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IS LANGUAGE NECESSARY FOR ACQUIRING CONCEPTUAL CAPABILITIES?

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SUMMARY: Normative conceptual holists have argued that conceptual capabilities can only be acquired through language. The *a priori* nature of their argument means that, if it is correct, not only is it a mistake for scientists to attribute conceptual capabilities to nonlinguistic animals, but also a mistake to think that empirical results have any bearing on such a claim. I argue that the absurd conclusion that concept acquisition is impossible can be derived from the claims that motivate this argument. Normative conceptual holists can avoid this result, but only by giving up the claim that linguistic and conceptual capabilities are necessarily linked. It follows that it is an open and empirical question whether nonlinguistic animals have conceptual capabilities.

KEYWORDS: concept acquisition, animal cognition, Myth of the Given, emergence, nonconceptual content

RESUMEN: Quienes defienden un holismo conceptual normativista sostienen que las capacidades conceptuales solo pueden ser adquiridas mediante el lenguaje. El carácter *a priori* de su argumento implica, si es correcto, que no solo es un error de los científicos atribuir capacidades conceptuales a los animales no lingüísticos, sino que también es un error pensar que ciertos resultados empíricos tienen alguna relevancia en relación con dicha afirmación. Aquí argumento que la conclusión absurda de que la adquisición de conceptos es imposible puede derivarse de las premisas que apoyan este argumento. Los holistas conceptuales normativistas pueden evitar esta conclusión, pero solo si abandonan la afirmación según la cual las capacidades lingüísticas y conceptuales están vinculadas necesariamente. De esto se sigue que la pregunta sobre si los animales no lingüísticos tienen capacidades conceptuales es una pregunta abierta y susceptible de responderse empíricamente.

PALABRAS CLAVE: adquisición de conceptos, cognición animal, mito de lo dado, surgimiento, contenido no conceptual

1. *Introduction*

Success at certain types of behavioural tasks has convinced many researchers in the animal behavioural sciences to attribute conceptual capabilities to nonlinguistic animals (for an overview of some of this work with birds, see Castro and Wasserman 2017). In contrast,

normative conceptual holists, such as Wilfrid Sellars (1956), John McDowell (1996), and Robert Brandom (1994), have argued that there are a priori reasons for not attributing conceptual capabilities to nonlinguistic animals. Normative conceptual holism (NCH) is the view that (1) grasping a concept is a matter of participating in certain normative practices (e.g., linguistic traditions), and (2) in order to grasp any one concept, one must grasp many concepts. It is generally assumed that only creatures with linguistic capabilities can meet these conditions, hence, nonlinguistic animals cannot have conceptual capabilities.

Normative conceptual holists motivate this conclusion by arguing that any account of concepts that requires or allows for nonlinguistic conceptual content problematically relies on the Myth of the Given. ‘The Given’ is a term that is used to describe a type of content that is given to the subject by their immediate sense impressions instead of earned through understanding. This sort of content is referred to as ‘the Given’ because the subject gains knowledge from it (e.g., an impression of a red object allows the subject to know that the object is red), and this knowledge does not depend on any other prior knowledge that the subject may have. It is, in a sense, handed to the subject by their sensual encounter with the world. The problem that normative conceptual holists see for accounts that rely on the Given is that there is no such thing.

Sellars argues that in order for content to count as Given it must meet two conditions: (1) it must be epistemically efficacious and (2) it must be epistemically independent (deVries and Triplett 2000). Content is epistemically independent if it does not rely on any other epistemic states or processes, such as beliefs or inferences, and content is epistemically efficacious if it is able to justify further epistemic states or processes. Sellars’ (1956) argument against the Given is an a priori argument against the possibility of any content being both epistemically independent and epistemically efficacious. NCH avoids appealing to the Given in its account of conceptual capabilities by denying that content is ever epistemically independent. Instead, conceptual content is set up, grasped, and used through the normative and holistic space of reasons which is only accessible to beings with linguistic capabilities. Therefore, if Sellars is correct, it is a mistake to attribute conceptual capabilities to nonlinguistic animals because it is impossible for nonlinguistic animals to acquire them.

In this paper, I argue that the commitments that motivate this claim lead to an absurd conclusion. Normative conceptual holists

take conceptual capabilities to be acquired, but I will show that the arguments above actually make it impossible to explain concept acquisition.¹ I argue that concept acquisition within NCH is only possible if it allows for contentful nonconceptual states. While contentful nonconceptual states make it possible to explain concept acquisition, they also undermine the motivation for asserting that language is necessary because they can causally explain the possibility of epistemically efficacious content that lacks epistemic independence without any recourse to linguistic capabilities. This result does not demonstrate that nonlinguistic animals can acquire (or that they have) conceptual capabilities, but it does mean that denials of these capabilities will have to go beyond mere armchair theorizing.

2. *The Myth of the Given*

While it is too soon to claim that anything like a scientific consensus has been reached, many researchers in the fields of comparative psychology, behavioural ecology, and cognitive science are willing to attribute conceptual capabilities to nonlinguistic animals (see Shettleworth 2010, pp. 167–209 for a critical overview). In these fields, acquiring a concept is widely understood to involve the process of abstraction. In their article on avian relational concepts, Castro and Wasserman (2017) define abstraction as “the cognitive process of isolating a common feature or relationship observed in a number of things” (p. 229). Evidence for this capability is gathered by seeing if a subject can learn a relationship from a set of training stimuli and then apply it to novel stimuli. For example, Clark’s nutcrackers and black-billed magpies have demonstrated the ability to correctly identify which *novel* sets of pictures are the same or different after learning the relations of same and different through reinforcement training (Magnotti et al. 2017, 2015; Wright et al. 2018, 2017, 2016; Wright and Kelly 2017). The appropriate response to novel stimuli (either pecking one of the pictures to indicate that they are the same or pecking a white square to indicate that they are different) is regarded as evidence that the subject was able to abstract the relation from the training set, acquiring the relevant concept.

¹ In this paper, I will treat concept acquisition and the acquisition of conceptual capabilities as the same process/result. Arguably, ‘concept acquisition’ can refer to phenomena beyond acquiring conceptual capabilities, such as acquiring new concepts after one has already acquired conceptual capabilities. I will not be discussing these further sorts of phenomena, so, in this paper, these terms can be read as synonymous.

