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Mark Siderits

Philosophy East and West, Volume 70, Number 3, July 2020, pp. 615-637  
(Article)

Published by University of Hawai'i Press

DOI: <https://doi.org/10.1353/pew.2020.0047>

Philosophy East and West



A Quarterly of  
Comparative Philosophy  
Volume 70 - Number 3

University of Hawai'i Press

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## Buddhist Non-conceptualism: Building a Smart Border Wall



**Mark Siderits**

Department of Philosophy, Illinois State University  
[msideri@ilstu.edu](mailto:msideri@ilstu.edu)

Ever since Dignāga drew his bright line between conceptually mediated inference (*anumāna*) and concept-free perception (PS I.3c), there have been efforts to erase it and make cross-border traffic in concepts (*vikalpa*) perfectly legitimate.<sup>1</sup> If we understand conceptualization as a mental operation of abstraction that yields knowledge of general, repeatable features or commonalities and facilitates such cognitive operations as categorization, inference, and analogical thought, then we can add Kant to the list of prominent critics of Dignāga's border wall. Here I shall first describe how this wall was built, then present some of the cracks that soon appeared. I then explore some ways of resolving the tension between Dignāga's strict dichotomy and its critics, both classical and more recent.

I

The Buddhist epistemologists' discussion of the distinction between the targets of perception and inference strongly suggests the standard 'abstraction' reading of 'concept'. Dharmakīrti follows Dignāga in describing the object of perception as something devoid of conceptualizing (*kalpanā*), the mental process whereby a given stimulus comes to be categorized and associated with other objects. Such association may be linguistically mediated, but such mediation is not deemed necessary, since infants and non-human animals also employ concepts, as when the infant seeks the breast as a source of nutriment. All conceptualizing, however, is said to be amenable to linguistic expression. The object of perception is the unique particular (*svalakṣaṇa*), and that of inference the object-in-general (*sāmānyalakṣaṇa*). The former is said to be ultimately real insofar as it is devoid of attribution of repeatable properties. Its representation in a perceptual cognition is said to be either distinct and clearly displayed (*sphuṭa*), or else indistinct, depending on the proximity of the object to the perceiver. Cognition of the object-in-general, by contrast, is said to have the same form regardless of whether the object is near or far away (in space or in time). All this seems to fit the picture according to which perception directly cognizes the concrete particular while inference cognizes only an abstracted (and thus mentally constructed) object-in-general.<sup>2</sup>

Take the contrasting cases of someone on the hill seeing a fire, and someone in the valley inferring the occurrence of fire from seeing smoke.

We are inclined to think that both cognize the same fire. Let us restrict our attention to one component of this bundle of distinct *dharma*s, the red color of the flames. Is this concrete particular the object of both cognitions? This is what causes the visual cognition of red color, and for that reason it may properly be called the object of the perceiver's cognition. Suppose that when the inferer in the valley cognizes fire, they form a mental representation of red color. Also assume that to form such a mental representation is to entertain a mental image (*pratibimba*) that shares the form of the fire's color. There is a difference between the red appearances (*pratibhāsa*s) of the two cognitions. The first will vary in the distinctness of its shape depending on the proximity of the perceiver to the fire and the acuity of their visual apparatus. The second will not. The two cognitions are equally valid (*pramā*) insofar as both are capable of leading their respective cognizers to successful practice: for instance, each receives information that helps them determine in which direction to go if they seek warmth.<sup>3</sup> But the fact that one varies qualitatively in dependence on proximity while the other does not tells us that the cognitions do not have the same object. Even if the flames of the fire on the hill are red, the red that appears to the cognizer in the valley when they infer the existence of a red fire does not represent the occurrence of red currently on the hill. What it represents is red-in-general, the generic red color that is common to red *dharma*s whenever and wherever they occur. And since there is ultimately no such thing as generic redness—there being nothing that exists at many times and places—it follows that the inferential object is a mere superimposition. Even though the same red particular plays a causal role in cognition of the fire both perceptually and inferentially, it is a mistake to think of the two processes as different paths to the same object.

This all fits the story according to which conceptualization is abstraction and the object-in-general is an abstract object. One widely held view has it that the distinction between concrete and abstract objects is to be drawn in terms of efficacy: concrete particulars are those that participate in causal relations and are thus capable of bringing about real effects; abstract objects are not. If one adds to this view the further claim that only the causally efficacious is real, one arrives at the distinction between particular and object-in-general. As for the mental process of abstraction, this is commonly understood as a matter of finding what is common to a variety of entities. This is unacceptable to those Buddhists who deny that there is anything common to all the instances of *red*. An alternative account of abstraction is suggested by their *apoha* semantics. This account has it that the meaning of the word 'cow' is arrived at by overlooking the differences among the particulars capable of satisfying the desire for milk (TS, TSP 1004–1008ab; PV III.164–165).<sup>4</sup> So, for them, abstraction involves overlooking the differences among all the things that satisfy a certain functional description. And

since a concept is what can be expressed by a word, it seems to follow that concepts are formed through abstraction.

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While this account may be compelling, there are reasons to think it cannot be right. As we shall see, Dignāga's own tradition recognizes cases where something ordinarily cognized indirectly, with the use of concepts, may be cognized directly, that is, perceptually. And then there is the more modern critique: if only a belief can be evidence for another belief, then if perceptual cognitions lack propositional content, perceptions should never lead to conceptually mediated action. To begin to resolve this tension, it may be useful to look at earlier Buddhist accounts of concepts.<sup>5</sup> Of particular importance here is the idea that concepts somehow falsify the nature of reality.

How did conceptualization—the process of bringing perceptual input under concepts—get such a bad reputation in Buddhism? The roots are to be found in the explication of the twelvefold formula of dependent origination found in the *Madhupiṇḍika Sutta* (M i.108). There the step from perceptual identification (*saṃjñā*) to appropriation (*upādāna*) is spelled out in terms of the following sequence: feeling (*vedanā*) gives rise to perceptual identification (*saṃjñā*), which gives rise to reasoning (*vitarka*), which gives rise in turn to hypostatization (*prapañca*), out of which develops a tendency to consider past, present, and future objects. Here perceptual identification represents the entry of concepts into the cognitive process. In the early Buddhist and Abhidharma scheme, consciousness (*viññāna*) is the bare registry of the object; feeling (i.e., pleasure, pain, or the neutral state) spurs the further process of categorizing the sense object. So the claim here is that as the cognitive process moves from bare registry through the valencies of feeling and then on to categorization, the way is opened to investigating the object in order to determine its significance for the subject-system. Since this in turn brings in reference to past and possible future episodes involving similar objects, the system now has the resources to think of itself as one enduring thing. This is hypostatization, which is elsewhere (S iv.39–40) identified as the basis of all views concerning the person (*satkāyaḍṅṅi*). Appropriation is just the tendency of the system to identify with past and future stages in the causal series to which the present occurrences belong, that is, to view them as also 'me'. And this is what the Buddha identified as the root cause of suffering. Extirpating all such views is the point of the Buddhist path.

