# Uddyotakara on Universals I: Against Resemblance Nominalism

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Universals are properties that are shared by multiple objects. My cow in the byre and the cow grazing in the field are both cows. As I look at them, it seems to me that they are the same in some respect, or have something in common. This judgement of sameness calls out for explanation. Realists about universals answer this challenge by positing a property—cowhood—that all and only cows share. According to realists, universals have *stance-independent existence*: they exist independently of our attitudes like beliefs, judgements, desires, and so on. Nominalists argue that we don't have to posit such stance-independent properties to answer this explanatory challenge.[1] On their view, universals don't have stance-independent existence. In classical South Asia, Brahmanical thinkers from Vyākaraṇa, Nyāya, Vaiśeṣika and Mīmāṃsā text-traditions were realists about universals, while most Buddhists were nominalists. In this paper, my aim is to reconstruct the early Nyāya-Vaiśeṣika theory of universals, with special emphasis on the work of the Nyāya philosopher Uddyotakara (6th century CE). [2]

Early Nyāya and Vaiśeṣika philosophers like Vātsyāyana (4th-5th century CE) and Praśastapāda (6th century CE) argued that universals are necessary for causally explaining certain patterns of cognitive phenomena, e.g., the judgement of sameness about the cows. The early Buddhist nominalists, like Vasubandhu (4th-5th century CE), resisted this argument. On their view, the fundamental constituents of reality are just *tropes* or *property-particulars*. So, there are no properties that multiple objects can share. Against the realists, the Buddhists claimed that we don't need to appeal to universals for the purposes of explaining the relevant cognitive phenomena: we can explain them simply by appealing to resemblances amongst the objects we can perceive or think of. Here, I wish to explore how Uddyotakara responds to this kind of resemblance nominalism.

I show that Uddyotakara's contribution to this debate about universals is two-fold. On the one hand, he is possibly the first Naiyāyika to adopt a *sparse theory of universals*, a theory according to which it is necessary to posit only those universals which explain how objects resemble each other in the most fundamental or irreducible respects. On the other

hand, he offers a few arguments for realism, which are explicitly motivated by a commitment about intentionality.

> *The Causal Constraint on Content*. A particular or a property *E* can be an intentional object of an awareness-event (*jñāna*)[3], i.e., an experience or a thought, only if the awareness-event is causally connected to *E.*

Uddyotakara argues that, if the *Causal Constraint on Content* is true*,* then we should be realists about universals. In this essay, I argue that there is a kernel of truth in Uddyotakara's argument: if we accept either this constraint or other weaker causal constraints on content, we must reject resemblance nominalism.

This paper is divided into four parts. In §1, I sketch the arguments that Uddyotakara's Nyāya-Vaiśeṣika predecessors offer for realism about universals. In §2, I explain the form of resemblance nominalism that Vasubandhu and other Ābhidharmika Buddhists accept. In §3, I show how Uddyotakara argues for realism by appealing to the *Causal Constraint on Content*. In §4, I present his sparse theory of universals. In §5, I show how we can extract from Uddyotakara's arguments a serious challenge for Buddhist resemblance nominalism.

## 1. Early Nyāya-Vaiśeṣika Realism about Universals

I look at the field before me, and see a brown cow gently walking through it. That's Daisy. There are at least three objects[4] here: Daisy, the brown colour on Daisy's coat, and Daisy's movement. When I look inside the byre, I discover another brown cow, tethered to a post but moving around it. That's Maisie. Daisy resembles Maisie: she is the *same* kind of animal as Maisie; she has the *same* colour, and she walks in the *same* way.

The early Vaiśeṣika philosophers tried to fit mundane observations of this sort into a six-category ontology. The six categories are: substances (*dravya*), qualities (*guṇa*), motions (*kriyā*), universals (*sāmānya*), ultimate differentiators (*antyaviśeṣa*), and inherence (*samavāya*). Their Nyāya comrades—at least Vātsyāyana onwards—accepted this ontological scheme.[5] According to this scheme, the cows are substances. Their attributes like colours, odours, and flavours are qualities. Their movements are motions. Substances, qualities, and motions share further properties: *universals*. The cows share *cowhood* (*gotva*). Their brown

colours share *brownness* (*śyāmatva*). Since they horizontally traverse space as they move, their motions share traversalhood (*gamanatva*). Under this account, there is one primary relation by which a substance, or a quality, or a motion can possess a universal: inherence. The cows share their cowhood because cowhood inheres in them. The brown colours share their brownness because brownness inheres in them. The motions of the cow share traversalhood, since traversalhood inheres in them.[6]

Despite the complexity of this ontological scheme, it's relatively easy to see that there are at least four kinds of entities on this picture:

(i)      *Thin particulars* or property-bearers, i.e., entities that have properties.

(ii)      *Non-repeatable properties*, i.e., properties that are possessed by unique thin particulars.

(iii)      *Repeatable properties,* i.e., properties that are possessed by multiple thin particulars.

(iv)      A *relation of property-possession*, i.e., inherence.

We classify them using Table 1.

| Thin Particulars | Non-Repeatable Properties | Repeatable Properties | Relation of Property-Possession |
|---|---|---|---|
| Substances | Qualities and Motions | Universals | Inherence |
| Qualities | ✗ | Universals | Inherence |
| Motions | ✗ | Universals | Inherence |

Table 1: A Partial Classification of Entities
within the Nyāya-Vaiśeṣika Ontological Scheme

Three things should be clear from the table. First, amongst the thin particulars, only substances can have both repeatable and non-repeatable properties; qualities and motions only have repeatable properties. Second, non-repeatable properties—what we may call *tropes*

or *property-particulars*—can also be thin particulars, i.e., entities that have properties. Finally, all properties that appear on this list reside in their respective property-bearers by a relation of inherence.

The Vaiśeṣikas and their Nyāya counterparts accept a hierarchy of universals. The highest point in the hierarchy is existence (*sattā*), a property shared by all existent substances, qualities, and motions. Call this the *highest universal* (*parasāmānya*). Below existence, there are the universals shared by different kinds of entities: properties like substancehood (*dravyatva*), qualityhood (*guṇatva*), and motionhood (*karmatva*). These universals subsume other further universals. For example, universals like earthhood (*pṛthivītva*) or waterhood (*aptva*) are shared by different kinds of substances, e.g., earth and water, and therefore belong to a lower rung of the hierarchy than substancehood. Call any universal other than existence a *lower universal* (*aparasāmānya*). Lower universals are more restricted in scope than the highest universal and track kinds of existent objects; that is why they are often dubbed *specific universals* (*sāmānyaviśeṣa*).