According to normative conceptual holists, abstractionist accounts of concept acquisition beg the question by explaining the acquisition of epistemic capabilities by illicitly appealing to capabilities/states that are only possible if one already has such capabilities. Sellars (1956) argues that empiricist accounts of concept acquisition rely upon the ability to associate particular features of one's sense impressions with linguistic sounds/marks. For example, an abstractionist account of acquiring the concept DOG² might argue that one learns DOG by recognizing instances of dogs in their impressions and then connecting those instances to the word 'dog'. However, Sellars (1956) argues that the ability to associate a feature from one's experience with a word or label presupposes "that the human mind has an innate ability to be aware of certain determinate sorts— *indeed that we are aware of them simply by virtue of having sensations and images*" (p. 62). For Sellars, this account of concept learning goes awry because the ability to pick out particulars of a certain type is only possible if one already has the concept in question. Since abstractionist accounts seem to presuppose the very abilities they are trying to explain, Sellars argues for a position he calls psychological nominalism:

all awareness of sorts, resemblances, facts, etc., in short, all awareness of abstract entities—indeed, all awareness even of particulars—is a linguistic affair. According to it, not even the awareness of such sorts, resemblances, and facts as pertain to so-called immediate experience is presupposed by the process of acquiring the use of language. (p. 63)

If Sellars is right, then not only are comparative psychologists wrong about how to explain concept acquisition, but they are also wrong to attribute conceptual capabilities to nonlinguistic animals.

Sellars (1956) thinks that the reason these accounts fail is that in order to explain concept acquisition, they must appeal to something that he calls 'the Given'. However, there is no such thing as the Given, or put otherwise, it is not possible for anything to do the sort of work that it would be necessary for the Given to do. The Given is something in experience or in one's impressions that is both epistemically independent and epistemically efficacious (pp. 68–69).³ It has to be epistemically independent because in order for it to explain

² In this paper, I follow the convention of using small caps when referring to the concept itself instead of the object it identifies, or the word used to express it.

³ My presentation of Sellars' argument against the Given is indebted to deVries and Triplett 2000.

concept acquisition it cannot rely on other beliefs and/or knowledge. Such states or abilities are conceptually structured, meaning that they are only possible if one has already acquired conceptual capabilities. It has to be epistemically efficacious because one has to be able to do something epistemic with it; in this case, learn a concept.

Sellars (1956) argues that the Given is a myth because he thinks that nothing can be both epistemically independent and epistemically efficacious. One way to motivate Sellars' position is to consider the disjunction of propositional and nonpropositional content to see if either is capable of being both epistemically independent and epistemically efficacious. According to Sellars, in order for content to be epistemically efficacious it has to be possible for it to function as a reason, and only content that can serve as a premise in an argument or inference can function as a reason. Sellars takes it for granted that only propositional content can serve as a premise in an argument or inference.⁴ Therefore, nonpropositional content cannot be epistemically efficacious, meaning that it cannot be the Given (pp. 15–20).

Perhaps then the Given is propositionally structured content, such as the content of beliefs. Beliefs can be either inferential (beliefs that are the result of an inference) or noninferential (beliefs that are not the result of an inference, such as observational beliefs). Inferential beliefs cannot be epistemically independent because they are arrived at on the basis of other beliefs. However, Sellars thinks that noninferential beliefs are also not epistemically independent. For Sellars (1956), in order to genuinely count as believing something, one must not only have a reliable differential response but one must also have some sense of what it takes to be justified in offering such a response (pp. 73–75). So, to have the noninferential belief that 'this is red', one must not only be able to reliably identify instances of red, but one must also have some knowledge about the sorts of conditions that must obtain in order for one's report of 'this is red' to be reliable. This additional internalist requirement allows Sellars to avoid attributing beliefs and knowledge to artifacts or animals, such as thermostats (deVries and Triplett 2000, p. 79) or parrots (Brandom 2015, pp. 101–102). Therefore, in order for content to genuinely count as a belief, it cannot be epistemically independent, even if it is noninferential. Having a belief requires knowledge; in

⁴ The claim that inferences require propositional content is a contentious one. For example, Mariela Aguilera (2016, 2021) has argued that maps can support inferences even though they lack a propositional structure. However, for this paper, I will grant this assumption because nothing in my argument depends upon its standing.

particular, knowledge about whether one is responding to the world in reliable and/or appropriate ways. Therefore, neither inferential nor noninferential beliefs can serve as the Given.

If one finds Sellars' account of knowledge overly intellectualist, it is possible to support the same line of reasoning with slightly less stringent criteria. Brandom (1997), for instance, uses conceptual holism (grasping any one concept requires grasping many concepts) to argue that noninferential beliefs cannot be epistemically independent (p. 156). To believe 'it is red', one already needs to understand the ways in which RED is inferentially connected to other concepts. For example, one can infer 'it is coloured' or 'it is not green' from the application of RED. Even if these inferences are not made when a concept is applied, one has to *be able* to make them in order for the content to count as a belief (p. 159). Therefore, noninferential beliefs are not epistemically independent because the concepts that they are composed of rely on their inferential connections to other concepts, situating even noninferential beliefs in a wider epistemic web.

Either way, neither propositional nor nonpropositional content can be both epistemically independent and epistemically efficacious; therefore, the Given is a myth. Sellars and other normative conceptual holists attempt to avoid the Myth by banishing the idea of epistemic independence from their account of cognition (Maher 2012, p. 18). Grasping a concept or having a belief is never independent; it is always a matter of orienting oneself in the space of reasons (Sellars 1956, p. 76), and access to this holistic space of reasons is only possible through language (p. 63). 'The space of reasons' refers to a metaphorical space that is constructed out of the inferential relations between reasons. Rationality requires that one must situate oneself in the space of reasons by recognizing that one's claims and actions are the sorts of things that reasons can be provided for or against, and that they can also provide reasons for or against other claims and actions.