What this makes clear is that conceptualization *per se* was not originally seen as a process that necessarily leads one astray.<sup>6</sup> While concepts are introduced in the cognitive process at the stage of perceptual identification

(when, e.g., the visual percept is classified as ‘blue’), it is only subsequently that the availability of concepts turns into the hypostatization that fuels the *kleṣas*. This point is reinforced by something Vasubandhu says about sense perception in the *Abhidharmakośabhāṣyam* (AKBh 1.32): that even though it involves the employment of concepts, these are the benign intrinsic nature concepts (*svabhāvavikalpa*), and not the other two sorts that are implicated in hypostatization, so that it is not misleading to call perception non-conceptual. The notion of an intrinsic nature concept is clarified by Jñānaśrīmitra:

There is, in fact, such a thing as a concept, common to small children and [non-human] animals, that depends only upon empirical cognition caused by simple objects. And by virtue of that concept, even animals, after having ascertained a power to cause sneezing, thirst, or tranquility etc. in the very object, will because of that seek the object again because of its being accompanied by that (power), or avoid it because of its not being accompanied by that. This is called a pure [concept] based on intrinsic nature.

On the other hand, there is [the other sort of conceptualization] that arises from empirical cognition supported by recollection of verbal conventions (*saṃketa*). For instance, a man looking at lampblack from a lamp [thinks] that this dark stuff is fit for eyelashes etc. This kind of conceptualization arises from a direct experience accompanied by recollection of the causal efficacy (*arthakriyā*) experienced before. This type [of conceptualization] is called ‘imposed’ (*aupādhika*). (JSN 248)

So at the stage in the development of Abhidharma thought represented by the AKBh, not all use of concepts was considered deceptive. The intrinsic nature concept is said to be ‘pure’ insofar as it carves nature at its joints, without reference to human interests or cognitive limitations. Thus, visual perception, for instance, delivers information about the world in the form of discriminations couched in terms of color: blue, red, yellow, et cetera. This input serves as the raw material for further processing through the operations of determination and recollection. Such processing facilitates not only linguistically mediated labeling (‘blue’) but also predication (‘this is blue’). And that in turn leads to the forms of hypostatizing that instill and reinforce the ‘I-sense’. But the visual faculty’s discriminating output of blue as blue and not yellow is itself taken to be innocent. How else could the senses convey information about the world?<sup>7</sup> Precisely here is where we should locate the ‘introduction rules’ for concepts that Kellner (2020) speaks of.

We now know that *blue* cannot be quite so innocent. Indeed some Ābhidharmikas had their doubts: insofar as the atomic theory of the four elements (*mahābhūtas*) would reduce visual sense-objects to the sphere of tangibility sense-objects, it seems that *blue* cannot carve nature at its joints, that is, independently of facts about human perceivers. These philosophers at least implicitly recognized the distinction early modern philosophers

would draw with the terms ‘primary quality’ and ‘secondary quality’. But Dignāga had something else in mind. To call *blue* an intrinsic nature concept is to claim that there is something common to all occurrences of the visual-object dharmas correctly called ‘blue’. And this ‘something common’ can only be an object-in-general, something only superimposed. It is because Dignāga fully grasped the implications of the Buddhist commitment to nominalism<sup>8</sup> that he drew the line between ultimate reals and conventional reals the way that he did. But that in turn brought to the fore the issue we are discussing: how can cognition of a unique particular lead to successful action if one cannot rely on knowledge of how similar particulars behaved in the past? If all particulars are unique, there are no similarities to be found. Radical nominalism calls into question the legitimacy of any introduction rule for concepts.

### III

This question—how sensory cognition of a concrete particular can lead to conceptually mediated cognitive operations like categorization, inference, and analogy—flows directly out of the radical nominalism that Dignāga first embraced. If perception could grasp not only particular occurrences of blue but also their mutual resemblance, it would be less mysterious how what the senses deliver could serve as input to more sophisticated conceptual operations. But the mystery is generated by the assumption that there is a strict dichotomy between the two kinds of cognition, given the distinction between their respective objects. And that assumption begins to break down when we look more closely at what authors like Dharmakīrti, Dharmottara, Śāntarakṣita, and Kamalaśīla say about perception.

That conceptualization somehow falsifies is expressly affirmed by Kamalaśīla in commenting on TS 1214 (where Śāntarakṣita accepts Dignāga’s definition of perception as non-conceptual):

Imagination (*klṛpti*) is designation, having the nature of the cause of natural kinds (*jāti*) and the like, so it is to be understood; for there is no designation without the distinctions of natural kinds and the like. By ‘and the like’ is meant deliberation and analysis which are the cause of the subtlety that invests speech, association and thought, so conceptualization in terms of grasping and grasped is thus to be understood.<sup>9</sup> Designation, speech, words, and what takes the form of a universal, that is found due to its appearance, it [conceptualization] is said to be so. (TSP *ad* TS 1214; K 1984, p. 367)

So at this point it looks as though there is thought to be a bright line between perception and inference and that the presence or absence of concepts marks the border.