According to early Nyāya and Vaiśeṣika thinkers like Vātsyāyana (4th-5th century CE) and Praśastapāda (6th century CE), the existence of these two kinds of universals should be accepted because they explain two kinds of cognitive phenomena.[7] The crucial notion here is that of "*anuvṛtti*," which is best translated as "uniformity" or "uniform occurrence."[8]

The first cognitive phenomenon is the *uniformity of awareness* (*pratyayānuvṛtti*). Sometimes, when we perceive distinct *F*s, we repeatedly make judgements that take the form, "That is *F*." When I see Daisy and Maisie on different occasions, I judge, "That's a cow." Similarly, when I see different kinds of existent objects—e.g., substances like earth and water, their qualities like the colour and flavour, and their motions—I may repeatedly judge, "That's existent." These judgements are *uniform* in the sense that they have similar contents. This is what the Nyāya-Vaiśeṣika philosophers call the uniformity of awareness. The second cognitive phenomenon is an *awareness of uniformity* (*anuvṛttipratyaya*). When we repeatedly judge different objects to be *F*s, we also take them to have something in common. When I see Daisy out on the field and look inside the byre to find Maisie, I may judge, "This is the same sort of animal as that." Similarly, when I perceive different kinds of existent objects, not only may I repeatedly judge, "That's existent," I may also judge, "These are all existents." Any such judgement may indicate that these existent objects are same in some respect, or that they

have something in common. This constitutes an awareness of uniformity. The early Nyāya-Vaiśeṣika thinkers appeal to these two kinds of cognitive phenomena in their arguments for realism about universals.

In *Nyāyasūtra* 2.2.69, the *sūtra*-maker Akṣapāda Gautama (2nd century CE) defines a kind property or *jāti* as "that which has the nature of producing the same [awareness-events]" (*samānaprasavātmikā*). Often, in early Nyāya and Vaiśeṣika texts, the terms "universal" (*sāmānya*) and "kind property" (*jāti*) are used as synonyms. The commentator Vātsyāyana doesn't use them that way: for him, kind properties are specific universals. He explains the idea by appealing to the uniformity of awareness.

> A universal is something that produces a similar awareness with respect to distinct substrata (*adhikaraṇa*); something in virtue which many objects do not distinguish themselves from each other; an object which causes the uniformity of awareness (*pratyayānuvṛtti*) with respect to many objects. Moreover, a specific universal that doesn't distinguish some objects but distinguishes others is a kind property.[9]

Vātsyāyana's explanation is a bit more careful than the *sūtra*: he first says what a universal is, and then defines kind properties as a species of universals. On his view, a universal plays two roles. The first role is *metaphysical:* a universal is an entity in virtue of which distinct objects are *not* different from each other, i.e., objectively resemble each other. Daisy and Maisie may differ from each other in some respects, e.g., with respect to the sharpness of their horns or the length of their tails. But they are not different insofar as cowhood is concerned. On this picture, universals explain objective resemblances between distinct objects. The second role that Vātsyāyana attributes to universals is *cognitive:* it causes the same awareness—an awareness with roughly the same content—to arise with respect to distinct objects. For example, the occurrence of cowhood in distinct cows like Daisy and Maisie produces the judgement, "That's a cow," with respect to those distinct cows. So, universals causally explain the uniformity of awareness.

As Vātsyāyana goes on to say, not every universal is a kind property (*jāti*), i.e., a lower or specific universal like substancehood, qualityhood, and motionhood. According to Vātsyāyana, a kind property plays a metaphysical role that not all universals can play. While the highest universal—existence—constitutes a respect in which all existent substances, qualities, and motions resemble each other, it cannot explain the objective distinctions

amongst those objects. Lower universals, like substancehood, do this. Not only do they explain why certain things—e.g., substances—objectively resemble each other, but they also explain why those very objects are objectively different from other entities like qualities and motions.

Unlike Vātsyāyana, Praśastapāda defines universals not with reference to the uniformity of awareness, but rather with reference to the uniformity of distinct objects and our awareness of such uniformity. In *Padārthadharmasaṅgraha*, he says:

> Universals are of two kinds: the highest and the lower. They are the cause of an awareness of uniformity (*anuvṛttipratyaya*). Amongst them, the highest is existence, because it has the most instances (*viṣaya*). Moreover, since it only causes uniformity, it is just a universal. Substancehood and so on are lower universals, since they have fewer instances. Further, since those also cause distinctness, they are given the label "differentiator" along with "universal."[10]

In a later context, Praśastapāda offers a fuller explanation.

> Universals are of two kinds: the highest and the lower. A universal resides in all its instances, its nature is the same [everywhere], and it resides in many things. It produces an awareness of the uniform occurrence (*anuvṛtti*) of its own nature in one, two, or many things. It is present without interruption (*prabandhena*) in its substrata without any change in its nature. [Thus,] it is the cause of an awareness of uniformity. How? Due to one's reflection (*pratyavekṣaṇa*) on an earlier uninterrupted series of awareness-events, "What is uniformly present (*anugata*) [in all these individuals] is a universal," which arises when awareness-events are produced with respect to each individual without interruption depending on a universal, on the basis of memory traces produced by [these] repeated awareness-events (*abhyāsapratyaya*).[11]

Suppose I have the ability to perceptually identify certain animals as cows. Thus, whenever I see cows, I repeatedly make judgements that take the form, "That's a cow." This is what we earlier called the uniformity of awareness. Due to the memory traces left by these repeated judgements, I am later able to recall that I made such judgements. When I reflect on the uninterrupted sequence of these earlier judgements, it is obvious to me that the animals I was taking to be cows about have something in common with each other. From this, I can

conclude that something is uniformly present in those animals. This is what we called an awareness of uniformity. According to Praśastapāda, the property that is uniformly present in the different cows is nothing other than cowhood.

Vātsyāyana and, especially, Praśastapāda seem to think that both these cognitive phenomena give us reasons for accepting the stance-independent existence of universals. Praśastapāda constructs two distinct arguments. The first is an *Argument from Uniformity of Awareness*

> *The Uniformity of Awareness Premise*. Often, an agent undergoes accurate awareness-events that uniformly take the form, "That is $F$," with respect to different objects.

