size, or colour. They learn to generalize to new sets of stimuli that consist both in novel pairs of objects that belong to the training set and pairs of new objects. The pigs are successful around 90% of the time. Pigs trained on this same/different task – Allen claims – show knowledge of their own errors, defined as follows: “[a]fter committing to a response but before any feedback was provided, some pigs would attempt to back away from the choice they had made. Analysis of 22 cases of the backout behavior showed that only one of these cases occurred after the pig made a correct choice” [Allen (1999), p. 38].

Allen’s idea is that this type of self-monitoring suggests the existence of an internal representation of some environmental property (*being the same* or *being different*) that is independent of the pigs’ perceptual representations at any time, and that such representation deserves to be regarded as a concept. But, could this kind of back-out behaviour be rightly considered evidence of error detection and proof of a particular kind of inferential ability? Could it not be just the result of some hard-wired behavioural patterns? Interestingly, finite-state automata are, for instance, extremely good at detecting grammatical errors in the absence of any feedback, but I take that we are not at all inclined to ascribe grammatical concepts to such parsers.

Be that as it may, a very important question still remains: what is it that we gain, from an explanatory point of view, if we granted Allen’s claim, that the pigs in the experiment do possess the concepts SAME and DIFFERENT? We would get, for sure, a quick route for a re-description of the pigs’ behaviour. We could now say that the pigs have the concepts SAME and DIFFERENT because they are successful at detecting some environmental properties as presented in a particular task and because the pigs have learnt to re-deploy their perceptual information about pairs of objects of the same (or different) colour, shape and size in such a way so as to form a mental representation that transcend such perceptual stimuli. Their success at this particular task *explains* that we can single out the concepts SAME and DIFFERENT as those concepts the pigs allegedly possess.

Yet, this is not the kind of explanatory job that we expect from concept ascription. Remember that the shared agenda, for full-fledged and austere theorists, is to provide an account of concepts and concept possession that could deliver adequate explanations of animals’ intentional behaviour. But such target requires the explanatory direction to be the reverse to the one we actually get from Allen’s account. The target is to invoke possession of the concepts X or Y to explain that our discriminative abilities are successful, not the other way around. That’s why, everyone, including Allen, agrees that “[i]t is possible to teach a human being to sort distributors from other parts of car engines based on a family resemblance between shapes of distributors.

But this ability would not be enough for us to want to say that the person has the concept of a distributor” [Allen & Hauser (1996), p. 51]. That’s also why Allen’s self-monitoring ability is so crucial in order to grant concept ascription to animals. But Allen’s appeal to this additional condition is highly deceptive. In talking about detection of error, Allen seems to suggest that the pigs are capable of engaging, not in the kind of inferential processes that could be characterized as mere forward-looking tuneability, but in a rather more complex inferential process, that of forward-looking tuneability by way of understanding reasons, i.e., by taking into consideration how the pigs take the world to be. Yet, nothing in this type of experiment warrants taking the notion of error-detection in this reflective sense. Austere accounts of concepts of the kind Allen’s illustrate are thus fine if we want to explain *why* the pig *has* a neural mechanism that produces tokens of the type SAME or DIFFERENT. But such account do not help much with what is really at issue in taking concept possession as an explanatory notion. They do not provide an answer to the question of *what it is* for the pig’s neural mechanism to count as being a concept with that specific content – i.e., what it is for the pig to appropriately count as a system that possesses a concept with that specific content.

The point I am trying to press for is not that austere theories are not explanatory or fruitful.⁹ My point is rather that their explanatory power doesn’t seem to be of the right kind, i.e., of the kind we would expect given the target shared by full-fledged and austere theorist. As I indicated earlier, both types of theories are independently motivated by the need to find adequate grounds for explaining intentional behaviour in terms of animals’ possession of concepts. Both types of theories look for an explanation of *why* animals behave the way they do. Intentional explanations of this kind would thus show how certain behaviours are the result of how the animal takes the world to be. However, the problem with austere views is that they deliver something slightly different, albeit perhaps useful, namely, they give us an explanation of how it is that an animal has come to behave the way it does. Explanations of this second kind, however, not only are different from the intended target, they cannot even be properly considered intentional explanations.

The deflationist is thus right in thinking that there are ways of understanding ‘possess concepts’ that make *C* express a different proposition when used by austere and full-fledged theorists. But, if my argument is sound, it doesn’t follow from this that each theorist makes claims that are true when they, respectively, affirm and deny *C*. Allen’s austere notion turns out to be too austere, because it cannot play the explanatory role that Allen, unwittingly, has demonstrated that he wants it to play via his condition (ii). Again, as in the perception case, I don’t pretend to completely have settled the issue here. My claim that what is most problematic for austere views is the resulting instrumental character of concept-ascription based explanations could indeed be challenged as irrelevant or ill-suited. But this would just be another

way of undermining the deflationist's final conclusion, since the philosophical discussion would, as a result, be fuelled in new and interesting ways.

*Departament de Filosofia
ICREA / Universitat Autònoma Barcelona
Facultat de Filosofia i Lletres. Building B
Bellaterra, Barcelona, Spain, 08193
E-Mail: jtoribio@icrea.cat*

ACKNOWLEDGMENTS

I would like to thank Daniel Quesada, Víctor Verdejo, Marta Vidal, and two anonymous referees for helpful comments on earlier drafts. Research for this paper was partially funded by the MICINN, Spanish government under the research project FFI2008-06164-C02-02, the CONSOLIDER INGENIO 2010 Program, grant CSD2009-0056, and by the Catalan government via the consolidated research group GRECC, SGR2009-1528.

