

Conceptualism and the Notion of a Concept

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There is a long-standing conflict in philosophy between two pictures of perceptual experience. On one picture, traditionally associated with Kant,¹ perceptual experience, at least in adult humans, involves the operation of conceptual as well as sensory capacities. The experience you have when you see a yellow daffodil essentially involves your being aware of it as yellow, and as a daffodil. A subject lacking the concepts of *yellow* and *daffodil* would see the same object you do, in that it would affect their sense-organs as it does yours, but would have a different perceptual experience. On the other picture, more closely aligned with empiricism, perceptual experience is the product of our sensory capacities only. Although, when you see a yellow daffodil, you may at the same time take it to be yellow and to be a daffodil, and so bring it under the concepts *yellow* and *daffodil*, your doing so is not part of your perceptual experience. You could have exactly the same experience if you lacked those concepts. On the first picture, which I will label “conceptualist,”² the perceptual experience of nonhuman animals and human infants -- at least to the extent that animals and infants are presumed to lack conceptual capacities - - is of a fundamentally different kind from that of adult humans. The discontinuity between humans and animals as regards epistemic access to the world is not a matter of humans being able to make judgments and entertain thoughts about the world in addition to having perceptual experiences of it, but operates at the level of perception itself. On the second picture, perceptual experience represents a stratum common to adult humans, animals, and human infants, with thought and judgment layered on top. Roughly, on this picture, we perceive the world as animals and infants do, although, unlike animals and infants, we are

¹ Although Kant has traditionally been regarded as the paradigm conceptualist, some commentators (e.g. Hanna 2005 and Allais 2009) have interpreted him as a nonconceptualist. I defend the conceptualist reading in Ginsborg 2008.

² “Conceptualism” in general refers to a broader epistemological view (see e.g. Ayers 2019, 70-71); here I use the label exclusively for the view that perceptual experience has conceptual content.

able to articulate what we perceive in the form of linguistically expressible thoughts. Although there is an important difference between adult humans and other sentient beings, it is less profound and less pervasive than on the conceptualist picture, since it does not operate at the level of perception.

This conflict is reflected in a number of recent debates about perceptual experience. One is the debate about whether experience has nonconceptual content. Defenders of nonconceptual content argue that the content of perceptual experience differs from the content of propositional attitudes (paradigmatically belief) in not being composed of concepts. A common route to this view goes *via* the claim that we can have perceptions with determinate representational or intentional content without having corresponding conceptual capacities. This claim goes against the Kantian view that conceptual capacities are essential for perception that is intentionally directed towards objects, as opposed to mere sensations caused by them. Another debate, more prominent in recent years, is about whether experience has representational content at all. Defenders of naïve realism and related views hold that perceptual experience should be understood as relating us immediately to worldly objects and properties, as opposed to being analysed in terms of representational content or, *a fortiori* conceptual, content. Many proponents of this approach, like defenders of nonconceptual content, appear to be motivated by the second picture of perceptual experience. The idea that perception consists in a direct relation to the world allows us to understand the conceptual work of generalizing and making judgments as additional to, rather than informing, perceptual experience, and this is seen as doing better justice than representationalist views to the proper function of perception as distinct from judgment. Defenders of nonconceptual content and deniers of representational content are alike in opposing conceptualism about perceptual content; I will label them “anti-conceptualists.”

What are the motivations for conceptualism? For Kant himself, one possible motivation was that it made it possible to show how apparently a priori concepts like *cause* and *substance* can have application to objects presented in experience. If, as on the conceptualist view, perceptual experience involves intellectual activity, then it can be argued that the applicability of the pure concepts derives from their status as a priori rules for that activity. But, even leaving aside the project of showing the objective

validity of the pure categories, the view of experience summarized in Kant's slogan that "intuitions without concepts are blind" has seemed to many philosophers to be attractive in its own right.

Philosophers with Kantian sympathies, such as Strawson and Sellars, have found independently appealing Kant's idea that our perceptual experience is in part due to the workings of imagination, and that, as a result, it is "infused" or "informed" by empirical concepts.³ Relatedly, many philosophers have found attractive the idea that "all seeing is seeing as."⁴ A further motivation, emphasized by John McDowell, is the idea that experience must be capable of rationalizing judgment, where "rationalize" is understood in an internalist way. If experience lacks conceptual content, according to McDowell, it is not possible for a subject's having a certain experience to *make rational* her going on to form a belief based on that experience, and that in turn undermines the idea that our beliefs in turn can have content.⁵

Anti-conceptualism, on the other hand, is motivated in large part by the intuition that perceptual experience is more primitive than thought and belief. Gareth Evans, often viewed as the originator of the notion of nonconceptual content, introduces it in terms of a contrast between the "informational system" which we share with animals and infants, and the more sophisticated system responsible for belief and judgment, and associated with the capacity to reason.⁶ Tim Crane, another early defender of nonconceptual content, identifies "the point of the original introduction of non-conceptual content" as being "to identify a form of mental representation which is in some ways more primitive, more basic, than belief."⁷ As John Campbell puts it, in defending a view of experience as non-representational, "experience of objects has to be something more primitive than the ability to think about objects, [something] in terms of which the ability to think about objects can be explained."⁸ This intuition about the primitive character of experience relative to thought underlies two arguments often raised against conceptualism, the argument from animal and infant perception, and the argument from concept

³ See e.g. Strawson 1970, Sellars 1978.