> *The Explanation Premise 1*. Such uniformity of awareness is caused by some property, e.g., $F$-hood, that uniformly occurs in all the $F$s but is distinct from the $F$s.

> *Conclusion*. There is some property that uniformly occurs in all $F$s but is distinct from them.

Praśastapāda offers a version of the *Argument from the Uniformity of Awareness* while explaining why we should accept the highest universal, i.e., existence.[12] Whenever I see blue colour on a material substance (whether it is a hide of an animal, a cloth, or a blanket), I may uniformly judge, "That is blue," with respect to all of them. What explains this uniformity of perceptual judgements? In each case, the judgement is caused by the contact between my visual sense and the blue colour that is present in each of the substances I see. The same line of argument generalizes to other cases. Whenever I see existent objects like substances, qualities, and motions, I may uniformly judge them to be existent. The uniformity of these perceptual judgements cannot be explained by the fact that my visual sense is interacting with these disparate entities. A better explanation is that there is a relation of perceptual contact between my visual sense and a universal that is present in all these objects. That property, according to Praśastapāda, is nothing other than existence.

While explaining why we should posit lower universals like substancehood, qualityhood, and motionhood, Praśastapāda appeals to a different argument, what we may call the *Argument from the Awareness of Uniformity.*

> *The Awareness of Uniformity Premise.* Often, with respect to distinct objects, an agent accurately judges that something uniformly occurs in all of them, i.e., that they have something in common.

> *The Explanation Premise 2.* Such awareness of uniformity is caused by some property, e.g., *F*-hood, that uniformly occurs in all the *F*s but is distinct from the *F*s.

> *Conclusion.* There is some property that uniformly occurs in all *F*s but is distinct from them.

Praśastapāda applies this argument to lower universals like substancehood.[13] When we perceive multiple substances, e.g., clay pots, clothes, rivers, and so on, we take each of them to be a substance. After we have made such judgements, we may undergo an awareness that unifies the contents of all those judgements: "These are all substances." From this, we may conclude that these objects have something in common; this is an awareness of uniformity. But, when we think of qualities and motions, we judge, "These aren't substances." From this, we may conclude that the substances have some distinguishing feature that is absent from these qualities and motions; this is an awareness of distinction. According to Praśastapāda, what causally explains the two kinds of cognitive phenomena—the awareness of uniformity and the awareness of distinction—is nothing other than a universal, e.g., substancehood, which resides in all and only substances. The same reasoning is available for other lower universals like qualityhood, motionhood, and so on.

Let's sum up. For Uddyotakara's Nyāya-Vaiśeṣika predecessors, universals are posited as the *causes* of two kinds of cognitive phenomena: the uniformity of awareness and the awareness of uniformity. In the next section, we will see how the Abhidharma Buddhist Vasubandhu (4th-5th centuries CE) indirectly resisted the Nyāya-Vaiśeṣika theory of universals by arguing for a kind of resemblance nominalism.

## 2. Resemblance Nominalism

Before we consider Vasubandhu's arguments for nominalism in his *Abhidharmakośabhāṣya*, we need some background on his ontology.

## 2.1 Vasubandhu's Monocategorial Ontology

Vasubandhu and many other Abhidharma Buddhists accept a distinction between *ultimate existence* and *conventional existence*. According to Vasubandhu, an ultimately existent object (*paramārthasat*) is a fundamental constituent of reality. It is fundamental in two ways.[14] First, it is mereologically fundamental: it doesn't depend for its existence on any parts that it is composed of. Thus, it isn't something that disappears when it is physically broken down into parts. A pot made of clay isn't ultimately existent for this reason: if I hit the pot with a hammer, it will vanish as soon as it is smashed to pieces. Second, an ultimately existent object is conceptually fundamental: it isn't something that can be mentally analysed into other entities (*dharma*), such that, when these entities are mentally excluded from the object, we are no longer aware of the original object. Take, for example, water. Water can be mentally analysed into various physical tropes or property-particulars, e.g., its visible form, its fluidity, and so on. Once these other entities have been mentally excluded from water, we are no longer aware of anything that we can call "water." That is why it cannot be treated as an ultimately existent object. By contrast, a conventionally existent object can be non-fundamental in these two ways. Roughly speaking, a conventionally existent object (*saṃvṛtisat*) is an ultimately non-existent object whose existence we accept because it serves our practical interests. Both a pot and water can be conventionally existent.

This conception of ultimate existence pushes many Ābhidharmikas towards a *monocategorial* ontology. On this picture, the only constituents of reality are certain objects—called *dharma*s—that are both mereologically and conceptually fundamental. Typically, these Ābhidharmikas divide up the *dharma*s into five kinds: (a) matter (*rūpa*), (b) mental events (*citta*), (c) associated mental factors (*caitta*), (d) conditioned factors that are dissociated from the mental (*cittaviprayuktasaṃskāra*), and (e) causally unconditioned *dharma*s. However, amongst the Ābhidharmikas, Sautrāntika philosophers like Vasubandhu thought that categories (d) and (e) are empty: there are no ultimately existent objects that fail to be either mental or physical, or causally unconditioned. What are the remaining *dharma*s? According to one natural interpretation of Vasubandhu, these are *tropes* or *property-particulars*.[15] Vasubandhu takes matter to be of two kinds: (a) the *material elements* (*mahābhūta*) like the earth element, the water element, and so on, and (b) *derived matter*

(*upādāyarūpa* or *bhautika*), i.e., physical qualities that are causally dependent on the material elements. The material elements are simply property-like entities: the earth element is solidity, the water element is fluidity, the fire element is heat, and the wind element is motion. Similarly, derived matter includes perceptible qualities like visible form (*rūpa*), odour (*gandha*), and flavour (*rasa*), which are derived from the material elements. By contrast, mental events are conscious or unconscious mental tropes, while the associated mental factors are those mental tropes that invariably accompany mental events, i.e., concepts or mental labels (*saṃjñā*), hedonic states (*vedanā*) like pleasure and pain, and conditioned forces (*saṃskāra*) like intention, mental habits, and so on.