One place where the line begins to blur is in discussions of *manas*. In classical Abhidharma this is the faculty that deploys concepts.<sup>10</sup> It is *manas*

that is said to synthesize the deliverances of the different sensory modalities and thereby facilitate the commonsense understanding of the empirical world as a world of enduring substances. At the same time, though, *manas* is called a sixth sense faculty, and the cognitions produced by it are said to be perceptual and devoid of concepts. This may be the result of *manas* having been introduced as something of a catch-all category, meant to do a variety of tasks that are unrelated save to the extent that they can be called 'inner' and cannot be explained as external-sensory. So *manas* was thought of as not only the cross-modal synthesizer, but also as the faculty responsible for apprehending such 'inner' states as feelings of pleasure and pain. Thus, when Yogācāra-Sautrāntika embraced a representationalist view of sense perception, *manas* became the natural place to locate cognition of the after-image (*pratibimba*), something that is clearly meant to be 'inner' or an object of introspection. There is some dispute as to whether Dignāga included cognition of feeling, desire, and the like in the category of *mānasa* cognition.<sup>11</sup> But in any event, he does include both the clearly non-conceptual cognition of the after-image of an immediately preceding sense perception and the cognition of shape—something that is said not to be seen because it is a conceptual construction and so cannot serve as cause of visual cognition.<sup>12</sup> Even when *manas* is restricted to processing information from a single sense modality, it seems to be sometimes conceptual and sometimes non-conceptual.

*Manas* is also the faculty of yogic perception, in particular the faculty whereby enlightened beings cognize the fact that the three characteristics pertain to all dharmas.<sup>13</sup> The attainment of the cessation of suffering is said to be brought about by directly perceiving the impermanence, suffering, and non-self of all entities. We shall say more below about the mechanism whereby this ability is said to be attained. The important point here is that this cognition that all dharmas have the three 'marks' is said to be devoid of concepts.<sup>14</sup> One might think that such a fact could be apprehended only inferentially, by force of the arguments that establish the universality of the marks of impermanence et cetera. And that is one reason why *manas*, as the faculty that employs concepts, seems like a natural choice for the faculty that performs this cognition; surely one cannot be in direct sensory contact with all dharmas everywhere and at all times. (The other reason is that yogic perception has as object entities belonging to different sense-spheres, and so seems cross-modal.) But yogic cognition is said to be perceptual, not inferential, and devoid of concepts:

For a direct cognition of the reality of non-self that is devoid of concepts, by virtue of its clear representation (*pratibhāsa*) that consists of meditation, and that is non-erroneous by virtue of having as intentional object (*viṣaya*) an entity (*artha*) established by an epistemic instrument, that seeing of non-self, by completely uprooting the seeing of a self, is not as the opponent said, something consisting of [mere] hearing and thinking. (TSP *ad* TS 3338; K 1986, p. 870)

It is for this reason, Kamalaśīla later explains, that classical Ābhidharmikas lack the omniscience of buddhas and advanced bodhisattvas. While they may have rehearsed the arguments for non-self, impermanence, et cetera, their understanding of the full extension of the three marks uses concepts and thus lacks the vividness and forcefulness of direct perception. Yet it is difficult to see how such an all-encompassing fact could be cognized directly and immediately. How can *manas* be a faculty of non-conceptual cognition?

Still more blurring of lines occurs with the notion of habituated or stereotyped perception (*abhyāsavatpratyakṣa*). This is included in a list of epistemic instruments considered intrinsically valid (*svataḥ prāmāṇya*), that is, uniformly producing cognitions whose veridicality is caused by the same factors that caused the cognition. The idea of a habituated perception is that while the first occurrence of a particular kind of perceptual experience might leave room for doubt concerning the object ('Is that water I see from my window, or just a reflection off some shiny surface?'), after repeated confirmation of similar episodes—I walk there each day and confirm the presence of water by drinking—a similar perception counts as direct knowledge of water (provided my eyes are functioning properly). Habituated perception is on the list of intrinsically valid epistemic instruments given by Śākyabuddhi, Dharmottara, Kamalaśīla, Manorathanandin, Mokṣākaragupta, and a long line of Tibetan commentators (see [Kyūma 2002](#)). Manorathanandin, for instance, explains that with a habituated perception "there is direct establishment of the intrinsic property of being free of error inferred from oft-repeated conduct" (PVV 3.22 ff). There is some ambiguity in discussions of this sort of cognition, but as Manorathanandin's 'direct establishment' suggests, it would seem to be taken as genuine perception (and not perceptual judgment or ascertainment) and so is devoid of concepts. This is somewhat mysterious if the cognition in question is valid by virtue of its having been preceded by inferential confirmation of prior occurrences through the known effects of water (e.g., slaking of thirst). While the present cognition is not said to involve such an inference, we would still be inclined to consider it conceptually mediated. This may make us wonder if *vikalpa* are properly thought of as concepts.

A remark of Dharmakīrti's may be the source of the notion of habituated perception:

While the power [to produce] is the intrinsic nature of existents, it is not seen where the effect has not been previously [given]; hence there is confusion due to lack of acuity with respect to ascertainment.

Inference is prescribed for the sake of stopping [confusion]; those of great mind [however] determine all forms just from seeing. (PV III.106–107)

The key idea here is that, given radical nominalism, an ultimately real entity can be brought under a natural kind term only given apprehension of the



effect it is capable of producing. What makes something a cow is not a nature it shares with other cows (there being no shared natures), but rather its being distinct from all those entities that cannot, for instance, satisfy the desire for milk. Categorization—classification under natural kind terms—is in turn the gateway to all sorts of other useful information to be gleaned from past experience. In order for epistemic instruments to guide our behavior, there must be awareness of the effect a given perceived particular can produce. But effects always come after their causes, so there must be reliance on information about the past behavior of similar particulars. Ascertainment—the correct classification of a perceived particular—must rely on cognitive processes utilizing concepts.

But then, says Dharmakīrti, there are those ‘of great mind’, who can categorize ‘just from seeing’, that is, through perception alone without employing inferential processes. It is possible that the reference here is to enlightened beings. As we just saw, yogic perception is said to give them the capacity to directly perceive not just the particular but also the general nature of any given dharma. In pre-Dignāga Abhidharma it is the three marks of impermanence, suffering, and non-self that are usually referred to as the general natures of dharmas. Knowledge that these characterize all entities is instrumental to ridding oneself of the ‘I’-sense and the defilements of desire, aversion, and delusion that are fueled by that sense. But inferential knowledge, knowledge ‘in theory’, was not considered adequate to the task of ending the ‘beginningless ignorance’ from which suffering arises. Instead it seemed that the powers of concentration developed in meditation must be involved.

This comes out in something Śāntarakṣita says in defense of the claim that the Buddha possesses omniscience:

The perception [of the three marks in all things] is a valid epistemic instrument because it is clearly manifest and conforms to the nature of things,

Like the case of the cognition of the appearance of blue and the like produced in the visual sense sphere and the like.