⁴ The slogan appears in Vesey 1955 and is defended, for example, in Searle 2015.

⁵ See McDowell 1994, especially Lectures I and II.

⁶ Evans 1982, 124.

⁷ Crane 2009, 466.

⁸ Campbell 2002, 122. Similar views are expressed in Smith 2002, 99; Ayers 2004, 255; and Brewer 2011, 85.

acquisition. Regarding animals and infants, it can seem plausible that a cat observing a sparrow in a bush in some sense “has the same experience” as I do of the same scene, even though the cat lacks concepts like *sparrow* and *bush*.⁹ Regarding concept-acquisition, it seems on the face of it that we arrive at at least some concepts by having perceptual experiences of their instances, so that it cannot be that those concepts are required as a condition of having those experiences.¹⁰ A third anti-conceptualist argument, regarding the “fine-grained” or “rich” character of experiential content, can also be seen as originating from the intuition about its primitive character. This is because representing an object in abstract terms, as say a greenish blob as opposed to something with a precise shape and shade of colour— can seem to require a level of sophistication which goes beyond what is required for perceptual experience as such.

An important obstacle to adjudicating the case for and against conceptualism is unclarity regarding the notion of a concept. The term “concept” is used in a bewildering variety of ways both in philosophy and in related fields such as psychology, artificial intelligence, and cognitive science. Jean Mandler, writing in 2004, describes attending a conference on conceptual knowledge, attended by psychologists, anthropologists and neurobiologists, in which there were “roughly as many opinions about how to define *conception*, *perception*, and their relationships as there were speakers,” noting that, with regard to the terms that have been used in the study of mind for hundreds of years, “we still reside in a Tower of Babel.”¹¹ Within philosophy we are no closer to a consensus. In particular, there are questions both about what kinds of things concepts are (for example, are they mental particulars, abstract objects or capacities?),¹² and, perhaps more relevantly to the present debate, about how demanding the constraints are on having them. At one end of the range of possibilities, it is sufficient for possession of at least some concepts that a subject be able to discriminate behaviourally between objects that fall under the concept and objects which do not. At the other end, concept-possession requires both the capacity to entertain conscious thoughts in which the concept figures and to articulate reasons for beliefs involving the

⁹ The example is from Travis 2013, 159; note that Travis thinks it tells against nonconceptual content as well as conceptualism.

¹⁰ See for example Peacocke 2001, 252, and, for a more detailed elaboration, Roskies 2008.

¹¹ Mandler 2004, viii.

¹² See e.g. Margolis and Laurence 2007.

concept.¹³ McDowell, the pre-eminent contemporary defender of conceptualism, adopts a demanding conception of concept-possession which explicitly ties it to the capacity to articulate reasons.¹⁴ But one might wonder if this is the appropriate notion of concept to invoke in the context of the debate, and whether conceptualists like McDowell are saddling themselves with unnecessary strong commitments which make conceptualism a less attractive position.

In this paper I will be proposing that a notion which ties concept-possession to rationality is not, in fact, the appropriate one to use in the context of the debate. I will propose that, given the fundamentally Kantian motivation behind conceptualism, the appropriate notion to use is one deriving from Kant, but that this notion is less demanding than it is typically viewed as being. The upshot will be a defence of conceptualism, but a moderate version of conceptualism which is intended to do justice not only to the motivations behind conceptualism, but to the intuition about the primitive character of experience which gives anticonceptualist positions much of their appeal.

II

How should we understand the notion of a concept which figures in the debates about perceptual content? In an early defence of nonconceptual content, Tim Crane introduces this question by describing it as “almost self-evident” that there is no possession of concepts without thought, and then asking why thought, in turn, requires the possession of concepts.¹⁵ Why do we need to ascribe concepts to subjects, in addition to ascribing to them intentional states such as beliefs and desires? Drawing on a remark by Frege to the effect that we need to ascribe sense and meaning to individual words (as opposed to whole sentences) only when we need to make sense of inferences,¹⁶ he suggests that we understand concepts as

¹³ See section 7 of Bermúdez and Cahen 2015.

¹⁴ McDowell 2004, 11-12; McDowell 2009, 129-130.

¹⁵ Crane 1992, 144.

¹⁶ The remark, from an 1896 letter to Peano, is quoted in Hart 1983.

“the inferentially relevant constituents of intentional states.”¹⁷ (1992, 146). The implication is that concept-possession is tied to the capacity to make inferences, or at least to be in states which are inferentially related to one another. A similar connection between concepts and inference is drawn, in another early challenge to conceptualism, by M. G. F. Martin: “much of the utility of talking about concepts arises from the explanations one may give of why a thinker might possess or lack a certain thought or belief despite what else she knows”;¹⁸ that is, of why a thinker might have or not have beliefs which are inferentially related to other beliefs she has. Richard Heck applies a related idea to the question of what Evans had in mind in claiming that perceptual content differed from belief content in being nonconceptual. He interprets what it is for content to be conceptual in terms of Evans’s Generality Constraint, according to which, in Heck’s words, “no thinker is capable of entertaining a Thought with a particular structure unless she is able to recombine the elements of that structure so as to form other, related Thoughts.”¹⁹ Concepts, as Heck reads Evans, are the (potentially recombinable) elements of a thought’s structure; presumably the same elements to which we appeal in accounting for a thinker’s capacity to infer one belief from another. The view of concept-possession shared by these opponents of conceptualism is thus consistent with McDowell’s view of concept-possession as associated with rationality, even if it is arrived at by a different route.²⁰