In light of this background ontology, Vasubandhu rejects a version of substratum theory that is accepted by his Nyāya-Vaiśeṣika interlocutors. According to this theory, there is a distinction between property-bearers and their properties, e.g., a distinction between a substance and its properties like qualities, motions and universals, or a distinction between a quality or a motion and the universals that it possesses. Vasubandhu's claim is that ordinary material objects like pots and chariots are simply bundles of physical tropes. Similarly, persons like you and me are bundles of physical and mental tropes. This makes his view both similar to and dissimilar from that of his Nyāya-Vaiśeṣika opponents. Like his Nyāya-Vaiśeṣika opponents, Vasubandhu argues that macroscopic material objects are composed of material atoms (*paramāṇu*). But, unlike his Nyāya-Vaiśeṣika opponents, he doesn't think atoms are substances that possess qualities. Rather, he thinks that atoms are in fact maximally small bundles of the physical tropes, while macroscopic objects themselves are just larger bundles of such physical tropes.

Vasubandhu offers two arguments for this view. [16] The first is *an argument from the absence of evidence*. The argument depends on a principle that Vasubandhu invokes at many places within his text.

> *The Absence of Evidence Principle.* If objects of a certain kind *K* exist, then there must be a source of knowledge (*pramāṇa*)—perception or inference—by means of which we can know that instances of *K* exist.

This principle entails that, if there were material objects that could serve as the substrata of their qualities, then we would have some means of knowing them, e.g., perception or

inference. But, when we perceive the world, we never perceive any such material substratum over and above perceptible qualities like colours, odours, etc. No one makes a perceptual judgement that takes the form, "These are earth, water, and fire, and those are their colours and so on." So, we cannot perceptually know that there are material objects that serve as the substrata of their qualities. What about inference? Vasubandhu doesn't address this question. But we can offer a response on his behalf. Notice that material substrata of ordinary perceptible qualities are causally redundant: there is no physical phenomenon that can only be causally explained with reference to such substrata. So, there is no causal inference that can take us from observed physical phenomena to the existence of material substrata of ordinary perceptible qualities. Thus, we have no way of knowing whether there are material objects that serve as substrata of their qualities. Therefore, it follows that there are no such material objects at all.

The second argument is an argument from a *causal theory of reference.* It depends on a principle about reference that Vasubandhu defends at multiple places.[17]

> *The Causal Principle of Reference.* If the application of a conventional designation (*prajñapti*) $C$ is typically caused by our awareness of objects of kind $K$, then the designation $C$ refers to objects of kind $K$.

Consider our ordinary linguistic expressions for various kinds of material objects, e.g., "wool," "cotton," "safflower" and "incense." According to the *Causal Principle of Reference*, if these expressions are typically applied on the basis of our awareness of various perceptible qualities, then the relevant designations must refer to those qualities. Vasubandhu, therefore, proceeds to show that this is indeed the case. When wool, cotton, safflower, or incense is burnt, we are left with a pile of ashes that doesn't have the distinctive characteristics—colours, odours, tactile qualities—of these things. No one looks at a pile of ashes left over from burning wool, and judges, "That's wool." This is best explained by the fact that, when wool has been burnt, we are no longer aware of the distinctive qualities—the distinctive colour or texture—that wool possesses. This suggests that we only apply the expression "wool" when we are aware of the distinctive qualities of wool. So, the expression "wool" simply refers to a bundle of those qualities, and not to their substratum.

Here, the Nyāya-Vaiśeṣika opponent might point out that this doesn't seem true across the board. When a clay pot is baked, it loses its brown colour and turns red. Even though its colour changes, we seem to treat the pot with the new colour as identical as the earlier pot. This might suggest that our concepts of ordinary material objects don't simply track qualities like colour, odours, etc., but rather pick out substances that serve as bearers of such qualities and can therefore survive the destruction of such qualities. But, as Vasubandhu correctly notes, this objection isn't persuasive.[18] When a pot is baked, an earlier bundle of tropes is replaced by a new bundle of tropes. Even in these cases, when we identify the later bundle of tropes as a pot, we do so because as it is similar with respect to its configuration (*saṃsthāna*) to the earlier bundle of tropes. Vasubandhu illustrates the point by appealing to the analogy of a row (*paṅkti*). A row of pine trees is nothing over and above the trees arranged in a certain way, e.g., in a line. We may identify different collections of pine trees as *rows* of pine trees, because they resemble each other with respect to their configurations or shapes. The same, Vasubandhu claims, is true of material objects like pots. Since a pot is just a bundle of tropes, it is nothing over and above its constituent tropes. We identify distinct such bundles as the same pot, because they resemble each other with respect to shape or configuration.

This point is significant for our discussion of universals. If Vasubandhu is right, then we don't need to posit any universals to explain the uniformity of awareness: to explain how an awareness that takes the form, "That's a pot," arises whenever we see pots, we can simply appeal to certain respects of resemblance between the pots. Each pot is a bundle of tropes. If the tropes occurring in each bundle are similar to each other in some key respects, e.g., in virtue of being arranged pot-wise, we can correctly identify all of them as pots. This form of bundle theory naturally lends itself to a form of *resemblance nominalism*.

> *Buddhist Resemblance Nominalism*. A kind term or concept can be *correctly* applied to a number of objects $B_1, B_2, …, B_n$ iff
>
> (i)     either each $B_i$ is itself a trope or is a bundle of tropes, and
> (ii)    any two $B_i$ and $B_j$ resemble each other in some respect, e.g., configuration or shape, such that the resemblance isn't explained by any further property possessed by these objects.

In the rest of this section, we shall explore how Vasubandhu defends this form of resemblance nominalism.

## 2.2 Vasubandhu's Arguments for Nominalism

While Vasubandhu might be right in thinking that there is no distinction between property-bearers and properties, that doesn't immediately imply that there are no universals (as the Nyāya-Vaiśeṣika philosophers understand them). Why can't we say that ordinary concrete particulars like pots and cows are bundles of tropes and universals, or just bundles of universals? One naïve answer might be this. From Vasubandhu's standpoint, ultimately existent objects lack two features that the Nyāya-Vaiśeṣika philosophers associate with universals: *causelessness* and *permanence*. As a Sautrāntika, Vasubandhu thinks that all *dharma*s are causally conditioned and momentary: they arise from a collection of causal conditions and cannot persist through time.[19] But, even if this is right, it at best can show that the Nyāya-Vaiśeṣika theory of universals is false. It doesn't show that *every* theory of universals is false.