It is possible for there to be the vivid appearance all at once in a single cognition

Even of all dharmas, so you should understand. (TS 3444–3445; K 1986, pp. 816–817)

Note the claim that the state in question is both clear (*sphuṭa*) and vivid (*spaṣṭa*), to which we will return shortly. But why is only cognition of this extraordinary kind capable of putting an end to suffering? In his commentary, Kamalaśīla develops the answer. He begins by explaining that the roots of our ignorance concerning the dharmas run very deep:

Therefore, one having been repeatedly born in similar lives from beginningless time, the theory of the self, the grasping of the self was instilled, then love of self; then also hatred and the like; due to grasping a self from repeated positive and negative concomitance, it is clearly known to all down to the cowherd that the root of all these is the sense of 'mine'. (K 1986, p. 870)

He then explains that “that which obscures the cognizables [i.e., what makes us ignorant of the true nature of reality], however, [is removed] due to uninterrupted attentive repetition over a long period of time of the seeing of selflessness.” Here repetition (which is the basis of habituated perception) is said to explain both the ubiquity and the persistence of the 'I'-sense, and also its extirpation through yogic perception. It is because the fundamental error of the sense of a self and the affective habits to which it gives rise have been continuously repeated over countless past lives that they are so difficult to uproot. Indeed, one can 'know' (like the Ābhīdharmikas) that they are erroneous and yet persist in the intellectual and affective habits that perpetuate suffering. Stronger measures are required.

And as for what has been said, that desire etc. can still arise in one who has ascertained selflessness by the force of inference, that is incorrect [as regards the enlightened ones]. For a direct cognition of the reality of non-self that is devoid of concepts, by virtue of its clear representation that consists of meditation, and that is non-erroneous by virtue of having as intentional object (*viṣaya*) an entity (*artha*) established by an epistemic instrument, that seeing of non-self, by completely uprooting the seeing of a self, is not as the opponent said, something consisting of [mere] hearing and thinking. (K 1986, p. 875)

Enlightenment, understood as the extirpation of the defilements, is a gradual process. But the cognition that sparks this process is an all-at-once occurrence that directly apprehends all dharmas as having the three characteristics. The model here is the meditation taking as object the so-called spheres of totality (*kr̥tsnāyatana*) described by Buddhaghosa in VM III.105 ff. There the meditator first draws a blue circle and focuses their attention on it, until such time as they can clearly visualize it without looking. Through repeated practice of this exercise they are said to develop the ability to perceive all blue occurring everywhere in a single cognition.

This yogic perception is said to be attained “through practice repeated in many ways over a long time” (TSP *ad* TS 3339; K 1986, p. 871). It is not only yogis, though, who are said to directly perceive the nature of the reals due to repetition. The 'habituated perception' discussed earlier is also said to be intrinsically valid “because the cause of error has been excluded by force of repetition” (TSP *ad* TS 2945; K 1986, p. 775). As shown by [Kellner \(2004\)](#), a 'cause of error' may here mean no more than a perception's being indeterminate with respect to the capacity of its object: when I have the visual cognition as of something sparkling, is its cause water or just a shiny solid? Both yogic and ordinary perceptions may be made determinate—may

have such doubt excluded—through a mechanism produced by repetition of confirmation. The question before us is whether the triggering of this mechanism counts as the involvement of concepts. The mechanism might seem to be a cognition that is a case of what Kellner (2004) calls ‘perceptual ascertainment’, a mental event that immediately follows after perception and, due to the content it receives from that perception, categorizes the percept as an entity with a certain causal capacity. But it is not clear that there actually is a separate ascertaining cognition in the case of habituated perception. Dharmakīrti seems to have habituated perception in mind when he says, “Immediately upon seeing that, because the capacity has been cognized in [other] things seen, due to recollection one acts out of desire” (PVin 1.18). Being thirsty, I proceed to walk toward the sparkling appearance without bothering to think of it as water.

We might in retrospect see our activity as stemming from an implicit act of bringing the percept under a category. But in his defense of the claim that habituated perception is intrinsically valid, Kamalaśīla rejects this reconstruction:

Just as by the power of repetition, as in the case of yogis and experts in gems and the like, a clear (*sphuṭa*) representation (*pratibhāsa*) can itself produce a cognition that is determinate with respect to error, so elsewhere as well due to the power of repetition by the clarity of the representation, [a cognition] with all doubt as to error dispelled, producing, without anything intervening, apprehension of what is common to similar things without there being reflective thought, accomplishes the rejection of all dissimilar things; its validity is said to be purely intrinsic. It might be thought: With respect to what has also been done repeatedly, the ascertainment of validity by means of the property of having the power to attain a goal is inferred from seeing the sign (*liṅga*) common to similar things, hence all accomplishment of validity is extrinsic, nowhere is it intrinsic. But this we do not understand. For it is to be explained how there is ascertainment of the sign that is the characteristic of the purely homogeneous. (TSP *ad* TS 2969; K 1986, pp. 780–781)

For, he claims, having the cognition by way of an inferential mark leads to an infinite regress. The point then seems to be that there is no separate ascertaining cognition following habituated perception; the perceiver simply acts given the requisite desire (such as thirst).

This may seem to be in some tension with Dharmakīrti’s claim that prelinguistic infants and non-human animals possess and use concepts despite their lacking the means to express them.<sup>15</sup> If the infant can be said to possess concepts despite its inability to express them (presumably even to itself in thought), this might seem to suggest that the direct transition from habituated perception to activity must likewise involve the use of concepts. There is, though, evidence against this supposition. In a passage cited earlier, we saw yogic perception described as “devoid of concepts, by virtue

of its clear representation that consists of meditation.” The idea is that through the practice of meditation one is able to form a representation (*pratibhāsa*) or mental image the clarity (*sphuṭatva*) of which shows it to be devoid of concepts.