But I want to question whether this is the appropriate notion of concept for making sense of the debate. The idea that concepts are inferentially relevant or recombinable constituents of whole thoughts is Fregean in inspiration, whereas conceptualism about perceptual content derives from Kant. Given the Kantian heritage of present-day conceptualism, it would seem that we should be looking to Kant rather than Frege for the relevant notion of a concept.²¹ And Kant’s notion of a concept is very different from

¹⁷ Crane 1992, 146

¹⁸ Martin 1992, 746

¹⁹ Heck 2000, 487

²⁰ José Bermúdez endorses a similar view, but denies that it ties concept-possession to rationality, although he does take concept-possession to involve “being sensitive to the legitimacy of certain inferential transitions” (Bermúdez 2007, 59).

²¹ This is not to deny that Frege’s own use of “concept” to designate the *Bedeutung* of a predicative expression, as contrasted with the *Bedeutung* of a proper name, is derived from Kant’s use of “concept” to designate a representation which is general as opposed to singular.

Frege's. He thinks of concepts as contrasted, not with whole propositional contents, but rather with intuitions, where intuitions and concepts are differentiated primarily in that intuitions are singular whereas concepts are general or universal. This is especially clear in his writings and lectures on logic.²² In the *Jaesche Logic*, the notions of intuition and concept are presented as follows: "Intuitions are singular [*einzel*n] representations (*representatio singularis*), concepts universal [*allgemeine*] (representation by common marks) or reflected representations (*repraesentatio discursiva*).... A concept is opposed to an intuition because it is a universal representation, a representation of what is common [*gemein*] to several objects, thus a representation in so far as it can be contained in various ones."²³ After offering a similar definition in the lectures transcribed as the *Vienna Logic*, he goes on to offer an example: "He who first wanted to have a representation of the color red had to see the color red. But when he compared the red color of [*bei der rothen Farbe verglich*] cinnabar, carmoisin and red ponceau, he became aware that there is something general in the color red, that was contained along with other things in other representations of the color red, and he thought by red that which was common to many objects, and this was a concept."²⁴ (24: 904-905).

On this understanding of concepts, a concept is simply a general or universal representation, that is, a representation through which one represents what a multiplicity of things have in common. There is nothing built into the notion of a concept which implies that concept-possession requires capacities for inference or reasoning: it appears to be sufficient for concept-possession that a subject be able, not just to pick out individual things that are presented to her, but to represent them as being the same in kind or as sharing common features. It would seem, then, that a subject could in principle represent different red things, or different shades of red, as having something in common, and so could possess a concept whose extension was roughly the set of red things, without necessarily being able to represent inferential

²² I focus here on Kant's logic, rather than on what he says about the concepts in the *Critique of Pure Reason*, because the former has more of a claim to provide an explication of the notion of a concept, as opposed to a substantive theory of what concepts are in the context of the critical philosophy. Here my approach differs from that taken in Ginsborg 2006.

²³ Kant 1902-, 9:91.

²⁴ Kant 1902-, 24: 904-905.

relations between different propositions containing the concept *red*, or indeed to entertain such propositions at all. However, it is likely to be objected that Kant's notion of a concept is in fact more demanding than this suggests. First, although the standard criterion he uses to distinguish concepts from intuitions is that they are general as opposed to singular, he also distinguishes them as representations of understanding or spontaneity, rather than of sensibility or receptivity.²⁵ And the idea of spontaneity for Kant is often taken, and in particular by McDowell, to be interchangeable with the freedom involved in the exercise of rationality, so that someone who grasps a concept is *eo ipso* capable of recognizing reasons for applying it as she does.²⁶ Second, it might be maintained, in the spirit of Evans's Generality Constraint, that I cannot represent the general feature of redness common to a multiplicity of red things if I am not able to use the representation of redness in other contexts, for example making nonperceptual judgments in which *red* figures as a subject or predicate. And this again brings us to the idea that I must be able to recognize *red* as a common element in different judgments and so be capable of appreciating inferential connections among different propositional contents.²⁷

Now it will not do to respond to the second of these two points by proposing that a creature can represent redness, or represent different red things as having something in common, simply in virtue of having the kind of experience which allows it to respond differentially to red as opposed to non-red things. There is a very undemanding notion of perceiving an object as F on which an animal can demonstrate its capacity to perceive something as F by showing its sensitivity to the presence of F-ness, as in standard examples of laboratory animals which can be trained to press a key when shown a red object or a picture of a fish. And, among researchers on animal behaviour, an animal's coming to exhibit such differentially responsive behaviour is often seen as sufficient ground for ascribing possession of a

²⁵ E.g. at R2836: "Cognition is either intuition or concept [*vel intuitus vel conceptus*]... With the former I am passive [*leidend*] (receptivity) with the second acting [*handelnd*], spontaneity" (Kant 1902-, 16:538).

²⁶ See e.g. McDowell 1994, 4-5.