Some interpreters have taken Sellars' insistence that language is necessary for access to the space of reasons to be an unargued for assumption (e.g., Snowdon 2009, p. 113), and other normative conceptual holists have not always provided compelling arguments for the necessity of language themselves, often either making it a definitional matter (Brandom 2015, p. 112) or by doing armchair comparative psychology (Brandom 2009, p. 48; McDowell 1996, pp. 114–119). However, I think that a proper consideration of Sellars' argument against the Given helps show the initial motivation for insisting that

conceptual capabilities require language. If acquiring conceptual capabilities requires epistemically efficacious content and epistemically efficacious content cannot be epistemically independent, then an account of concept acquisition needs some way of providing access to epistemically efficacious content that lacks independence. I suspect that linguistic understanding is insisted upon here because the productive and systematic nature of language provides a non-mysterious means of avoiding anything that looks epistemically independent.⁵ This is likely why normative conceptual holists are so keen to insist that the process of acquisition is an initiation into a linguistic tradition which provides a store of already worked out rational linkages between claims (McDowell 1996, pp. 125–126). If language is necessary to avoid epistemic non-independence, then ascriptions of conceptual content to nonlinguistic animals, such as Clark's nutcrackers or human infants, rely on a form of the Myth of the Given by implying that they can grasp conceptual content independently of this holistically constructed logical space.⁶

So, a critique of abstractionist accounts of concept acquisition and a priori considerations about what forms of content are possible motivate the claim that conceptual capabilities require linguistic capabilities. However, in the following section, I will argue that the claims that provide this motivation actually make it impossible to explain concept acquisition. More precisely, the argument against the Given has such wide-reaching consequences that they not only create problems for abstractionism, but for NCH as well.

3. *The Problem of Concept Acquisition*

While the problem of explaining concept acquisition for NCH has been pointed out before (e.g., Ayers 2004; Fodor and Lepore 2007; Ginsborg 2006; Laurence and Margolis 2012), I hope to emphasize its severity by presenting it in the form of a *reductio*. If one insists that conceptual capabilities are only accessible through the space of reasons and the space of reasons is only accessible through language, then no preconceptual child will be able to acquire conceptual capabilities. I will call this argument the Concept Acquisition *Reductio* (CAR):

⁵ This would also put their arguments for the necessity of language in line with similar arguments outside of NCH (for a critical discussion of these other arguments, see Blumson 2012).

⁶ Graham Bounds (2025) also argues that Sellars' arguments for the necessity of language are motivated by his holism.

1. Acquiring conceptual capabilities requires content that is epistemically efficacious for the subject.
2. Only content that is linguistically understood by the subject can be epistemically efficacious for the subject.
3. Therefore, only subjects that understand a natural language can acquire conceptual capabilities.
4. Preconceptual human children do not understand a natural language.
5. Therefore, preconceptual human children cannot acquire conceptual capabilities.

The first premise states that acquiring conceptual capabilities requires epistemically efficacious content. This premise directly follows from critiques of abstractionism by normative conceptual holists. As discussed above, Sellars' complaint about abstractionism was that it helps itself to mythical states/processes that are both epistemically efficacious and epistemically independent. Normative conceptual holists do not think that this problem can be avoided by simply jettisoning epistemic content from one's account of concept acquisition because without it, one cannot account for the normative character of conceptual capabilities. As David Forman (2006) puts it, a Sellarsian account cannot deny "that authentic language learning and concept acquisition differ qualitatively from mere behavioral conditioning" (p. 129). Even without these critiques, the premise is plausible. Concept acquisition seems like a process that will involve learning. Learning is generally regarded as an epistemic process, and it is reasonable to presume that any epistemic process will require epistemically efficacious content.

The second premise states that only content that is linguistically understood can be epistemically efficacious for the subject. I take this premise to straightforwardly follow from Sellars' psychological nominalism, which states that any form of epistemic awareness requires language. The epistemic success term 'understand' is used here because Sellars thought that it was possible to develop the ability to use language in fairly sophisticated ways through the acquisition of reliable differential responses before one has acquired knowledge or conceptual capabilities (see Triplett and deVries 2007 for an overview and discussion of this claim). So, the mere ability to use language is not sufficient for having epistemically efficacious content; one must

use it with understanding. This is partly what motivates Brandom's oft-repeated claims about the epistemic deficiencies of parrots. Even if a parrot's report involves language, it "means nothing to the parrot" because the parrot lacks "conceptual understanding" (Brandom 2015, p. 102). This lack means that the parrot is unable to treat its report as a reason and is therefore unable to use it in epistemically efficacious ways.

The third claim in the argument deductively follows from the first two premises. The problem that emerges for NCH is the way in which these two categories are interdefined. Normative conceptual holists generally take understanding to be a matter of being able to find one's way around the space of reasons (Brandom 1994, p. 120), and reasons are composed out of concepts, therefore understanding is a conceptual affair. If understanding a language depends upon conceptual capabilities, it then becomes a mystery how understanding a language can provide the means for acquiring conceptual capabilities. In fact, a *reductio* that shows the impossibility of acquiring linguistic understanding can be provided by simply switching each use of 'understanding language' in CAR with 'conceptual capabilities', and vice versa. Furthermore, this shows why normative conceptual holists must take premise four to be true. If understanding a natural language is a conceptual affair, then it must be true that preconceptual children lack linguistic understanding, even if they are able to use language in sophisticated ways. The argument's conclusion that preconceptual children cannot acquire conceptual capabilities deductively follows from the third and fourth claims.

Conceptual nativism—the view that one's mind comes pre-stocked with an innate set of concepts—might immediately come to mind as a possible escape hatch. However, normative conceptual holists tend to either argue against nativism or simply assume that it is an inherently broken approach. For example, McDowell (1996) states that "it is not even clearly intelligible to suppose a creature might be born at home in the space of reasons. Human beings are not: they are born mere animals, and they are transformed into thinkers and intentional agents in the course of coming to maturity" (p. 125). Likewise, Brandom (2009) also rules out nativism when he dismisses a view he calls 'platonism' which attempts to explain "the use of concepts in terms of a prior understanding of conceptual *content*" (p. 4). I suspect that McDowell and Brandom are comfortable dismissing nativism out of hand because, like Sellars (1956, p. 241), they view nativist approaches as relying on the Myth of the Given.

One reason to think that nativist approaches rely on the Given is that innate concepts would have to be epistemically efficacious if they are to play any role in judgements or inferences, but they also look epistemically independent because their initial use does not rely on any antecedent epistemic states or processes.⁷ If nativist accounts try to avoid the Given by claiming that the innate content that explains language acquisition is entirely non-epistemic, then they risk reducing linguistic understanding to mere causal conformity (O'Shea 2007, p. 85). For example, O'Shea (2007) argues that nativist accounts cannot make sense of the distinction between merely conforming to a rule and acting because of a rule (p. 83). According to Sellars, conceptual capabilities are normative, therefore any explanation of their acquisition must explain that normativity. Nativist accounts (or other purely casually oriented accounts, such as dispositionalist approaches) can explain why our behaviour comes to exhibit certain patterns, but not why we come to take certain patterns as telling us what we ought to do instead of merely what we do in fact do.