NOTES

¹ A gentle wink at Dummett's (1975) distinction between full-fledged and austere theories of meaning.

² Peacocke doesn't talk about abilities in this context, but rather about "finding certain transitions primitively compelling in virtue of their form" [Peacocke (1992), pp. 137-138]. The distinction doesn't matter for my purposes in this paper. Despite the different formulation, the spirit of the proposal remains faithful to the Neo-Fregean picture I sketch here.

³ For *extreme* full-fledged theorists, the ability to *justify* the categorization of something as an X may also be a requirement (see e.g. McDowell, 1994).

⁴ The contrast here should not be taken to entail a commitment to the intelligibility of such an idea, which is, of course, controversial and would require further support [see e.g. Hurley (2001)]. I bring it up at this point just to illustrate that, even if this form of practical rationality were acceptable, it would certainly not be the kind the full-fledged theorist conceives as being associated with concept possession.

⁵ Setting aside issues over differences between events/episodes and states, on which nothing turns for the argument of this paper.

⁶ The distinction has been used by some of its proponents in an attempt to show that most arguments in favour of perceptual non-conceptualism succeed only in establishing the truth of the state view, but leave the content view unsupported [Speaks (2005), Crowther (2006)].

⁷ But see Toribio (2008).

⁸ Similarly, the blood on the socks part of the comparison strikes me as rather unconvincing. Here I even doubt that finding the victim's blood on a pair of socks provides reasonable grounds for believing the socks' owner to be a murderer. We have all read enough crime novels to come to appreciate how feeble those grounds can be.

⁹ As one of the referees seems to think.

REFERENCES

- ALLEN, C. (1999), 'Animal Concepts Revisited: the Use of Self-monitoring as an Empirical Approach', *Erkenntnis*, 51, pp. 33-40.
- ALLEN, C. & HAUSER, M. (1996), 'Concept Attribution in Nonhuman Animals: Theoretical and Methodological Problems in Ascribing Complex Mental Processes', in Bekoff, M. & Jamieson, D. (eds.), *Readings in Animal Cognition*, Cambridge, MA, MIT Press, pp. 47-62.
- BERMÚDEZ, J. L. (2003), *Thinking Without Words*, New York, Oxford University Press.
- BYRNE, A. (2005), 'Perception and Conceptual Content', in Sosa, E. and Steup, M. (eds.), *Contemporary Debates in Epistemology*, Oxford, Blackwell, pp. 231-50.
- CHATER, N. AND HEYES, C. M. (1994), 'Animal Concepts: Content and Discontent', *Mind and Language*, 9, pp. 209-46.
- CROWTHER, T. (2006), 'Two Conceptions of Conceptualism and Non-conceptualism', *Erkenntnis* 65 (2), pp. 245-76.
- DAVIDSON, D. (1985), 'Rational Animals', in his (2001) *Subjective, Intersubjective, Objective*, New York, Oxford University Press, pp. 95-106.
- DAVIES, M. (1992), 'Aunty's own argument for the language of thought', in J. Ezquerro, J. and Larrazabal, J.M. (eds.), *Cognition, Semantics and Philosophy: Proceedings of the First International Colloquium on Cognitive Science*, Dordrecht, Kluwer Academic Publishers, pp. 235-71.
- DUMMETT, M. (1975), 'What is a Theory of Meaning?', in Guttenplan, S. (ed.), *Mind and Language*, Oxford, Oxford University Press, pp. 97-138.
- EVANS, G. (1982), *The Varieties of Reference*, McDowell, J. (ed.), Oxford, Clarendon Press.
- HECK, R. (2000), 'Non-conceptual Content and the 'Space of Reasons'', *Philosophical Review*, 109 (4), pp. 483-523.
- (2007), 'Are There Different Kinds of Content?', in Cohen, J. and McLaughlin, B. (eds.), *Contemporary Debates in Philosophy of Mind*, Oxford, Blackwell, pp. 117-38.
- HUME, D. (1968), *A Treatise of Human Nature*, Oxford, Oxford University Press.
- HURLEY, S. (2001), 'Overintellectualizing the Mind', *Philosophy and Phenomenological Research* 63 (2), pp. 423-431.
- MCDOWELL, J. (1994), *Mind and World*, Cambridge, MA, Harvard University Press.
- PEACOCKE, C. (1992), *A Study of Concepts*, Cambridge, MA, MIT Press.
- (2001), 'Does Perception Have a Non-conceptual Content?', *Journal of Philosophy*, 98, pp. 239-64.
- SMITH, E. and MEDIN, D. L. (1981), *Categories and Concepts*, Cambridge, MA, Harvard University Press.
- SPEAKS, J. (2005), 'Is There a Problem about Non-conceptual Content?', *Philosophical Review*, 114 (3), pp. 359-98.
- STALNAKER, R. (1998), 'What Might Non-conceptual Content Be?', in Villanueva, E. (ed.), *Concepts. Philosophical Issues* 9, Atascadero, Ridgeview.
- TORIBIO, J. (2008), 'State versus Content: The Unfair Trial of Perceptual Non-conceptualism', *Erkenntnis*, 69 (3), pp. 351-61.
- WITTGENSTEIN, L. (1967), *Philosophical Investigations*, Blackwell, Oxford.