²⁷ We might indeed think that this is an implication of Kant's famous remark that concepts are "predicates of possible judgments," especially when that remark is interpreted, as is often the case, as anticipating Frege's principle of the priority of judgments over concepts. Jeremy Heis (2013) offers what is, to my mind, a plausible argument against that interpretation.

corresponding concept.²⁸ But this cannot be what Kant has in mind when he identifies the representation of generality as the defining mark of the conceptual, since he thinks of concepts as associated with understanding, a faculty which animals lack. There must be more to seeing the redness of the various pigments, or to seeing the various pigments *as red*, than simply having the kind of experience which would enable one to produce a uniform response to them. The challenge for the approach to conceptualism I am advocating is how to make out this stronger sense of representing general features without taking it to presuppose capacities for rational inference. What could it be to represent an individual red thing as having the general feature of being red, in a sense which goes beyond mere sensitivity to its redness, if not to apply to it a concept which one is already in a position to deploy in contexts like thinking of things as red, inferring that they are red, denying that they are red, and so on?

III

In order to help meet this challenge, I want to consider some empirical research designed to shed light on the representation of generality, and specifically in how it develops in human children. My starting-point is a series of studies in which children under three are presented with small objects of various shapes and colours and encouraged to play with them.²⁹ It turns out that, starting at around 12 months, children spontaneously sort the objects into kinds, grouping similar objects spatially with one another. In a typical study, the child is given a tray on which there is a scrambled array of eight objects of two clearly discriminable kinds: for example four grey balls and four yellow cubes or four blue dolls and four green boats. At 12 months, children will often group together three of one kind of object, pushing them away from the others, which are left untouched. At 18 months children will move objects of both

²⁸ See e.g. Herrnstein et al. 1976. Herrnstein 1990, drawing on ideas in Lea 1984, argues for a stricter notion of concept-possession which goes beyond a mere capacity for perceptual discrimination, but it is still one which can be satisfied by animals which are able to respond flexibly to changing features of their environment (e.g. which can learn to change their responses to a given class of stimuli in response to changes in patterns of reinforcement).

²⁹ Ricciuti 1965, Nelson 1973, Starkey 1981, Sugarman 1983, Langer 1986, Gopnik and Meltzoff 1987, 1992. For reviews see Gopnik and Meltzoff 1992 and Spinozzi et al 1999.

kinds around to form two distinct same-kind groups, sometimes including all eight of the objects; by 24 months most children sort all the objects into same-kind groups (“exhaustive sorting”). This kind of behaviour has a precursor in the form of sequential touching or manipulation: starting as early as 9 months children will successively touch all or most of the objects of a single kind, leaving the others untouched. Researchers have ascribed special significance to the sorting activity which yields two distinct groups by manipulating objects of both kinds. A child who successively pushes one doll after another to one side of the tray without moving the others could just be manifesting a preference for the dolls over the boats, or it could be that she does not even notice the boats. But a child who manipulates objects of both kinds to form two distinct groups at least appears to engage, as Susan Sugarman puts it, in “conceptual comparisons of the objects in terms of their similarities and differences.”³⁰ Whether or not we accept that description, it does seem clear that this kind of two-class sorting has more of a claim to manifest the child’s representation of generality, so it is this kind of behaviour which I will primarily have in mind in discussing children’s sorting behaviour in what follows. It is worth noting that the behaviour does not depend on the members of each group being identical to one another; children at 18 months are just as likely to carry out exhaustive sorting when the groups are, say, four pencils of different lengths and colours and four differently coloured toy horses,³¹ or four eating utensils (three mismatched spoons and a fork) and four receptacles (three mismatched cups and a bowl).³²

Let us consider an 18-month-old who is carrying out an exhaustive sorting of grey balls from yellow cube-shaped blocks. What can we say about how she represents the objects she is sorting? Presumably there is some feature or group of features she is detecting, in the members of one or both of the two classes, which allows her to differentiate them. It could be their distinctive shape (being a cube, being spherical), or a combination of shape and colour (being a cube and yellow, being spherical and grey), or it could be some more general property (having edges that are sharp to the touch, being something which can be rolled). We could determine the relevant feature or features by performing

³⁰ Sugarman 1983, 68.

³¹ Gopnik and Meltzoff 1992.

³² Sugarman 1983.

studies in which she is presented with grey balls or yellow cubes in combination with different sets of objects and seeing whether she is inclined to sort, say, grey balls from grey cylinders, or yellow cubes from blue cubes. But for our purposes it does not matter what the feature or features are: let us suppose that the most decisive feature belongs to the blocks, and let us just call it *F*. The question I want to ask is, does she represent the blocks *as F*, and if so, in what sense? It seems that we can say she represents them as *F* in the undemanding sense mentioned at the end of the previous section; that is, she is indeed sensitive to their *F*-ness in a way which allows her to respond to them in a way different from how she responds to non-*F* things. But that is too minimal to capture the kind of representation involved in the sorting activities I have described. For it does not capture the difference between the kind of sorting involved in actively grouping the objects of one kind together and the kind of sorting or discrimination carried out by babies in the first weeks and months of life, when they learn, say, to grope for a nipple, rather than any other object, when hungry, or to smile and gurgle in response to a smiling human face but not a frowning one. 3-month-olds can learn to discriminate, say, pictures of dogs from pictures of cats,³³ so presumably could learn to represent blocks as *F* in the undemanding sense. But the 18-month-olds presented with objects to manipulate are doing more than merely responding to the features which differentiate the objects. If we imagine a spectrum of examples of discrimination or sorting, with, at one end, an iron nail's classification of the air around it as moist (prompting rusting) or not moist, and, at the other, the work of a biological taxonomist determining how to classify a newly discovered species, the 18-month-olds are already much closer to the taxonomist to the rusting nail: something that cannot be said of the pigeon, nor, arguably of the one-month old who responds differentially to a proffered nipple. The 18-month-old's engagement with the objects has marks which are typically associated with intentional activity: researchers describe them, as, for example, inspecting objects before placing them in an arrangement,³⁴ hesitating over where to put an object and placing it part way in one location before

³³ Quinn et al 1993.