4. *Attempts to Explain Concept Acquisition*

In this section, I will consider two ways in which normative conceptual holists can be interpreted as responding to CAR. McDowell has argued that it is a mistake to think that conceptual capabilities must be independent of or preceded by the sorts of states through which they are acquired. Conceptual capabilities, linguistic understanding, and epistemically efficacious content all come as a package—one of these features cannot be said to precede, and therefore explain, the acquisition of the others. However, I will argue that on its own, this move is not sufficient for demonstrating the possibility of concept acquisition because those who emerge into epistemic subjecthood will do so completely devoid of any content beyond their initial acquisition. Such content is required for the ability to make inferences, and

⁷ I suspect that something like this is the reasoning behind NCH's rejection of nativism, but it is not entirely clear that nativist accounts must rely on the Given, especially with McDowell's rejection of the necessity of antecedent epistemic states and the forward-looking way account of epistemic non-independence argued for in this paper (both discussed below). If nativist accounts are holistic, in the sense that the innate concepts come as a group of inter-related concepts that allow for inference, then it seems at least possible to have epistemically efficacious content that avoids epistemic independence. Perhaps then the dismissals of nativism by normative conceptual holists also come from the assumption that the attribution of content to nonlinguistic subjects (such as prelinguistic infants) is automatically Given because only linguistic understanding provides access to the space of reasons.

without such an ability, their initially acquired content will have to be understood as Given. Alternatively, Brandom and Sellars can be understood as accepting the *reductio* as one that shows the impossibility of acquiring conceptual capabilities *as an individual*. They provide an externalist account of concept acquisition, meaning that conceptual capabilities are bestowed upon individuals by their community. I will argue that this account only works if one presumes that there are always already others that have conceptual capabilities, meaning that this account cannot explain how conceptual capabilities initially emerged. Once this assumption is identified, it can be shown that it papers over the ways in which externalist accounts also rely upon the Given.

One of the central aims of McDowell's philosophical work is to demonstrate that conceptual thought is both natural and autonomous, and as a result defies empirical description (Forman 2008). McDowell (1996) claims that the idea that thought escapes empirical description only leads to "rampant platonism", where thought is regarded as "extra-natural", if we fail to recognize that the autonomy of thought is part of our "second nature" (p. 88). My argument in this section is not meant to undermine any of these claims, and as I will discuss in the following section, I am happy to accept a picture where the normative is entirely natural and yet not reducible to empirical description without loss. McDowell has also claimed that we can avoid philosophical anxiety about the autonomy of thought by recognizing that conceptual capabilities are acquired through the normal maturation process of being initiated into a linguistic tradition (p. 88). My claim in this section is that any attempt to have language alone do this work will rely upon the Myth of the Given and therefore fail to assuage philosophical anxieties.

McDowell (1996) has responded to worries about concept acquisition by arguing that such worries arise from the mistaken assumption that any one of these epistemic capabilities or states must be dependent upon antecedent others. Instead, he has argued that conceptual capacities are already operative in the very experiences through which we acquire them. The idea is to reject the assumption that conceptual capabilities must be independent of or antecedent to the sorts of states through which they are acquired. For instance, in a reply to Richard Schantz, McDowell (2001) writes that conceptual capabilities can be "initiated in and by the very experiences in which they are actualized" (p. 182).

Let's presume with McDowell that conceptual capabilities can be initiated in and by the very experiences in which they are actualized.

Is the resulting conceptual content Given? Presumably the content is epistemically efficacious, otherwise it would not have a place within the space of reasons and would therefore not count as conceptual content. Is the content epistemically independent? McDowell (1996) has stressed that acquiring conceptual capabilities is a gradual process that involves being initiated into a linguistic tradition where the rational linkages that constitute the space of reasons have largely already been constructed by a lineage of others (pp. 125–126). If one has access to the rational linkages within the linguistic tradition, then the content is not epistemically independent. However, if this story is to avoid the Myth of the Given, then crucially this initiation has to be entirely non-epistemic until one has actually acquired conceptual capabilities. Otherwise, this gradual process looks like it is helping itself to epistemic content outside of the conceptual realm to explain the acquisition of conceptually-laden epistemic content.

However, as noted above, McDowell argues against the assumption that concept acquisition requires antecedent epistemic states, so we should look elsewhere to demonstrate the newly acquired content's epistemic non-independence. Later, I will argue for an approach to concept acquisition that takes conceptual capabilities to be weakly emergent and the lack of epistemic independence for weakly emergent conceptual content to be explained by looking forward to what one can do with said content (i.e., make inferences). Could McDowell explain away epistemic independence by also looking forward to the inferences that one can make with their newly acquired conceptual content? It is hard to explain how such inferences could be possible because inferences require content and up to the point of acquisition, according to McDowell, the subject completely lacks content. McDowell (1996) has argued that the very idea of nonconceptual content requires appealing to the Myth of the Given (p. 114), and since preconceptual subjects lack conceptual content, they must lack content altogether. Presumably, the subject has a number of sophisticated responsive dispositions, including linguistic ones, but without the possibility of nonconceptual content, none of these dispositions can be said to come along with memories of prior use because such memories would be contentful.

To see the exact nature of the problem, imagine a child who has just acquired conceptual capabilities from and through the experience in which they are actualized by uttering “It has two wheels!” in response to their partially unwrapped present. If these capabilities have been actualized, then “It has two wheels!” is a conceptually-laden epistemic claim. McDowell has already ruled out explaining

away epistemic independence by looking at antecedent states, so the natural place to look is forward: can the child now make inferences from and to such a claim in a way that would signal epistemic non-independence? Let's say we respond by asking her what she thinks the gift is, and she says "It's a bike!" This seems like a perfectly good inference to make. However, we need to ask how the child came to know that bikes have two wheels. A very natural response is to say that she has had previous encounters with bikes and other wheeled objects, such as tricycles and cars, and based on her memories of those encounters, she can infer that the two-wheeled object is a bike. However, this sort of explanation is not available to McDowell because before the utterance of "It has two wheels!", there are no contentful memories of past experiences with wheeled objects for the child to draw upon. The child cannot even draw upon contentful memories of previously heard or made utterances of 'bike' or 'two wheels' because there is no content for her to recall.