In fact, other Abhidharma Buddhists offer an alternative theory of universals. The Vaibhāṣikas claim that different kinds of sentient beings (*sattva*) and ultimately existent objects (*dharma*) share and are distinguished by various homogeneous characters (*sabhāgatā*). These homogeneous characters are causally conditioned, but cannot be reduced to either mental or physical tropes; they are what we earlier called *conditioned factors that are dissociated from the mental* (*cittaviprayuktasaṃskāra*). According to Vaibhāṣikas like Saṃghabhadra (5th century CE), these homogeneous characters are neither permanent nor causally unconditioned like the universals accepted by the Nyāya-Vaiśeṣika thinkers. Like other *dharma*s, they are impermanent and momentary. But their theoretical role consists in explaining objective similarities amongst different kinds of *dharma*s. For example, in his *Nyāyānusāraśāstra*, Saṃghabhadra says that the homogeneous character of sentient beings is "the cause of the mutual similarity of the body, the appearance, the various controlling faculties, the modes of behaviour and the sustenance, and so on, or the cause of the mutually similar aspirations of the various categories of sentient beings born in the same rebirth state."[20] Vasubandhu considers a similar view in his commentary on *Abhidharmakośa* v. 2.41ab, which says, "A homogeneous character is a common characteristic of sentient beings" (*sabhāgatā sattvasāmyam*). He unpacks the view as follows.

The substantially existent object called "homogeneous character" is the resemblance of sentient beings. It is labelled "homogeneous character of a group" (*nikāyasabhāga*) in authoritative texts [like *Jñānaprasthāna* and so on]. Moreover, it is either invariant (*abhinnā*) or variant. The homogeneous character of sentient beings that belongs to all sentient beings is invariant, since it is present in each and every sentient being (*pratisattvaṃ sarveṣu*). However, the variant homogeneous characters are specifically restricted to those very sentient beings depending on their realms of existence, stages of these realms, planes [or destiny] of existence, mode of birth, caste, gender, their statuses of being laypersons, or monks, or trainees, or perfected beings, and so on. Also, the homogeneous characters of the *dharma*s exist corresponding to the aggregates (*skandha*), the sense-bases (*āyatana*), and the elements (*dhatu*). [21]

Why should we accept the substantial or ultimate existence of such homogeneous characters? Vasubandhu sets out the Vaibhāṣikas' reasoning by appealing to the homogeneous character shared by all sentient beings, *sattvasabhāgāta*.

If there were no substantially existent invariant homogeneous character of sentient beings, then there wouldn't be awareness-events that invariably take the form, "[That's] a sentient being," "[That's] a sentient being," and so on, with respect to sentient beings that are distinct in virtue of mutually distinguishing features. Nor would the conventional designation (*prajñapti*) ["sentient being"] exist. Awareness-events about and conventional designations pertaining to ultimately existent objects like aggregates (*skandha*) are also to be understood in the same way.[22]

This is simply a version of the Nyāya-Vaiśeṣika philosopher's *Argument from the Uniformity of Awareness*. The Vaibhāṣika is arguing that the uniformity of awareness-events that take the form, "That's a sentient being,"—or our application of the conventional designation, "sentient being"—with respect to different sentient beings cannot be explained without positing a homogeneous character shared by all sentient beings. The same reasoning also applies to other ultimately existent objects such as the *aggregates* (*skandha*), i.e., the mental and physical tropes that constitute a person.

As a Sautrāntika, Vasubandhu doesn't accept this view. He offers five objections against it. The first objection is an *objection from redundancy*. It depends on a widely accepted Buddhist distinction between the *nobles* (*ārya*), i.e., people who have attained some form of enlightenment, and the *wordlings* (*pṛthagjana*), i.e., people who haven't attained that kind of enlightenment.

> If there were a substantially existent object called "the homogeneous character of worldlings," then what would be the point of the property of being a worldling [understood as the non-attainment of the qualities of the Nobles]? For one doesn't posit the property of being a human being as distinct from the homogeneous character of human beings.[23]

At first glance, this seems like an internal criticism of the Vaibhāṣikas, because it targets two claims accepted by them. The first claim is this: just as the homogeneous character of human beings is just the property of being a human being, so too the homogeneous character of worldlings is nothing other than the property of being a worldling (*pṛthagjanatva*). But, according to the Vaibhāṣikas themselves, the property of being a worldling isn't a *sui generis* property. This brings us to the second claim: a worldling is just someone who lacks the qualities of the Nobles. Thus, the property of being a worldling is nothing over and above the non-attainment of the qualities of the nobles (*āryadharmālābha*). However, if the uniformity of awareness were to always give us reason to posit *sui generis* homogeneous characters, then the homogeneous character of worldlings would have to be a *sui generis* homogeneous character. So, either the Vaibhāṣika would have to make the implausible claim that the homogeneous character of worldlings is distinct from the property of being a worldling, or they would have to give up their thesis that the property of being a worldling is just the non-attainment of certain qualities. The deeper point here is that, if we take the *Argument from the Uniformity of Awareness* seriously, we will have to posit *sui generis* homogeneous characters (and universals) that can be explained away in other ways and therefore are redundant.

> The second objection is an *objection from the absence of evidence*:

> Moreover, an ordinary person doesn't perceive any homogeneous character at all, since it lacks visible form. Nor do they determine it by means of understanding (*prajñā*). An ordinary person becomes aware of the sameness of kind (*jātyabheda*)

with respect to sentient beings. But how would that homogeneous character—even if it were to exist—engage in any causal activity (*vyāpāra*) with respect to such an awareness?[24]

The claim is that we don't perceive homogeneous characters that are distinct from the individuals that they belong to. For homogeneous characters don't have any visible form; they are formless (*arūpiṇī*). Moreover, we also cannot infer the existence of such universals, as Vasubandhu puts it, by means of understanding (*prajñā*). Vasubandhu doesn't deny that our awareness-events do exhibit a kind of uniformity when they repeatedly take the form, "That's a sentient being!" with regard to distinct sentient beings. But it's far from obvious how homogeneous characters could *cause* that sort of awareness. Ordinarily, we only seem to be perceptually interacting with concrete particulars, e.g., the sentient beings themselves, and not their homogeneous characters. So, how could the homogeneous characters causally influence our judgements? Moreover, as we shall soon see, Vasubandhu thinks that the causal-explanatory work that homogeneous characters are supposed to do in accounting for the mutual similarity of sentient beings can simply be done by certain karmic factors— various conditioned factors (*saṃskāra*)—that explain why they are reborn in that state. Thus, we need not posit any homogeneous character on the basis of any causal inference from the uniformity of our awareness-events regarding such sentient beings.