³⁴ Langer 1986, 123

saying “no” and placing it in another,³⁵ looking for objects which have fallen on the floor and smiling when the experimenter hands them over,³⁶ and accompanying their activity with what appears to be verbal commentary, such as “uh-oh”, when an object rolls off the table.³⁷ So, if we assume that the grouping of the F objects together manifests the child’s representing each object as F, this cannot be representing-as-F in the weak sense I have characterized.

On the other hand, however, it is implausible to suppose that the child represents the objects as F in a sense requiring that she be in a position to entertain propositions containing F as a constituent, let alone recognize inferential relations between such propositions. Here it is useful to keep in mind some basic facts about linguistic development in children of this age: they typically acquire their first words at around 12 months, attain an active vocabulary of around 20 or 30 words and expressions around eighteenth months, and increase their vocabulary to around 300 words by the end of the second year; which is also the point at which they leave the “one-word stage” and start combining expressions to form sentence-like constructions. So although children between 18 and 24 months have some of the rudiments of language, and also appear to understand many more expressions than they can produce, they are still far from doing anything that we might call making verbal judgments. An eighteenth-month-old might have the words “ball” and “block” in her vocabulary, but even if she says “ball” while placing one ball beside another (and I have not come across any reports of this kind of verbal accompaniment at that age) it would be a stretch to describe her as asserting that the object was a ball. We might construe the child’s deliberate placing of one F object beside another as itself amounting to a non-verbal judgment that the second thing is F. However, since she does not meet Evans’s Generality Constraint for possession of the concept F (she cannot judge that something is F outside of a perceptual context), this requires either denying either that a judgment has to be the application of a concept, or construing concepts as something other than inferentially or combinatorially relevant constituents of thoughts. If we do want to say that the

³⁵ Sugarman 1983, 90

³⁶ Langer 1986, 122

³⁷ Langer 1986, 122. Regarding the seeming intentionality of the behaviour, see also Gopnik 1980, which interprets the meaning of children’s early non-nominal expressions in terms of their plans.

child is representing the ball as F, or, more generally, as sharing a general feature with the other balls, it has to be in a sense which does not require that the child have the kind of rational capacities associated with concept-possession as understood by either McDowell or his anti-conceptualist critics.

What seems to be called for, if we are to do justice to how prelinguistic children represent the general features of things, is a middle ground between mere sentient responsiveness to the presence of features and the conscious entertaining of propositional content. I suggest that we can find this middle ground by invoking a notion I call “primitive normativity”: very roughly, a normativity which does not need to be made out in terms of conformity to rules and whose recognition, accordingly, does not depend on grasp of a rule.³⁸ I will introduce it in this context by noting that the children in the studies I have been describing appear to recognize a normative dimension to what they are doing. When they move the objects around so that objects of the same kind are juxtaposed, they seem to regard the objects they put together as *belonging* together. From their point of view, it appears, a given arrangement can be correct or incorrect, and the arrangements they regard as correct are (in fact) those in which we would describe the objects as being grouped together by kind.³⁹ This is evident in part from what I earlier called the marks of intentional activity, and in particular from the behaviour in which children seem to be correcting themselves, a phenomenon which has been noted in children as young as 15 months.⁴⁰ Children also appear to correct the sorting behaviour of others. Starting around 21 months, children presented with “mismatched” arrays of objects, say a set of three rectangular rings and one circular ring, and a set of three circular rings and one rectangular ring, will start switching the objects around, and when they are old enough to have acquired some normative expressions, they will use them in conjunction with this kind of behaviour. Jonas Langer describes an experimenter giving children mismatched sets of objects to play

³⁸ I develop this notion in Ginsborg 2011 in the context of rule-following skepticism.

³⁹ This is an oversimplification, since children, especially as they get closer to age 3, will also make more complex arrangements, e.g. symmetrical patterns (see e.g. Sugarman 1983, 62, 117) or alternating patterns (Sugarman 1983, 110). But these arrangements are still, as Sugarman calls them, “class-consistent,” and the capacity to make them seems to depend on the more basic capacity to place same-kind objects together. Moreover we can think of them as more sophisticated forms of straightforward class grouping, in that, e.g. an alternating pattern of red and blue blocks the second pair of blocks is juxtaposed with, and seen as “belonging with” the first pair.

⁴⁰ Langer 1986, 56.

with, for example a set of three rectangular rings and one circular ring, and a set of three circular rings and one rectangular ring. One 30-month old child, he says, “rebukes” the experimenter, saying “No belongs this way” as she corrects the classificatory “mistake.”⁴¹ Sugarman describes similar remarks, again accompanying 30-month-olds’ correcting of mismatched sets of objects: “not good in there,” “no, they’re not on properly.”⁴² Although these children are a year older than the 18-month-old we were considering earlier, it does not seem implausible, given the similarity of other aspects of their behaviour to that of the younger children, to suppose that the normative attitude expressed was present in the earlier stages as well.