The idea that a cognition’s clarity (*sphuṭatva*) or vividness (*spaṣṭatva*) is a sign of its being perceptual and not involving concepts has an echo in the British empiricists’ doctrine of ideas, an important precursor to current views about concepts. Locke and Hume both held that the images directly produced in sense perception are more “forceful and vivacious” than the copies of those impressions that are formed by the mind (through a process of abstraction, according to Locke) and then used to represent whole classes of percepts, thus serving as so-called “general ideas.” If we think of concepts as akin to the empiricists’ general ideas, then we can see a similar claim being made in this discussion of the case of the whirling firebrand:

The illusory circular shape that is caused by a single sense all at once arises due to the power of a collection of particulars, since its representation is quite vivid (*spaṣṭa*). It cannot be right that this vividness of representation pertains to apprehension with the help of concepts. That [sort of apprehension] is done just by memory, through the performance of assembling [past moments], and not by sensory cognition, due to lack of capacity to grasp past objects. And the object of such memory lacks this hyperclarity. Why? Because it no longer exists. [So the circle is perceived by vision.] (TSP *ad* TS 1254–1256; K 1984, pp. 376–377)

The cognition of a circle is produced by seeing a whirling firebrand, but there is no continuous circle of fire, only a flame that occupies one part of the arc at any given moment. Ābhidharmikas disputed just how to explain this phenomenon. But of particular importance to our investigation is Kamalaśīla’s claim that this cognition cannot be the product of concepts, since that would require the use of memory, which does not produce representations of the required clarity and vividness. Being clear and vivid is deemed sufficient for its being the content of a perceptual cognition.<sup>16</sup>

This clarity-and-distinctness (*spaṣṭatva*) test makes intuitive sense. We usually distinguish between ‘merely theoretical’ knowledge of some state of affairs and knowledge that is somehow direct and immediate. The difference in vividness is accompanied by a difference in forcefulness: the direct witnessing is more likely to motivate one to act. This seems to be because there are inferential steps between the ‘theoretical’ knowledge and action that are not present in the case of direct witnessing. And inferential steps are mediated by concepts. This might explain the importance attached to the claim that the *aryas*’ yogic perception of the three marks is said to be devoid of concepts. There being no place for the inferential processes fueled by conceptualization to enter in, there is no room for backsliding.

What we seem to have here, then, is a reversion to the old idea that perception’s use of intrinsic nature concepts does not make it conceptual.

Repetition, whether in perception of a stereotyped situation or in meditation, results in automatic access to information that would otherwise require bringing to mind the relevant contents of long-term memory, and produces a cognition with all the ‘force and vivacity’ of direct perception. Such cognitions are said to be non-conceptual, but there can be no gainsaying the fact that they involve concepts nonetheless—what classical Ābhidharmikas call intrinsic nature concepts. That the habituated perceiver can now go directly from seeing the sparkling appearance to acting to slake thirst, without first having to recall similar appearances and the results of activity subsequent to their perception, does nothing to change the reliance on patterns of resemblance. For the Buddhist nominalist there are no resemblances in the world; the resemblances we think we see are all conceptual constructions. All that repetition might do is speed up the process of deploying concepts. It cannot erase them from the picture; they are still there, now operating behind the scenes.

#### IV

The bright line that Dignāga sought to draw resembles in certain respects the views of recent supporters of non-conceptualism about perception. But we now have empirical evidence that was not available to Indian Buddhist philosophers. And that evidence seems to support the claim that, as classical Abhidharma held, perception yields basic categorization as output, so that non-conceptualism is false. To see how this plays out within the current dispute, and how this in turn might impact Dignāga’s border wall, we need to say something about the cognitive-scientific background of the conceptualist/non-conceptualist debate.

That debate is part of a larger one concerning the degree to which cognitive processing is modular as opposed to global. At one time, dual-systems theorists made bold claims to the effect that all mental processes could be assigned to one of two systems, the modular System 1 (the dorsal system) or the global System 2 (the ventral system). Current views are more nuanced, in part due to increasing evidence of the plasticity of the brain: when a brain structure that serves a particular function is damaged, other parts of the brain may take up the function. Still, there are functions that are clearly modular: fast, informationally encapsulated, and resistant to cognitive penetration. The ducking response, for instance, is much faster than conscious threat assessment (‘that object is coming at my head’), and is not dampened by knowledge of illusoriness of trigger (we also duck in 3-D movies).<sup>17</sup> At the other end of the scale are types of mental processing that clearly require informational input to be made globally available. When trouble-shooting some malfunctioning mechanical system, for instance, perceptual content must be made available for semantic processing and access to long-term memory.

The dispute between conceptualists and non-conceptualists about perception concerns just where sense perception belongs on this continuum. We know that perceptual processing commonly leads to the percept's being assigned to a basic category: one sees the shape *as* a tree, one hears the sound *as* a cry. This is the phenomenon that led classical Ābhidharmikas to hold perceptual identification (*saṃjñā*) to be intrinsic to perception, and to posit intrinsic nature concepts as the (benign) products of such identification. The key issue in the current debate over conceptualism is whether these basic-level categorization processes are modular. Since categorization is a kind of conceptualization, an affirmative answer would count as strong evidence against non-conceptualism. The non-conceptualist wants to tell something more like Dharmakīrti's two-stage story, according to which perception outputs an iconic representation, which is then processed, using the contents of memory, to yield a basic-level categorization.

Eric [Mandelbaum \(2018\)](#) presents a compelling case for basic categorization being modular. The key variable at work in the evidence is processing speed. Modular processes, which can be accomplished using parallel processing, are fast, while processes requiring global availability, since they must use serial processing, create von Neumann bottlenecks (see [Dennett 2017](#)) and are consequently much slower. Investigation of the brain enables us to put lower limits on the speeds that would be required for perceptual categorization to involve cognitive penetration (i.e., to not be encapsulated). And subjects turn out to accomplish categorization tasks at an order of magnitude faster than the non-conceptualist hypothesis would predict.

So much, then, for the most straightforward reading of Dignāga's border wall. But there is more. The encapsulation of modular processes means they are resistant to synchronic cognitive penetration—but not to diachronic cognitive penetration. Given the plasticity of the brain (a factor that is usually thought to tell against modularity), there is no reason to suppose that habituation could not foster development of new modules on the fly. Indeed there is evidence that this does occur. The super-fast basic-level categorization resulting from perception includes not just natural kind concepts (*face, dog, flower*) but also concepts of artifacts (*car, trumpet*). Selectionist pressure can explain a face-detection mechanism being among the capacities hard-wired into the human visual system (alongside the ducking response).<sup>18</sup> But the ancestral environment did not include cars or trumpets, so the ability to rapidly assign a visual presentation to those categories must reflect learning. What we can well imagine is that habituation results in development of a module that rapidly and effectively delivers base-level categorization for artifact kinds commonly encountered in the environment. Indeed we can even imagine that such a module might yield output that is phenomenologically closer in degree of vividness to iconic representations than to more abstruse mental contents.