So, what allows the child to utter "It's a bike!" in response to our question? McDowell could say that the child has acquired a sophisticated set of dispositions that dispose her to respond in such a way. The problem is that if the response is based solely on a disposition, then the response is not an epistemic one and cannot be understood as the result of an inference. If it is to count as an inference, the utterance must be the result of understanding that the conceptual content of "It has two wheels!" licenses the claim that the object is a bike. But the child does not have access to content about bikes, in fact, the child does not have access to any content at all, other than "It has two wheels!" which we have granted by presuming that she has acquired conceptual capabilities. Perhaps we could say that while a disposition leads to the utterance "It's a bike!", the content is conceptualized as it is uttered. However, this will not work because the fact that the utterance is made *because* of a disposition instead of an understanding of their previously uttered content and what it licenses, the move is not made for epistemic reasons and therefore is not an inference. If the move is not an inference, then the first utterance cannot avoid epistemic independence by looking forward. Therefore, any claim that the first utterance is conceptual ends up relying on content that is Given.⁸

⁸ One could perhaps argue that because the child cannot make an inference with her initially acquired content, it does not count as epistemically efficacious and therefore does not count as the Given. This does avoid any reliance on the Given but at the cost of not attributing any epistemic content to her at all, meaning that we would then lack even an attempt to explain the possibility of concept acquisition.

Perhaps McDowell (1996) could argue that we are being too stringent in a way that does not honour his initial suggestion. If linguistic understanding and conceptual capabilities are acquired through the experiences in which they are actualized, then we should understand the child as having a “capacity to resonate to the structure of the space of reasons” (p. 109) once she has been initiated into the linguistic tradition. However, the denial of all prior content means that it is not entirely clear what structure the child is becoming in tune with because until there is content available to be something *to* the subject, there is no structure available to be attuned to. Gradual initiation into a linguistic tradition will not solve this problem because prior to acquiring conceptual capabilities, such an initiation is merely the training up of dispositions and dispositions lack content. Conceptualizing the content as it is uttered as the result of a disposition will not solve this problem because the existence of content within these utterances would rely on the possibility of islands of epistemic content that are only holistically connected post-conceptualization, meaning that such a theory would rely on the possibility of epistemically independent content.

An alternative strategy, that I interpret Brandom as providing, is to admit the soundness of the *reductio* but deny that it is a *reductio* of his view. Brandom (2010b) can happily admit that the *reductio* does show the impossibility of acquiring concepts as an individual because he takes the acquisition of conceptual capabilities to be externally bestowed through the social process of being interpreted by others (pp. 334–335).⁹ Making concept acquisition a matter of how one is regarded and treated by others lines up with Brandom’s (1994) general view that what makes one epistemically responsible for an utterance (and therefore, what gives an utterance its epistemic character) is that others hold one epistemically responsible for it (p. 163). Likewise, Brandom (2015) attributes a similar sort of view to Sellars, writing that:

I think [Sellars’] view is that whether or not one’s utterance has the significance of endorsing a claim, and so of applying a concept, is a question of how it is treated by the other members of the linguistic community. The normative status of committing oneself—taking up a position in the dimension of endorsement—is a social status. One must be good enough at anticipating and fulfilling one’s responsibilities in order to be held responsible, and so for one’s remarks to be accorded

⁹ Depending on how one interprets the process of being socially initiated into a linguistic tradition, this strategy may be available to McDowell as well.

authority, in the sense of being treated as providing suitable premises for inferences by others. (p. 113)

In other words, children acquire conceptual capabilities when adults treat their reliable responses to linguistic and environmental stimuli as epistemic commitments that they can be held responsible for.

Brandom (1994) interprets the space of reasons as constructed through the interpretative process of scorekeeping where the content of one's utterance is determined by the epistemic commitment that others interpret one as making (pp. 142–143). Brandom can even be interpreted as claiming that one's acknowledgement of such a commitment is also externally bestowed (Wanderer 2021, p. 202). Acknowledgement of a commitment can be added to others' scorekeeping cards if one behaves in ways that lead others to interpret them as recognizing that they have undertaken a commitment. It is possible to interpret the behaviour of those that lack linguistic understanding as having content, but these interpretations are non-literal and depend on the existence of those with linguistic understanding (Brandom 2010a, p. 305). However, once a child is able to respond to others and their environment in sufficiently sophisticated ways, then we can attribute literal content by taking the child to be making a commitment. Brandom (2015) argues that this transition does not track some metaphysical change in the subject, instead it is an entirely social change in how the child is regarded and understood by others (p. 113).

While I think Brandom and Sellars are right to stress the social dynamics of concept acquisition, this approach will also not explain the possibility of acquiring conceptual capabilities. This problem will be most apparent when considering how an externalist account might attempt to explain the origins of conceptual capabilities. For instance, consider a group of nonconceptual beings, before the dawn of conceptual capabilities, who can reliably respond to stimuli in sophisticated ways, including each other's utterances. What would it take for the practices of this community to start counting as normative over mere differential responses to each other and their environment? There are no others with already existing epistemic capabilities to appeal to in such a situation, so it must be possible for conceptual capabilities to emerge without such a scaffold.

However, since Brandom has argued that all attributions of content to nonconceptual beings are derivative and nonliteral, it is not clear how such a change can come about without content being Given to at least some members of the community. These members must come

to see themselves and others as making epistemic commitments, and if the content on their scorekeeping cards is to count as epistemic, it must be epistemically efficacious. If such content cannot be bestowed by others and if it cannot come from themselves, then it is unclear how it is supposed to avoid being Given. Attempting to avoid epistemic independence by looking forward to the inferences that the subjects will be able to make with their newly acquired content will run into the exact same problems that McDowell's account faced. Any initial transition will have to solely rely on dispositions because nonconceptual beings lack literal content, so they cannot even rely upon contentful memories of previous interactions with the individuals that they are now attributing content to. Since this transition is based on a disposition instead of an epistemic relation, it cannot be used to show that the initial content lacks epistemic independence. Therefore, attributions of conceptual content at the origins of conceptual capabilities will have to depend upon the Given.