Further evidence emerges from studies of prelinguistic children’s reactions to what is referred to in the literature as “false labelling.” Children as young as 16 months appear to object to adults calling familiar objects by the wrong names. Roy Pea (1982) tested children two and under by showing them familiar objects like a car or a ball whose name the children already knew, and saying things like “That’s a ball” when he showed them the car, and vice versa. Children at age two would say things like “Not ball,” or “No, car”; at 18 months they would simply say “no.” Some two- and three-year-olds would occasionally respond to the experimenter’s false labelling by themselves calling familiar objects by the obviously wrong names: Pea reports a child pointing to a ball and saying “That’s a garden”, another looking at a cookie and saying “it’s a door, it’s a star”, and third saying “there’s the doggy” (touching a cat), “there’s the doggy” (touching a cat) and then, as Pea reports, “laughing uncontrollably.”⁴³ A later study, by Melissa Koenig and Catharine Echols (2003), investigated how younger children, at 16 months, respond to false labeling if it comes from a loudspeaker, or from someone who is not looking at the object, as contrasted with a human facing the object and obviously attending to it. They found that the children engage in much more of what they call “corrective behavior” when the false labeling comes from the attentive forward-facing human than in the other cases. But what is interesting for our purposes is the behavioral responses themselves: one infant shakes her head, three wave their hands, many of them point

⁴¹ Langer 2001, 22.

⁴² Sugarman 1983, 72

⁴³ Pea 1982, 616

to the falsely labeled object and try to produce the correct name. When the experimenter falsely labels a shoe by calling it a ball, almost a third of the sixteen infants tested attempt to correct her by pointing to their own shoes.

In both of the false labelling studies I've mentioned, the authors assume that the children should be understood as correcting false assertions. But it seems more in keeping with their lack of linguistic sophistication to think of them, instead, as correcting mistakes in sorting. According to Alison Gopnik and Andrew Meltzoff, we can think of the early use of names as as a kind of categorization behavior: as they put it, "a name places some of the objects in the world into a particular group."⁴⁴ When children's reactions to false labelling are viewed in this light, they can be seen to be of a piece with their behavior in the studies about manipulating objects. The 18-month-old who says "No" when the experimenter calls the shoe a ball is not negating the experimenter's utterance, but rather correcting her sorting behavior : she takes the experimenter to have sorted the shoe wrongly. The 16-month-old who points to her own shoe when the human speaker says "ball" is correcting the speaker's behavior in a different way: she is doing something analogous to switching mismatched objects. And the child who says "catty" to the dog and "doggy" to the cat is enjoying doing the "wrong" thing. In this respect he is rather like the two-year old described in Gopnik's 1980 study of non-nominal word-use who, having successfully completed a jigsaw puzzle multiple times, now "takes each piece and deliberately places it on top of the wrong space, saying "there" each time he does so," something which "strikes him as being hysterically funny."⁴⁵ The examples are alike in suggesting children's awareness of a normative dimension in how they group objects together, verbally or otherwise.

How are we to make sense of this normative dimension? We might think that, if an 18-month-old putting two yellow blocks together takes the second block to belong with the first, it can only be because she has engaged in some kind of inchoate reasoning along the lines of *this is F, that is F, so this should be put together with that*. But even if we allow that she can judge each of the cubes to be F, subject to the

⁴⁴ Gopnik and Meltzoff 1992, 1093

⁴⁵ Gopnik 1980, 81.

caveats mentioned earlier in this section, it is implausible to suppose that she has the rational capacities required for such an inference. Perhaps, then, her taking the cubes to belong together is a consequence of her recognizing them to be the same, or to be similar, so that the conclusion *this should be put together with that* derives from the single premise *this and that are similar*. But the notions of similarity and sameness arguably require more, not less, conceptual sophistication than those for which F is a stand-in (*block, yellow block, cube* etc.). And even if we grant her the recognition that the two blocks are similar, it is still problematic to suppose her capable of an inferential step from that recognition to the recognition that the second block should be put with the first.⁴⁶ The answer, I suggest, lies in rejecting the assumption that the awareness of normativity must rest on an appreciation of reasons. The child can simply recognize the second block as belonging with the first, without any need to first recognize that each block is F (for some F), or that the blocks are similar. The normativity here is primitive, in the sense mentioned earlier: we can make sense of it without invoking the idea of conformity to a rule (e.g. that the placement of the blocks conforms to the rule *put the similar blocks together* or *put the F things together*) and its recognition, accordingly, does not require the recognition of such a rule.

If this is granted, then we have a response to the challenge raised at the end of section II, that of how to make sense of representing something as having a general feature, in a sense strong enough to answer to Kant's notion of conceptual representation, but not so strong as to require capacities for rational inference. In short, it is to represent it as belonging with, or in other words to be sorted with, other things which share that feature. Somewhat more precisely: a subject can count as being able to represent objects as F if she is capable in general of sorting F things from things which are not F, and if her sorting behaviour, like that of the children we have been discussing, involves the awareness of a normative dimension. Such a subject can represent a particular object as F on some particular occasion by sorting it