Human perception, then, is imbued with conceptuality. The plausibility of Dignāga's bright line is thereby diminished. Is there anything in the cognitive-scientific neighborhood that might mitigate this? A lead worth exploring begins with the point that the colors we see are not actually in the world. They are, we now know, a superimposition contributed by the human visual system.<sup>19</sup> So while Dignāga cannot be blamed for not knowing this, he should have classified color perception as involving concepts, like the perception of shape. The processing may not look paradigmatically conceptual, but conceptualization is there nonetheless: many distinct stimuli are all treated as 'the same', yielding the one output 'blue'. Still Dignāga was onto something when he in effect called color perception direct and shape perception indirect. Processing of information acquired through irradiation of the retina proceeds in several distinct stages. First there is the excitation of nerve cells on the retina. That information is transmitted to the visual cortex, where differences in the outputs of the various rods and cones is processed to yield cognition of color. And only after color discrimination has occurred can there be detection of edges, for edges are boundaries between uniform patches of color. Finally, shape recognition can occur only after edges in the visual display have been processed. Shape perception comes considerably downstream from color perception. Insofar as both color and shape are artifacts of the human visual system, both are superimposed, and thus might deserve to be called products of conceptualization. But color, we might say, is less so than shape.

The suggestion, then, is that involvement with concepts might come in degrees, the degree to which a given cognitive content is concept-involving varying with the number of distinct levels of cognitive processing required for that content to become globally available. Only surface irradiations and other forms of sensory excitation would then count as genuinely non-conceptual. But some cognitive content could still be said to be less contaminated than others by superimposition of concepts. And if we recall the original rationale behind the demonizing of concepts—the critique of hypostatization as a force that instills and reinforces the 'I'-sense—we can see why this might be considered important. The less contaminated a given cognition is with layers of conceptualization, the less implicated it would then be in the origin and perpetuation of suffering. To this we might add that those cognitions at the low end of the conceptuality scale are more vivid than those at the high end: I see the blue of my sweater more vividly than I see its being an artifact. Yogācāra-Sautrāntikas might be loath to abandon the claim that the buddhas' directly perceiving the three marks in all dharmas is utterly devoid of concepts. They might see this as threatening the claim that buddhas have infallible knowledge about the ultimately real causes of suffering. Still, it would enable them to reconcile what they say about habituated and yogic perception with their views about the role of concepts.

The Yogācāra-Sautrāntika will not be pleased with the results so far. I want to turn now to a possible way to repair Dignāga's border wall. This time I shall be drawing on resources from both Buddhist philosophy and recent work in philosophy of mind. I begin with a point made by Jeson Wu (2019) concerning a similar tension in Dharmottara's understanding of the role of concepts in perception. In the standard Yogācāra-Sautrāntika account of perception of a novel object, there are several successive moments of cognition, each processing information from its predecessor in the causal series.<sup>20</sup> Following an event of contact between functioning sense faculty and appropriate object, and given the presence of a moment of consciousness  $C_1$ , there is the initial cognition  $C_2$ , the awareness of the particular as such. This cognition is said to consist in the conformity of the cognition's content to the object encountered at the preceding moment. Given such background conditions as the presence of traces formed by past experience, this cognition  $C_2$  produces a successor cognition  $C_3$  that categorizes the object encountered in the first moment (e.g., seeing as blue). This in turn facilitates subsequent conduct with respect to the object—namely by allowing information about past experiences with objects of the same category to be brought to bear on the present situation. Now, strictly speaking, the activity of perceiving (understood as free of concepts) occurs in the transition  $C_1$ – $C_2$ , while the activity of perceptual ascertainment (*niścaya*, understood as conceptual) occurs in the transition  $C_2$ – $C_3$ . Wu's point is that when 'perception' is understood in the strict sense corresponding to the ultimate level of truth, it is  $C_2$  that qualifies, while when the term is taken in the loose sense corresponding to conventional truth, the series  $C_1$ – $C_3$  counts as perception in Dharmottara's scheme. Because of this ambiguity, perception may be said to be both with and without concepts: 'without' at the level of individual cognitions, 'with' at the level of the series of cognitions.

Dharmottara has (perhaps unwittingly) reproduced the Nyāya scheme of a two-stage perceptual process in which the initial encounter with the individual elements of a relational complex (e.g., a substance, a blue trope, inherence) gives way to a grasp of the complex as a whole (a substance as inhered in by a blue trope). Since Naiyāyikas allow for persisting entities, they are able to see this as a single cognitive event. This allows them to claim that every perception is conceptual, but that each contains an initial moment that is non-conceptual. On Dharmottara's account it is only when we ascend to the level of the merely conventionally real that we may speak of persisting objects and mental events; at the ultimate level there is no event that both counts as sense perception and is conceptual. The Buddhist distinction between two ways in which a statement may be true, and two ways in which an entity may be said to be real, is what allows Dharmottara



to make *prima facie* conflicting claims about perception. What is conventionally a single persisting cognitive event is ultimately a series of distinct causally connected cognitions. And just as properties that may pertain to an organism as a whole (e.g., being a carnivore) may not pertain to its constituent cells, so whether the property of being conceptual applies to cognitions may depend on the level of analysis at which they are found.

This alone may not resolve the tension, however. For we still have the ascertaining cognition  $C_3$ , and ascertainment looks like a process that requires the subject to call up, from long-term memory, information that is amenable to predication ('this is blue'). This brings us back to the question of how representation of a bare particular can lead to categorization of that particular, given the spartan resources available to the radical nominalist.