> The third objection is an *objection from overgeneration*:

> Moreover, why do the Vaibhāṣikas also not accept the homogeneous character of non-sentient objects? For rice, barley, moong, wild beans, mangoes, jackfruit, iron, gold, and so on, are similar to objects of their own kind.[25]

The Vaibhāṣikas don't want to say that non-sentient non-fundamental objects have homogeneous characters. But, as Vasubandhu points out, the same sort of reasoning that leads them to posit homogeneous characters of sentient beings should also make them postulate homogeneous characters of insentient non-fundamental objects like rice, barley, moong, wild beans, mangoes, jackfruit, iron, gold, and so on. Why? These objects are also similar to each other. We identify different grains of rice as rice-grains, and take them all to be of the same kind. If the uniformity of awareness-events counts as evidence for the existence of homogeneous characters of sentient beings, it should also count as evidence for

the homogeneous characters of insentient objects. This seems like a version of the first objection from redundancy: we simply cannot go around positing arbitrary homogeneous characters on the basis of the uniformity of our awareness-events, since that will populate our ontology with lots of entities that play no theoretically useful role.

The fourth objection is a *regress objection*:

And why is the convenient designation 'homogeneous character' invariably applied to those mutually distinct homogeneous characters?[26]

Just as our awareness-events regarding different sentient beings are similar to each other, so also are our awareness-events regarding different homogeneous characters similar to each other. We repeatedly make similar judgements that take the form, "That's a sentient being!" with respect to different sentient beings. Analogously, when it comes to different homogeneous characters, we also repeatedly make judgements that take the form, "That's a homogeneous character!" Why, then, don't we posit another homogeneous character that is shared by all these homogeneous characters? As Vasubandhu's commentator Yaśomitra seems to suggest, the Vaibhāṣikas cannot say this, because they don't think there can be such higher-order homogeneous characters.[27] Moreover, though Vasubandhu doesn't note this, we can easily turn this into an infinite regress. Let's say there are a number of first-order homogeneous characters $C_1, C_2, C_3, \ldots$ What explains the fact that $C_1, C_2, C_3,\ldots$ are homogenous characters? To answer this, we may posit a higher-order homogeneous character $C$ shared by all these homogeneous characters. But, again, we can ask what explains the fact that $C_1, C_2, C_3,\ldots$, and $C$ are homogeneous characters. Once again, we can posit another higher-order homogeneous character $C^*$ that $C_1, C_2, C_3, \ldots$ and $C$ share, and then another higher-order homogeneous character $C^{**}$ that $C_1, C_2, C_3, \ldots, C,$ and $C^*$ share, and so on *ad infinitum*.

Vasubandhu's final objection has an *ad hominem* flavour: it says that the Vaibhāṣika view simply collapses into the Vaiśeṣika theory of universals, the theory that there are permanent stance-independent universals that reside in many things at once: "And, if this view is right, the Vaiśeṣikas are supported (*dyotita*). For those Vaiśeṣikas also accept this view: namely, that there is such an entity as a universal, due to which similar awareness-events are produced with respect to things of different kinds. However, this is the

distinguishing feature of their view: even though the universal is unitary, it resides in many things."[28]  In response to these objections, Vaibhāṣikas could point out that homogeneous characters are mentioned in a number of Buddhist *sūtra*s. How would Vasubandhu himself explain such talk of homogeneous characters?

> The Vaibhāṣikas say: Whether or not the Vaiśeṣikas are supported, this homogeneous character nevertheless exists indeed, since it is mentioned in the *sūtra*s. For the Blessed One has said, "If he comes back here [and acquires] the homogeneous character of human beings,…"

> [Reply:] This has been said. But it hasn't been said that a homogeneous character is a distinct substantially existent object.

> [The Vaibhāṣika:] What, then, is it?

> [Reply:] They are simply conditioned factors of a certain nature to which the conventional designation 'human' and so on are applied, just like the homogeneous character [ascribed] to rice and so on."[29]

Whether or not the Vaibhāṣikas accept the view of the Vaiśeṣikas, both parties are committed to the idea that the universals or homogeneous characters are substantially or ultimately existent objects which are distinct from the objects that they group together. Vasubandhu denies this. He argues that we have no reason to treat homogeneous characters as distinct from the things that they belong to. According to him, homogeneous characters are reducible to conditioned factors that explain how a sentient being has the kind of embodied existence that it does have.

Let's take stock. Vasubandhu doesn't think homogeneous characters (or universals) ultimately or substantially exist over and above the individuals that they belong to. But he doesn't deny that, when we think or talk about different kinds of sentient beings, we in fact uniformly apply the same concepts or expressions, like the expression "sentient being", to them. What explains that sort of uniformity? Vasubandhu doesn't offer a general story about this. But his commentator Yaśomitra suggests that this sort of uniformity is explained by certain similarities amongst these these sentient beings. He writes:

Moreover, the awareness of a common characteristic (*sāmānyabuddhi*)—which takes the form, "[That's] a sentient being!", "[That's] a sentient being!" and so on—isn't caused by a homogeneous character that is a distinct substantially existent object. For it arises due to a resemblance of [physical] form, just like the awareness of resemblance with respect to rice, barley, moong, wild beans, and so on. For this [latter] awareness of resemblance arises in virtue of the resemblance of rice, barley, etc. with objects of the same kind. This is the explanation.[30]

If this is the right reading of Vasubandhu, then Vasubandhu is a resemblance nominalist (in the sense specified above). While he denies the existence of universals that explain the uniformity of our awareness-events, he thinks such uniformity can be explained by appealing to certain resemblances amongst distinct objects. For him, that is precisely the reason why we can correctly apply various concepts or mental labels uniformly to distinct objects.