⁴⁶ Children who are encouraged to tidy up their toys or help around the house will learn that, under most circumstances, similar objects should be put together (the blocks all go in this bin, the spoons all go in this drawer). So it might be suggested that the normative attitude reflects appreciation of this kind of domestic rule. But that is implausible, given that the "spontaneous" sorting behaviour under discussion here emerges before children participate in household activities (usually no earlier than two years old). Moreover children in these studies frequently ignore or reject experimenters' attempts to influence their manipulation of the objects (see e.g. Langer 1986, 152-153), suggesting that, when they do sort objects by kind, it is not as a response to what they have seen adults doing.

with another F thing and, in so doing, taking her behaviour to be appropriate. Depending on her more general sorting dispositions, the child who carefully places one block beside another, or who points emphatically to her shoe when the experimenter says “shoe” to the ball, can be understood as representing the block as a block, and the shoe as a shoe, even if we cannot ascribe to her a capacity for entertaining thoughts in which *block* and *shoe* figure as constituents, or for reasoning about blocks and shoes. And to understand her this way is to understand her as grasping the concepts *block* and *shoe*, even though she can as yet apply those concepts only by sorting objects which are perceptually presented to her.

IV

I have been using the example of small children to argue for a notion of a concept on which conceptual representation, and so concept-possession, do not depend on capacities for rational thought and inference. Concept-possession, according to this notion, requires the capacity to recognize one’s behaviour with objects (verbal or nonverbal) as normatively governed, but this can be separated -- and, in small children, is separated -- from the capacity to recognize reasons. I have argued that this notion of concept-possession answers to Kant’s notion of conceptual representation as the representation of general features. And I have suggested that, given the Kantian antecedents of the conceptualist position, this is the appropriate notion of concept to use in the debate, rather than the later, Fregean-inspired notion of a concept as a constituent of thoughts.

The upshot is a version of conceptualism which is moderate in that it goes some way towards accommodating the intuitions about the relatively primitive character of experience which motivate anti-conceptualists. The perceptual experience of human adults and 18-month-olds alike is informed by the exercise of conceptual capacities, but these are capacities to recognize objects as belonging together in the sense explained in the previous section, not capacities for articulate thinking and reasoning. A child need not have any thoughts about daffodils or about what it is to be yellow to have the same experience of a yellow daffodil that an adult does: it is enough that she is able to sort daffodils from non-daffodils and

yellow things from non-yellow things and, in so doing, to recognize the objects she sorts together as belonging together. This means that the view can meet the requirement, mentioned in section I, that perceptual experience of objects can be invoked to explain the capacity to think and reason about objects. The content of perceptual experience, on this version of conceptualism, can also be as fine-grained as a subject's capacity for conscious perceptual discrimination. Seeing a greenish blob as having a precise shape and shade of colour is something someone can do to the extent that she can match it with other blobs with the same, or similar, shapes and shades of colour.

What about the perceptual experience of nonhuman animals? While the literature on perceptual content typically groups animals and human infants together, I think that this is a mistake. In the case of human children, it is important to be able to recognize continuities between their perceptual experience and ours, since it is otherwise mysterious how, in a relatively short space of time, their interaction with the world can enable them to develop adult capacities for thinking and reasoning. But the case of animals, even our primate cousins, is quite different. Here I think we can accept the idea that their perceptual experience might be of a very different kind from ours. So I do not think that it is a mark against the version of conceptualism presented here that -- unless it can be shown that they, like human children, can take a normative attitude to their own discriminative behaviour⁴⁷ -- the perceptual experience of animals is unlike ours in not being informed by concepts.

⁴⁷ Chimpanzees do engage in the same kind of active spatial grouping of same-kind objects that human children do, although their development is much slower, and they never reach the level of complexity in sorting (e.g. exhaustive sorting of eight objects into two same-kind groups of four) attained by human 18-month-olds (Spinozzi et al 1999). Although I do not want to rule out a priori that chimpanzee sorting behaviour involves awareness of normativity, I have not seen evidence that it does. For a more positive assessment of animals' capacity to appreciate normativity, see Andrews and Sultanesu 2013 and Andrews forthcoming.