At this point it may be useful to bring in tools drawn from a different sort of levels distinction than the one we find in the Buddhist notion of two truths. Daniel Dennett distinguishes among three different stances one may take when trying to explain and predict the behavior of some system: the physical stance, the design stance, and the intentional stance. In taking the physical stance, one treats the system as a collection of physical objects whose behavior is governed by the laws of physics; explanation and prediction are to be done entirely by application of such laws. In taking the design stance, one typically ascends to a higher level, treating certain assemblages of physical objects as functional components of the system. So instead of trying to explain the behavior of a car's electrical system in terms of the changes in electrons predicted by the theory of electromagnetism, one understands the system's behavior in terms of the functions of such components as the solenoid (to increase the voltage of the current flowing to the starter motor) and the distributor (to send current to the spark plugs in the correct sequence). Obviously our explanatory and predictive powers are enhanced when we take this stance with respect to complex systems—provided, of course, that the components of the system operate as intended. But with certain complex systems we can do even better, by attributing intentional states—states having the property of being *about* something else—to the system. This involves treating the system as something having such intentional states as beliefs and desires, and the ability to govern its behavior in accordance with the norms of practical rationality. Taking this stance represents a further leap in explanatory and predictive power. For Dennett, though, such systems are still physical systems, and their behavior is in principle subsumable under straightforwardly physical laws. Attribution of functional and intentional properties to complex systems may often prove necessary, given our interests and cognitive limitations, but it is still just a useful cognitive shortcut.

The Buddhist soteriological project of establishing non-self involves a sustained attempt to show that the commonsense understanding of persons allows for reductive analysis that avoids positing a subject of experience or

agent of actions. This is the thought, for instance, behind the Sautrāntika claim that sensory consciousness does nothing, that it merely arises bearing the form of the object the sensory contact with which caused its occurrence (AKBh 9; *Abhidharmakośabhāṣyam of Vasubandhu* 1975, p. 473). This is akin to the move from taking the intentional stance toward some system to taking the physical stance: processes that seem to require a conscious subject are shown to be explained by causal relations among impersonal entities. But the Buddhist epistemologists' analysis of cognition seems to retain elements appropriate to a higher-level stance, such as the phenomenal property of vividness (*spaṣṭatva*), the presence of which is said to signal directness in the cognition in question. The underlying idea that there is such a thing as 'what it is like to perceive directly' derives from the model used by systems of self-control to monitor and control their own states. It thus belongs with that first-person stance that Buddhists see as implicated in existential suffering. If the property of vividness belongs anywhere in Dharmottara's analysis, it belongs at the level of the series (*santāna*), not at the level of the ultimate particular. Taking the intentional stance may prove useful in meditation instruction. But for a Buddhist it cannot represent how things ultimately are.

Perhaps something similar might be said about the involvement of concepts in cognitive processes.<sup>21</sup> A cognition is said to be conceptual when its object is an object-in-general, and non-conceptual when its object is a particular. Notice that this distinction relies on taking the intentional stance.<sup>22</sup> Notice also that for a nominalist the object-in-general is not ultimately real. In order to understand this way of talking we must ascend to the design stance and specify the function performed for the system by states that are characterized as being conceptual. Their function seems to be this: bringing past experience—the experiences of this system, and of other similar systems as encapsulated in and transmitted through a shared language—to bear on the present circumstances of the system. And once this function has been specified, we can begin to look for the mechanisms that play this role in the system in question. The new tools of neuroscience hold promise to reveal the mechanisms that explain the transition from 'seeing' to 'seeing as' more generally. That in turn should help us understand how the gap between sensory input and motor output may be shorter or longer depending on such factors as past experience. And it may turn out that none of the elements in what is thus revealed will be the sorts of things to which the labels 'conceptual' or 'non-conceptual' properly apply. *Vikalpa* may turn out to be a mere *façon de parler*.

A similar point is made by Radu Bogdan (2010), who inveighs against the reification of propositions, which he calls "clever devices that enable speakers of a language and scientists to map out and talk publicly about the entities and regularities" of the mental domain (Bogdan 2010, p. 135). Insofar as concepts are the constituents of propositions, the same holds for

them. Of course the Buddhist nominalist agrees on the ontological point: the universal that is the object of conceptualization is a construction. The deeper point, though, is that the attitudes that take them as objects are equally the posits of a folk theory that has been adopted for the purposes of explaining and predicting the behavior of complex systems. There can ultimately be no such thing as being in a conceptual mental state. On the other hand, there is ultimately such a thing as the event caused by contact between a functioning sense organ and a suitable object. The problem of the seemingly fluid boundary between states that are without concepts and states that are conceptual simply does not arise: ultimately there are only the former, the latter are only conventionally real.

I spoke before of the early Buddhist origins of the idea that conceptualization is implicated in suffering. In time this idea led some parts of the tradition to embrace the notion that all conceptualization falsifies. That then gave rise to strains of irrationalism in some sectors of Buddhist thought. Now the idea that conceptualization leads to hypostatization, which in turn fuels the 'I'-sense, has the support both of testimony (*āgama*) and of reason. Bogdan amply demonstrates what the *Madhupiṇḍika Sutta* claims, that the conceptual resources made available through language acquisition are what make appropriation—identification with past and future stages of the causal series, thinking of it as oneself, an enduring entity—possible. The full autobiographical sense of an 'I' as a persisting subject of experience and agent of action is not available to the pre-linguistic child. If the 'I'-sense is at the heart of existential suffering, the question is what to do in response to the implication of conceptualization in its very possibility.

That the irrationalist rejection of all use of concepts in favor of some sort of 'direct cognition' might be a mistaken overreaction is suggested by the Buddhist doctrine that a human birth represents a rare opportunity to overcome suffering.<sup>23</sup> This is because rebirth as a non-human animal leaves one unable to form linguistically mediated concepts and thus come to understand the cause of suffering. This suggests what should in any event be clear, that the use of concepts not only obscures the nature of reality but also can help dispel the ignorance it fosters. The appropriate response in this case is not elimination but reduction. It is conventionally true that all perceptual cognition is mediated by concepts.<sup>24</sup> It is just that the mediating processes take longer in some cases than in others. There is no bright line separating two types of cognition. The appearance of such a line stems from ignoring the distinction between the ultimate stance and the conventional, intentional stance. It is neither ultimately true nor ultimately false that perception is devoid of concepts. Ultimately there are cognitions, but the question whether any of them is with or without concepts does not arise. The word *vikalpa* is a meaningless bit of gibberish in the ultimate discourse.