What remains unclear is whether Vasubandhu treats these resemblances as objective similarities amongst the relevant objects or merely as stance-dependent. Elsewhere in AK 6.14, he says that the application of mindfulness (*smṛtyupasthāna*) is cultivated by attending to the particular characteristics (*svalakṣaṇa*) and the common or general characteristics (*sāmānyalakṣaṇa*) of the body (*kāya*), awareness (*vit*), mental events (*citta*), and other *dharma*s. The particular characteristics are their intrinsic natures (*svabhāva*), while the common characteristics are general features that they share. For instance, the common characteristic of causally conditioned *dharma*s is impermanence (*anityatā*) and the common characteristic of impure *dharma*s is their unsatisfactoriness (*duḥkhatā*), whereas the common characteristics of all *dharma*s are emptiness (*śūnyatā*) and selflessness (*anātmatā*).[31] So, we might wonder what ontological status such common characteristics have for Vasubandhu. We know that he distances himself the Vaibhāṣika theory of homogeneous characters as well as the Nyāya-Vaiśeṣika theory of universals. So, he cannot coherently treat these common or general characteristics as *repeatable properties* that are instantiated by multiple *dharma*s. The only other two possibilities are either that they are objective similarities or resemblances amongst certain kinds of ultimately existent objects, or that they are conceptual constructions that are supposed to guide the meditative practices of the Buddhist practitioner. Towards the end of this essay, I shall return to the question of what ontological status such similarities could have within a monocategorial trope-theoretic ontology like Vasubandhu's.

## 3. Evidence for Repeatable Properties

Is Vasubandhu right in thinking that we have no evidence for accepting the stance-independent existence of repeatable properties like cowhood? Uddyotakara's answer to this question crucially depends on:

> *The Causal Constraint on Content*. A particular or a property *E* can be an intentional object of an awareness-event, i.e., an experience or a thought, only if the relevant awareness-event is causally connected to *E*.

In this section, I will motivate the *Causal Constraint on Content*, and then show how Uddyotakara uses it to support the stance-independent existence of repeatable properties.

### 3.1 The Causal Constraint on Content

We can extract an argument for the *Causal Constraint on Content* from Uddyotakara's text.

> *The Content of Knowledge Premise*. If an awareness-event is a knowledge-event (*pramā*), i.e., an accurate experience or thought through which the agent acquires knowledge, then it satisfies the *Causal Constraint about Content*.

> *The Knowledge-Dependence Premise*. If an awareness-event isn't a knowledge-event (e.g., if it is an error or a doubt), then it depends for its content entirely on the agent's knowledge-events.

> *Conclusion.* The *Causal Constraint about Content* is true of all awareness-events.

Let me motivate the premises one by one.

To understand what the *Content of Knowledge Premise* says, it's best to begin with a case of veridical perception. Suppose I veridically see an object before me as a banana. Since I thereby come to know that it is a yellow banana, my visual awareness is a knowledge-event. It has (at least) three intentional objects: a particular banana, its property, i.e., bananahood, and a relation of inherence between the banana and this property. On Uddyotakara's view, I can only perceive these objects if my senses are in contact with them. He develops a theory of

perceptual contact (*sannikarṣa*) that systematically explains how we can perceive a range of particulars and their properties.[32] In this case, since my visual sense is a substance (insofar as it is made of fire or *tejas*), it can stand in a relation of conjunction (*saṃyoga*) with another substance, like the banana I see. Since bananahood inheres in the banana, my visual sense is connected to the bananahood through a relation of *inherence in that which is conjoined* (*saṃyuktasamavāya*). Finally, my visual sense is in contact with the relation of inherence through another relation—the relation between a qualificand and a qualifier (*viśeṣyaviśeṣaṇabhāva*)—because the relation of inherence qualifies the banana that my visual sense is conjoined to. Since my veridical perception of the banana as a banana is caused by these relations of perceptual contact, the *Causal Constraint on Content* is satisfied in this case: the banana and its properties must be causally connected to my awareness through these relations of perceptual contact.

This point generalizes to other knowledge-events (*pramā*), i.e., experiences or thoughts in undergoing which I come to know something. Consider the following cases.

> *Case 1*. I see dark clouds on the horizon. Since I have learnt from past experiences that such dark clouds typically lead to heavy showers, I infer that it's going to rain.

> *Case 2*. I see a river flooding its banks. Since I have learnt from past experiences that this sort of flood only happens when there has been rainfall upstream, I infer that it must have rained earlier.

In *Cases 1* and *2*, the future or past rain that serves as the intentional object of my inferential judgement cannot cause this judgement. But, if my inferential judgement is a knowledge-event, then the dark clouds I see in *Case 1* must be causes of future rainfall, and the floodwaters I see in *Case 2* must be effects of past rainfall. So, the future or past rain must be causally connected to my judgement. Similar observations can made about knowledge-events based on testimony. Suppose I learn on the basis of a meteorologist's testimony that it will rain tomorrow. Here, the future rain which appears as the intentional object of my judgement needn't be its cause. But my judgement could still be causally connected to it through the data that the meteorologist uses to predict rain. Thus, the *Causal Constraint on Content* is true of knowledge-events.

Let's now turn to the *Knowledge-Dependence Premise*. What about awareness-events that aren't knowledge-events, e.g., errors and doubts? When I erroneously perceive a plastic banana as a banana, the property of bananahood needn't be instantiated in my environment, so my visual sense won't be in contact with that property through any ordinary relation of perceptual contact. But Uddyotakara would claim that I couldn't be perceptually aware of the fake banana as a banana unless I have veridically perceived bananas and their bananahood elsewhere. In his commentary on *Nyāyasūtra* 4.2.36, Uddyotakara explains how inaccurate awareness-events arise.

> There is a cause for a false awareness.
>
> [The Buddhist:] Still, what is that?
>
> [Reply:] The observation of a general characteristic, the non-observation of a specific character, and the ascription of an absent specific characteristic.[33]

In the fake banana example, I only ascribe bananahood to the fake banana because I satisfy two conditions. First, I have earlier veridically seen some objects as bananas. Second, I now notice certain features of the fake banana—e.g., the yellow colour, the crescent shape, and so on—which it shares with the bananas I've encountered elsewhere. But I don't notice that it's a fake, i.e., that it lacks bananahood. More generally, Uddyotakara subscribes to a misplacement theory of error (*anyathākhyātivāda*):

> *The Misplacement Theory of Error.* If an agent is inaccurately (or non-knowledgeably) aware of an object *o* as *F*, then she must satisfy two conditions:
>
> (i)     She must have independently known some other object *o\** to be *F*, and
> (ii)    She ascribes the property of being *F* to *o* because
>         (a) she is independently aware of similarities between *o* and other *F*s that she has known, but
>         (b) isn't aware of any characteristic of *o* that distinguishes *o* from *F*s.[34]

This generalizes to other awareness-events that aren't knowledge-events, e.g., doubts. Imagine the following scenario. Out for a walk in a field, I notice something at a distance: it has the same height as a person, but could just as well be a tree-trunk. So, I wonder whether it is a person or a tree-trunk. If the object I see is a tree-trunk, my doubt misascribes

personhood to it. But this can only happen if I independently know other instances of personhood, and now notice a similarity between the object before me and those other persons (while failing to notice any dissimilarity).