I take this to show that appeals to the capabilities of already existing epistemic subjects papers over something necessary for the possibility of explaining concept acquisition. Presumably, it is not only important that one is regarded and treated in a certain way, but that one recognizes that one is being regarded and treated in a certain way. Brandom cannot just claim that this recognition is itself externally bestowed (by adding acknowledgement to an external scorecard) because even if the responsibility for this recognition is distributed away to the scorecards of others, the newly epistemic subject must come to regard and treat others as acting in epistemic ways if they are to play their role in passing along epistemic status in the future. In other words, at some point, some sort of recognition of normative practices from a personal vantage point must be acquired if the individual is to play their role in the continuance of the conceptual realm.¹⁰ While the externalist can certainly play a game of continually shuffling off this responsibility to existing external others, the need for this process to start and then continue beyond those already existing others (who will presumably stop existing at some point) throws into sharp relief the need for something beyond just external interpretation. What I take from both McDowell's and Brandom's (and this version of Sellars') attempts to explain concept acquisition is a failure to provide a means for causally explaining the possibility

¹⁰ If Brandom were to argue that others learn to mark their own commitments on their own scorecards after and because of others treating the child as making commitments, then this just seems to presuppose the very recognition to be explained.

of epistemic non-independence for the subject, and in the following section I will argue that nonconceptual content, not language, is well suited for providing the possibility of such an account.

5. *Conceptual Capabilities as Weakly Emergent Capabilities*

In this section, I will argue that the problem of explaining concept acquisition for normative conceptual holists is the problem of explaining how weakly emergent conceptual capabilities do not rely upon the Given. Drawing from Sellars' work, I will argue that providing a solution to this problem requires the existence of nonconceptual content that can causally explain the emergence of epistemic non-independence. However, once it is recognized that linguistic capabilities are not required for explaining epistemic non-independence, the motivation for asserting CAR's second premise is undermined. Rejecting premise 2 has two consequences, first, the *reductio* fails, and second, there is no longer an *a priori* reason for presuming that it is impossible for creatures without linguistic understanding to acquire conceptual capabilities.

One way to interpret the prior discussions of concept acquisition is that normative conceptual holists take conceptual capabilities to be weakly emergent. The idea of emergence is probably most often used in contemporary discussions of the relation between physical and mental properties, but it has also recently been used to explain the relation between natural and moral properties (e.g., Baysan 2025). While strongly emergent properties are new entities that add to the basic ontology of the world, weakly emergent properties do not add to the basic ontology, instead they refer to new ways of describing aggregates of already existing causal properties (Baker 2019, p. 208). I will take some phenomenon X to have weakly emerged from some phenomena Y, if X can be understood as being constituted by Y, but descriptions of X cannot be reduced to descriptions of Y without loss, and the existence of X does not fundamentally change the ontological makeup of the world already captured by descriptions of Y. I take the idea of weak emergence to fit well with Brandom's emphasis on interpretation and his claim that concept acquisition is not a metaphysical change, and McDowell's claim that conceptual thought is entirely natural but its autonomy means that it escapes empirical description.

Interpretations of Sellars also align with an account of normative capabilities as weakly emergent. For example, deVries and Triplett (2000) interpret Sellars as claiming that normative discourse

can never be entirely reduced to empirical descriptions. There will always be a normative remainder when attempting to empirically characterize knowledge and other epistemic states (p. 91). As a result, Sellars could say that “knowledge *supervenes on* states of organisms that have acquired a sufficiently complex set of such abilities” (p. 103). Similarly, O’Shea (2009) argues that, for Sellars, epistemic properties are causally reducible but are not logically reducible to non-normative patterns. Normative processes can be fully explained in terms of the psychological dispositions and behavioural patterns that constitute them, but it is not possible to fully reduce normative concepts to causal concepts. For instance, when analyzing the concept PERSON, Sellars (1963) is happy to admit that persons ‘really are’ reducible to bundles of micro-particles as long as we recognize that “the concept of a person is not the concept of a bundle” (p. 101). And if one were to try to conceptually reduce PERSON to underlying causal-physical properties, the normative features of the concept would be lost. O’Shea (2009) takes these types of claims to show that for Sellars “the normative in general [is] causally reducible, though conceptually irreducible, to the scientific-natural” (p. 200). If concept acquisition for NCH is a form of weak emergence, where the development of a bundle of reliable dispositions and behaviours lead to taking oneself and others to be constrained and shaped not only by causal forces but normative pressures, then showing that it is possible to acquire conceptual capabilities requires showing that it is possible for such an understanding of oneself and others to emerge without relying on content that is Given.

In *Empiricism and the Philosophy of Mind*, Sellars (1956) points out that his account of knowledge seems to lead to a regress. He states that “it might be thought that there is something obviously absurd in the idea that before a token uttered by, say, Jones, could be the expression of observational knowledge, Jones would have to know that overt verbal episodes of this kind are reliable indicators of the existence, suitably related to the speaker, of green objects” (p. 75). Since Sellars claims that knowledge of particulars relies on other states of general knowledge, it becomes a mystery how one could ever come to have knowledge of a particular (since general knowledge would presumably be built out of or formed on the basis of knowledge of particulars). Sellars’ proposed solution to the regress is that once Jones makes an utterance that actually does count as an observational report, “Jones could *now* cite prior particular facts as evidence for the idea that these utterances *are* reliable indicators, it requires only that it is correct to say that Jones *now* knows, thus

remembers, that these particular facts *did* obtain. It does not require that it be correct to say that at the time these facts did obtain he *then knew* them to obtain” (p. 77). In other words, Sellars’ claim is that once one enters the space of reasons, their memories of past non-epistemic encounters with particulars can be used as content for the sorts of inferences that are licensed from and to the genuine observation report.¹¹

In his interpretation of Sellars’ solution to the regress, Forman (2006) argues that this story “*logically* presupposes the existence of [nonconceptual] sense impressions” because the knower can only escape the regress if they have preconceptual content that they can recall once they have passed the epistemic threshold (p. 134). In other words, Sellars’ response to the paradox can be read as a transcendental argument for the existence of nonconceptual content. The acquisition of linguistic or conceptual capabilities is only possible if one already has nonconceptual states to draw on. Crucially those nonconceptual states need to be the sort of states that can be conceptualized in ways that allows them to support inferential transitions once conceptual capabilities have been acquired (p. 134).¹² It follows then that these nonconceptual states must be contentful, and that one has access to that content in some way.¹³

¹¹ This view will seem incoherent if one thinks that memories are necessarily epistemic. While there are epistemic theories of memory, they face significant problems because it is not clear how memories can properly meet conditions for truth, justification, and/or belief (for an overview, see Michaelian and Sutton 2017). In fact, problems with epistemic theories of memory are recognized as being so widespread that Michaelian and Sutton (2017) state that causal accounts of memory have “taken on the status of philosophical common sense”.