## Notes

Abbreviations are used in the text and Notes as follows; see the References for full citations:

- AKBh *Abhidharmakośabhāṣyam of Vasubandhu* 1975.  
D *Dīgha Nikāya*, eds. T.W. Rhys Davids and J.E. Carpenter. London: Pali Text Society, 1995.  
JSN *Jñānaśrīmitranibandhāvali* 1987.  
K [Krishnamacharya 1984](#), 1986.  
M [Majjhima Nikāya 1948–1960](#).  
PS *Pramāṇasamuccaya, Chapter 1*. See [Steinkellner 2005](#).  
PV [The Pramāṇavārttikam of Dharmakīrti 1960](#).  
PVin *Dharmakīrti's Pramāṇaviniścaya, Chapters 1 and 2* 2007.  
PVV *Pramāṇavārttikavṛtti* of Manorathanandin. In: *Dharmakīrti's Pramāṇavārttika with a commentary by Manorathanandin*. Edited by R. Saṃkrtyāyana. Patna, 1937.  
S [Saṃyutta Nikāya 1884–1898](#).  
SN *Suttanipāta*, ed. Dines Andersen and Helmer Smith. London: Pali Text Society, 1913  
TS, TSP [Tattvasaṅgraha of Śāntarakṣita with Tattvasaṅgrahapañjikā of Kamalaśīla 1984 \(vol. 1\), 1986 \(vol. 2\)](#).  
Viṃś [Viṃśikā of Vasubandhu 1984](#).  
VM [Visuddhimagga of Buddhaghosācariya 1950](#).

- 1 – I shall throughout this essay use ‘concept’ to translate *vikalpa*. Questions can be raised about whether the *concept* concept as currently understood matches this notion of Buddhist epistemology. (I here follow the convention of using italics for the names of concepts, so that ‘*concept*’ refers to the concept of a concept.) I shall not address these worries here, but see the Introduction to [Siderits et al. 2011](#) for discussion.
- 2 – Here ‘cognition’ translates *jñāna*, a representational mental state. In the current debate between conceptualists and non-conceptualists about perception, ‘cognition’ is sometimes used for representational mental states with propositional structure, so that the non-conceptualist would consider ‘perceptual cognition’ an oxymoron. Here I have chosen to follow the prevailing translation conventions; I do not thereby mean to foreclose any options.
- 3 – Of course the perceiver will still need to employ conceptually encoded information in order to make use of the information obtained through perception. See the end of the next section on this point.

- 4 – For more on the *apoha* theory of meaning, see the essays in [Siderits et al. 2011](#), and in [McAllister 2017](#). I shall not take up the question whether the strategy of the *apoha* theory succeeds in bridging the gap Dignāga opened up between perceptual and inferential cognitions, but I am skeptical.
- 5 – It is also possible that no coherent story brings together all the claims made about concepts in the Yogācāra-Sautrāntika tradition. One might account for such failure using the central claim of Edouard [Machery \(2009\)](#) that *concept* is a cluster concept. But I shall not explore this here.
- 6 – See, however, Sakkapañha Sutta (D v.1, pp.184 ff), and Dvāyātana passana (Sutta Nipāta 3.12, SN pp. 147–148), which can be construed as linking all conceptualization to suffering.
- 7 – The discussion, in [Kramer 2018](#), of concepts in early Yogācāra makes clear its continuity with earlier Abhidharma accounts.
- 8 – A general Buddhist commitment to nominalism comes by way of the point that real universals would have to be permanent. What we find before Dignāga, however, is a case of what is disparagingly called ‘ostrich nominalism’, a failure to recognize the fact that invoking resemblances among particulars does not allow one to circumvent commitment to universals. See [Siderits 2006](#).
- 9 – Notice that Kamalaśīla here explicitly rejects the claim that is at the center of Dunne’s (this issue) Dharmakīrtian account of perceptual error: that the grasper-grasped distinction is preconceptual.
- 10 – By ‘classical Abhidharma’ is meant the Abhidharma systems developed by non-Yogācāra schools. If we consider the school of Dignāga a form of Abhidharma, it would then count as non-classical.
- 11 – The dispute concerns the interpretation of PS I.6ab: *artharāgādisvasaṃvitti*.
- 12 – A given shape predicate no longer applies ‘after separation’, the first of the two tests of something’s being a mere conceptual construction given at AKBh 2.6. Arguments for shape being conceptually constructed are given at AKBh *ad* AK 4.3b ([Abhidharmakośabhāṣyam of Vasubandhu 1975](#), p. 194), and at Viṃś 15b.
- 13 – See TSP *ad* TS 3339; K 1986, p. 870.
- 14 – I take this to be the soteriological point of the rules for exiting conceptualization discussed by [Kellner \(2020\)](#).
- 15 – For a clear explication of the claim see TSP 1216, K 1984, p. 367.
- 16 – Also worth noting is that what has this vividness is a cognition representing a shape. As we saw above, Dignāga relegated cognition

of shape to *manas* because shapes could only have *prajñaptisat*; they must be conceptual constructs. While cognition of this circle might count as erroneous, stemming as it does from the inability of vision to resolve the stimulus quickly enough, there is no reason to think that the vividness that characterizes it does not also characterize veridical cognitions of shape. So once again we find ourselves confronting a cognition that is at once vivid—supposedly the mark of being devoid of *vikalpa*—and involving *kalpanā*.

- 17 – See Dunne (this issue), for more on the cognitive impenetrability test.
- 18 – Neonates show differential attention to highly stylized depictions of faces. The reason such a capacity might have been selected for has to do with reproductive success in a social but highly altricial species. A winning strategy for the infant that is completely dependent on adult caregiving is bonding through displays that will foster reciprocal affection.
- 19 – That *blue* is not a *jāti* or natural kind but an *upādhi* or artifact is known from the existence of a very large number of metamers, irradiation patterns of various frequencies under various conditions of background illumination all of which yield judgments of ‘blue’ by normal perceivers. For further details see [Hardin 1993](#).
- 20 – This seems to be an elaboration on an earlier Sautrāntika model; see [Yao 2005](#), pp. 99–101.
- 21 – The analogy here is only partial, since no Indian Buddhist is a physicalist. But this does not affect the point that both the physicalist and the Buddhist aspire to give an account that appeals only to the intrinsic natures of their ultimate reals.
- 22 – In Dignāga’s defense, his account of the epistemic instruments uses terminology that makes it accessible to his Naiyāyika and Mīmāṃsaka opponents, for whom the intentional stance is no mere useful pretense.
- 23 – That the rejection of all use of concepts might lead to irrationalism would follow from the fact that there is no such thing as reasoning in their absence.
- 24 – As Parimal [Patil \(2007\)](#) understands it, Jñānaśrīmitra’s account of *apoha* may also have this consequence.

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