References

- Allais, Lucy. 2009. "Kant, non-conceptual content and the representation of space." *Journal of the History of Philosophy* 47 (3):383-413.
- Andrews, Kristin. forthcoming. "Naïve normativity: The social foundation of moral cognition." *Journal of the Americal Philosophical Association*.
- Andrews, Kristin, and Olivia Sultanescu. 2013. "Are Apes' Responses to Pointing Gestures Intentional?" *Humana Mente Journal of Philosophical Studies* 24:53-77.
- Ayers, Michael. 2004. "Sense Experience, Concepts and Content." In *Perception and Reality*, edited by Ralph Schumacher. Paderborn: Mentis.
- Ayers, Michael. 2019. *Knowing and Seeing*. Oxford: Oxford University Press.
- Bermúdez, José , and Arnon Cahen. 2015. Nonconceptual Mental Content. In *Stanford Encyclopedia of Philosophy (Fall 2015 Edition)*, edited by Edward N. Zalta.
- Bermúdez, José Luis. 2007. "What is at stake in the debate on nonconceptual content?" *Philosophical Perspectives* 21:55-72.
- Brewer, Bill. 2011. *Perception and its Objects*. Oxford: Oxford University Press.
- Campbell, John. 2002. *Reference and consciousness*. Oxford: Oxford University Press.
- Crane, Tim. 1992. "The nonconceptual content of experience." In *The Contents of Experience*, edited by Tim Crane, 136-157. Cambridge: Cambridge University Press.
- Crane, Tim. 2008. "Is perception a propositional attitude?" *The Philosophical Quarterly* 59 (236):452-469.
- Ginsborg, Hannah. 2006. "Empirical concepts and the content of experience." *European Journal of Philosophy* 14 (3):349-372.
- Ginsborg, Hannah. 2008. "Was Kant a nonconceptualist?" *Philosophical Studies* 137 (1):65-77.
- Ginsborg, Hannah. 2011. "Primitive Normativity and Skepticism about Rules." *Journal of Philosophy* 108 (5):227-254.
- Gopnik, Alison. 1980. "The Development Of Non-Nominal Expressions In 12-24 Month Old Children." Department of Experimental Psychology, Oxford University.
- Gopnik, Alison, and Andrew Meltzoff. 1987. "The development of categorization in the second year and its relation to other cognitive and linguistic developments." *Child Development*:1523-1531.
- Gopnik, Alison, and Andrew N Meltzoff. 1992. "Categorization and naming: Basic-level sorting in eighteen-month-olds and its relation to language." *Child Development* 63 (5):1091-1103.
- Hanna, Robert. 2005. "Kant and Nonconceptual Content." *European Journal of Philosophy* 13 (2):247-290.
- Hart, W. D. 1983. "The Anatomy of Thought." *Mind* 92 (366):264-269.
- Heck, Richard. 2000. "Nonconceptual Content and the "Space of Reasons"." *The Philosophical Review* 109 (4):483-523.
- Heis, Jeremy. 2014. "The priority principle from Kant to Frege." *Noûs* 48 (2):268-297.
- Herrnstein, Richard J, Donald H Loveland, and Cynthia Cable. 1976. "Natural concepts in pigeons." *Journal of Experimental Psychology: Animal Behavior Processes* 2 (4):285.
- Herrnstein, Richard J. 1990. "Levels of stimulus control: A functional approach." *Cognition* 37 (1-2):133-166.
- Kant, Immanuel. 1902-. *Gesammelte Schriften*. Edited by Prussian [now German] Academy of Sciences. Berlin: De Gruyter.
- Koenig, Melissa A, and Catharine H Echols. 2003. "Infants' understanding of false labeling events: The referential roles of words and the speakers who use them." *Cognition* 87 (3):179-208.
- Langer, Jonas. 1986. *The origins of logic: One to two years*: Academic Press.
- Langer, Jonas. 2001. "The mosaic evolution of cognitive and linguistic ontogeny." In *Language acquisition and conceptual development*, edited by Melissa Bowerman and Stephen C. Levinson, 19-44. Cambridge: Cambridge University Press.

- Lea, S.E.G. 1984. "In what sense do pigeons learn concepts?" In *Animal cognition*, edited by H.L. Roitblat, T.G. Bever and H.S. Terrace, 263-276. Hillsdale, NJ: L. Erlbaum Associates.
- Mandler, Jean Matter. 2004. *The foundations of mind: Origins of conceptual thought*. Oxford: Oxford University Press.
- Margolis, Eric, and Stephen Laurence. 2007. "The Ontology of Concepts -- Abstract Objects or Mental Representations?" *Noûs* 41 (4):561-593.
- Martin, Michael. 1992. "Perception, Concepts and Memory." *The Philosophical Review* 101 (4):745-763.
- McDowell, John. 1994. *Mind and World*. Cambridge, Mass.: Harvard University Press.
- Nelson, Katherine. 1973. "Some evidence for the cognitive primacy of categorization and its functional basis." *Merrill-Palmer Quarterly of Behavior and Development* 19 (1):21-39.
- Pea, Roy D. 1982. "Origins of verbal logic: Spontaneous denials by two-and three-year olds." *Journal of Child Language* 9 (3):597-626.
- Peacocke, Christopher. 2001. "Does perception have a nonconceptual content?" *The Journal of Philosophy* 98 (5):239-264.
- Quinn, Paul C, Peter D Eimas, and Stacey L Rosenkrantz. 1993. "Evidence for representations of perceptually similar natural categories by 3-month-old and 4-month-old infants." *Perception* 22 (4):463-475.
- Ricciuti, Henry N. 1965. "Object grouping and selective ordering behavior in infants 12 to 24 months old." *Merrill-Palmer Quarterly of Behavior and Development* 11 (2):129-148.
- Roskies, Adina L. 2008. "A new argument for nonconceptual content." *Philosophy and Phenomenological Research* 76 (3):633-659.
- Searle, John R. 2015. *Seeing things as they are: A theory of perception*: Oxford University Press.
- Smith, A. D. 2002. *The Problem of Perception*. Cambridge, Mass.: Harvard University Press.
- Spinozzi, Giovanna, Francesco Natale, Jonas Langer, and Karen E Brakke. 1999. "Spontaneous class grouping behavior by bonobos (*Pan paniscus*) and common chimpanzees (*P. troglodytes*)." *Animal Cognition* 2 (3):157-170.
- Starkey, David. 1981. "The origins of concept formation: Object sorting and object preference in early infancy." *Child Development*:489-497.
- Sugarman, Susan. 1983. *Children's Early Thought: Developments in classification*. Cambridge: Cambridge University Press.
- Travis, Charles. 2013. *Perception: Essays after Frege*. Oxford: Oxford University Press.
- Vesey, G. N. A. 1955. "Seeing and Seeing As." *Proceedings of the Aristotelian Society* 56:109-124.