¹² One might worry that talk of ‘conceptualization’ means that this account faces the sorts of worries that Davidson (1973) raised against the scheme-content distinction. However, I do not think that conceptualization must be viewed as overlaying a scheme onto already existing content. Conceptualization could just be a matter of now being able to use already existing content in new ways. For instance, conceptualization may simply mean that one can now do normative things with what was previously only causally situated content, such as make inferences, commitments, etc.

¹³ Forman (2006, p. 134) follows Sellars (1956, p. 110) in arguing that the nonconceptual states must be conscious sensory impressions. This view is meant to contrast with McDowell’s (1998) contention that mere neurophysiological states can fulfill the same transcendental function (p. 443). Forman argues that neurophysiological states cannot fulfill this role because we do not have access to them in the right sort of way (i.e., one cannot directly recollect a neurophysiological state). Furthermore, as McDowell (1994) has argued, neurophysiological states, on the subpersonal level, lack content. Forman and Sellars seem to presume that only conscious sensory impressions are able to provide the subject with content that they both have access

I suspect the main worry about this argument will be that by presupposing nonconceptual content, Sellars' account will also appeal to the Given. Forman argues that Sellars' solution to the regress does not rely on the Given because nonconceptual states do not "stand in a justificatory relation to conceptual states" (p. 139). One is not appealing to nonconceptual states to justify their claims, instead contentful nonconceptual states causally explains how it is possible for new epistemic subjects to have content available to them in ways that allow their initial observations to not be epistemically independent.

To see how this theory can be applied to concept acquisition, imagine a child who we can say has emergent conceptual capabilities because she not only responds in reliable ways to the mention of green things, but also understands that a statement about a particular object being 'green' means that it is green. Understanding the concept GREEN requires that the child can make inferences about green things, such as that green things are also coloured or that things that appear to be green are only actually green under certain circumstances. Such inferences only seem possible if the child can recall past interactions with green and/or coloured things. McDowell has argued that the acquisition of conceptual capabilities is a transformational process that provides us with conceptually-laden experiences, including our experiences of inner phenomena (Sachs 2012, p. 145). If this is the case, then the emergence of conceptual capabilities means that our prior interactions with the world can now be recalled through conceptual means in ways that support the possibility of knowledge, but only if there is accessible content to be recalled.

The child's use of these memories allows for epistemically efficacious content that is not epistemically independent because the existence of these memories causally explains the possibility of making inferences from and to her utterances about green things. In other words, the existence of contentful and accessible nonconceptual states causally explains the possibility of epistemic non-independence. Like in McDowell's (2001) argument discussed above, the move denies the idea that antecedent epistemic states are needed to explain the acquisition of conceptual capabilities. Epistemic independence is avoided not by looking backwards at antecedent epistemic states but by looking forward to subsequent conceptual states that are causally the re-

to and can be conceptualized. My argument in this paper aligns with Forman's arguments that access and content are required and that mere neurophysiological states will not be able to provide those features. However, I will remain agnostic about whether only conscious sensory impressions can fulfill that role.

sult of antecedent *nonconceptual* states.¹⁴ The initial acquisition lacks epistemic independence because of what one can do with their newly acquired epistemic states: make conceptually-laden inferences to additional epistemic commitments that are causally dependent upon contentful nonconceptual states.

While this is admittedly little more than a shell for an actual explanation of concept acquisition, what I take Sellars and Forman to have shown is that it is possible to acquire conceptual capabilities as long as the subject has access to contentful preconceptual states. They have done this by showing that contentful preconceptual states can causally explain how the initial conceptual content of subjects with newly acquired conceptual capabilities can be both epistemically efficacious and epistemically non-independent. In other words, their argument completely undercuts the motivation for CAR's second premise that only linguistically understood content can be epistemically efficacious for the subject.

However, one could still argue that the relevant nonconceptual content must be linguistic, and there would then still be a reason for denying the possibility of nonlinguistically acquiring conceptual capabilities. Responding to this claim requires asking if nonlinguistic conceptual states could fulfill the role of causally explaining the possibility of emergent content that is both epistemically efficacious and epistemically non-independent. In other words, is it possible for nonlinguistic content to support the sorts of inferences that are featured in a forward-looking account of epistemic non-independence? Luckily, in his later work, Sellars provides an account of nonlinguistic representational content that supports inferential transitions.

In "Mental Events", Sellars (1981) argues that nonlinguistic animals can be understood as representational systems that build cognitive maps of their environments, including themselves and their behaviours, through a process he calls picturing (p. 336). Picturing is an entirely causal process where representations stand in isomorphic relations with the features of the environment (O'Shea 2007, p. 148). Therefore, Sellars (1981) takes it to be "perfectly intelligible" to claim that both humans and nonlinguistic animals have the innate ability "to be aware of something as something" (p. 336). To be aware of something as a something is more than being predisposed to respond to some environmental stimuli, instead awareness involves a holistic set of correlations that tie one representational

¹⁴ Interpreting this move as a 'forward-looking' one is inspired by Cameron Buckner's (2022) use of the term for his forward-looking theory of content.

state to others through shared associations, such as the geometric relations between locations on a cognitive map. And since nonlinguistic animals can be aware of something as a something, it makes sense to understand their representations as having a propositional form where representational states refer to objects and characterize them as being a certain way (p. 336).¹⁵ The fact that certain representational states tend to follow other representational states allows nonlinguistic representational systems to make associative inferences, such as ‘Smoke here, fire nearby’ (p. 337). These inferential relations between representational states are what make the representation a representation of a particular something because they fix its place in the wider representational space (p. 336).

It is reasonable to worry about the epistemic import of some of these terms, but there is nothing epistemologically suspect about prelinguistic awareness as long as we take it to be the description of an entirely causal relation where an object is represented and represented as having a particular character, and those two features are fulfilled by the representation’s location in an associative causal web (Sellars 1981, p. 336). Likewise, I will use the term ‘representational transition’ instead of ‘inference’ to avoid worries about equivocating epistemologically driven inferential transitions with merely causal ones. But even with these careful readings, it is clear that Sellars takes nonlinguistic animals to have representational states whose content is fixed by the holistic relations they sit in (such as having a location on a cognitive map, being associated with certain behaviours, outcomes, or further representational states, etc.) and those holistic relations are constructed by and support representational transitions. If a nonlinguistic animal were to acquire conceptual capabilities, their system of nonconceptual content could causally support their ability to make inferences from and to their initially acquired content. Sellars even

¹⁵ There are now compelling arguments for the claim that the content of cognitive maps is not propositional (Camp 2018; Rescorla 2009), and since I granted Sellars’ claim that inferences require propositional content, this would seem to potentially create significant difficulties for my claim that Sellars’ account of nonconceptual cognitive maps can explain the possibility of forward-looking epistemic non-independence. However, all that is required is that the preconceptual content, once conceptualized, can support inferential transitions. Aguilera (2021) interprets Sellars in “Mental Events” as proposing a predicative structure that precedes the propositional structure available to linguistic beings (p. 3811). If that predicative structure can be transformed into (or regarded as) a propositional structure through the emergence of conceptual capabilities, then the potential lack of a propositional structure for map-like representations does not undermine my claim that preconceptual content can causally explain epistemic non-independence.

thinks that there are close logical analogues to associative representational transitions that one can use once one enters the space of reasons, such as ‘If smoke anywhere, then fire nearby there’ (p. 342).

If Sellars is right to argue that nonlinguistic animals have representational content that is constructed and determined by transitions over the holistic relations between representations, then language is not necessary for warding off worries about epistemic independence. Instead, holistic nonconceptual content is able to explain how emergent epistemically efficacious content can be epistemically non-independent. I do not take the argument here to be dependent upon the details of Sellars’ account of nonlinguistic representational systems. There has been significant work on nonlinguistic representational formats since “Mental Events” and as long as those formats can holistically support inferential transitions once a subject acquires conceptual capabilities, then it does not particularly matter whether the format is map-like or otherwise. For example, Sanja Srećković (2024) has recently argued that affective representations can be understood as structured states that can explain the success of nonlinguistic animals at transitive inference tasks. If it is possible for preconceptual beings to have affective representations, then they seem well suited for providing a possible explanation for how weakly emergent conceptual content can be epistemically efficacious without being epistemically independent. Additionally, while Sellars’ account fits better with a kind of causal empiricism, where the nonconceptual representations come from sensual encounters with the world, there is nothing about my argument that insists that such a route is necessary. For instance, it is consistent with this account that the nonconceptual representations could be explained through an entirely causal version of nativism.

However, Sellars (1981) still takes there to be a significant difference between linguistic representational systems and nonlinguistic representational systems. The difference is that nonlinguistic systems lack the ability to use logic (p. 339) to form standing representations that can normatively guide inference (p. 342). We might then take the difference between normative and causal representational systems to be driven by the linguistic ability to form standing representations, and since conceptual capabilities are normative, it will still be the case that only linguistic creatures have conceptual capabilities. To be clear, the argument in this paper does not dispute this as a potential result. The aim of this paper has been to show that an a priori objection to the very possibility of acquiring conceptual capabilities without language fails. It could still turn out to be the case that only

linguistic beings have conceptual capabilities, and it may be because only linguistic beings have the ability to form logical representations. Or it could be because nonlinguistic animals lack normative cultural traditions to be initiated into, or they lack rich social practices that can be interpreted as providing epistemic responsibility, or any number of other reasons.

However, notice that these are claims that can be investigated through empirical means, so they should not be made before consulting work in the animal behavioural sciences. Furthermore, there is (at least) suggestive evidence that nonlinguistic animals can meet these conditions. Crows and amazon parrots are able to solve relational matching-to-sample tasks (Obozova et al. 2015; Smirnova et al. 2015; Smirnova et al. 2021) that cannot be solved through first-order picturing and therefore should be understood as involving second-order ‘logical’ representations (Nelson 2024). Recent work in both philosophy and science has started to recognize the role and importance of cultural traditions in animal communities (e.g., Biro et al. 2003; Fitzpatrick and Andrews 2022; Malherbe et al. 2025; Sasaki and Biro 2017; Whiten et al. 2007), that nonlinguistic animals participate in normative practices (e.g., Andrews et al. 2024; Danón 2024; Fitzpatrick 2020; Meynell and Lopez 2021; Papadopoulos 2021; Westra et al. 2024), that nonlinguistic animals are able to update their beliefs on the basis of new evidence, including by weighing the relative strength of that evidence (e.g., Melis and Monsó 2024; Schleihau et al. 2025), and so on. While none of these claims are without contention, this paper has argued that they and their potential import cannot be dismissed out of hand on the basis of an a priori argument about the necessity of language for acquiring conceptual capabilities.

6. *Conclusion*

NCH argues that conceptual capabilities are holistic and normative and presumes it to follow that linguistic understanding is necessary for conceptual capabilities. I have argued that the arguments that lead to this inference also make it impossible for NCH to explain concept acquisition. This leads to the absurd conclusion that preconceptual children cannot acquire conceptual capabilities. In order to find a way out of this unpalatable result, I turned to Forman’s transcendental interpretation of Sellars that takes nonconceptual content to be causally necessary for entering the space of reasons. This saves NCH from the *reductio* but also undermines the motivation for claiming

that language is necessary for ensuring that weakly emergent conceptual content is epistemically non-independent.

While this paper does not provide an argument for thinking that animal behavioural scientists are right to attribute conceptual capabilities to nonlinguistic animals, it does provide an argument against the claim that a set of a priori claims about the nature of concepts and reasoning show these attributions to be fundamentally misguided. This puts NCH in the far preferable position of potentially being able to fruitfully interact with some of the exciting claims coming out of animal behavioural science instead of being forced to automatically dismiss them from the armchair. NCH has a wealth of sophisticated theoretical tools for thinking about the mind and I hope I have been able to show that there are no a priori barriers to using those tools to engage with philosophical and scientific work on nonlinguistic minds. One could still end up arguing from an NCH perspective that only linguistic animals have conceptual capabilities, but such a result is far from predetermined, and one will actually have to engage with empirical work to do so.¹⁶

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