This suggests the following lesson. If the *Misplacement Theory of Error* is correct, all awareness-events other than knowledge-events are dependent on the relevant agent's prior knowledge-events. Unless the agent independently knows objects to be *F*s, the agent cannot be aware of a similarity between an objects *o* and those *F*s. So, the agent won't ascribe the property of being *F* to *o* on the basis of her awareness of that similarity. But, if this is right, then the *Causal Constraint on Content* must be true even of awareness-events that aren't knowledge-events. Whenever an agent inaccurately ascribes *F*-hood to an object *o*, the agent's inaccurate awareness must be causally connected to *o* and *F*-hood.

This aspect of Uddyotakara's view also allows him to explain how we can think thoughts that appear to be about non-existent objects. For example, I can correctly judge, "A hare's horn doesn't exist." This thought seems to be about a hare's horn. Since a hare's horn doesn't exist, it cannot be causally connected to any awareness. But a thought about a hare's horn could still be causally connected to other particulars and properties through which a hare's horn can be descriptively represented. The point comes out clearly in Uddyotakara's commentary leading up to *Nyāyasūtra* 3.1.1, where he argues that the negative existential claim, "A hare's horn doesn't exist," isn't really a negation of a non-existent object, but rather of a causal relation between hares and horns.

> Moreover, someone who says, "This hare's horn doesn't exist," should be asked: Is this a general negation or a specific one? If it is a general negation, then that isn't tenable, since it is impossible. If [the claim is that] a hare doesn't have a horn, then it follows that a hare doesn't even have a horn that belongs to cows and so on. That is impossible; for it is not the case that it doesn't have them! If it is a specific negation, then some horn is negated with respect to the hare, such that the hare isn't an effect of it, and it is not a cause of the hare. Thus, the relation of cause and effect is negated indeed. But the relation of cause and effect is observed elsewhere and negated here, so the example doesn't demonstrate absolute absence. It is to be understood that by the same reasoning, other cases, e.g., the non-existence of sky-flower, etc. are explained.[35]

Here's one way of explaining the reasoning. Take the negative existential claim

(1) A hare's horn doesn't exist.

For Uddyotakara, this is equivalent to something like:

(2) A horn doesn't belong to a hare.

But (2) can be interpreted either as a general negation or a specific one. The general negation will be:

(3) No horn including a cow's horn belongs to a hare.

On Uddyotakara's view, this can't be right. A hare may indeed be related to a suitable manner to a cow's horn. So, (2) should be interpreted as a specific negation:

(4) No horn, which is the cause of a hare (in virtue of being part of its body), belongs to a hare.

Typically, a part of an organism's body is a material cause (*upādānakāraṇa*) of the organism, since it is what the organism's body is made out of. So, (4) simply amounts to a negation of the claim that a hare has a horn as part of its body. Thus, it is a negation of a certain causal relation between a horn and a hare. However, as Uddyotakara is keen to emphasize, this causal relation exists elsewhere as do hares and horns. If that is correct, the intentional objects ultimately conveyed by the claim, "A hare's horn doesn't exist," cannot be non-existent: hares, horns, and the relevant causal relation exist. Thus, Uddyotakara's general strategy everywhere is to explain away any putative thought about non-existent objects by explaining its content in terms of existent objects that the agent may have independently encountered and causally interacted with. Thus, the *Causal Constraint on Content* is flexible enough to explain how we seem to think thoughts about non-existent objects.

In the rest of this section, I show how the *Causal Constraint on Content* helps Uddyotakara to defend the stance-independent existence of repeatable properties.

**3.2 Content-to-Existence Arguments**

Even though Uddyotakara doesn't think that the uniformity of awareness decisively proves the existence of universals, he acknowledges that there is an important connection between such uniformity and the existence of repeatable properties. Whenever a set of distinct objects share the repeatable property *F*-hood, an agent with suitable cognitive capacities would—under optimal conditions—undergo series of similar awareness-events that take the form, "That is *F*" with respect to those objects. For example, if cowhood is a repeatable property of cows, then an agent with suitable cognitive capacities would—under optimal conditions—be able to identify different objects as cows. So, repeatable properties can explain at least some instances of the uniformity of awareness.

That is why Uddyotakara goes on to offer three arguments for realism about universals like cowhood.

> (1) The observed awareness of uniformity with regard to cows, etc. takes place due to a causal condition that is distinct from the individuals, since the awareness has a distinguishing characteristic, like the awareness of blue and so on. (2) Cowhood is an entity distinct from a cow, since it is an intentional object of a distinct awareness, just like the awareness of colour and tactile qualities…(3) The awareness of the uniform occurrence of cowhood in a cow has a distinct causal condition, since it has a distinguishing characteristic, just like the awareness of colour and so on.[36]

Let's reconstruct the arguments one by one.

Arguments (1) and (3) resemble the earlier *Argument from the Awareness of Uniformity.*

> *The Revised Argument from the Awareness of Uniformity*
>
> *The Difference of Content Premise.* An awareness of the uniformity of different cows differs—with respect to content—from an accurate awareness of just those different cows.
>
> *The Causal Connection Premise.* Two awareness-events can differ with respect to content only if they are brought about by distinct causal conditions.

*Conclusion*. An accurate awareness of the uniformity of different cows with respect to cowhood is brought about by a distinct causal condition from an accurate awareness of just those different cows.

This argument focuses on any awareness that represents the uniformity of distinct cows with respect to cowhood. This may be a perceptual awareness of several cows as cows, e.g., a perceptual awareness whose content can be expressed as, "These are all cows." Such an awareness differs in content from a perceptual awareness which directed at those cows but doesn't involve perceiving them as cows, e.g., a perceptual awareness that only represents them as discrete objects without registering any similarity amongst them. Clearly, there is a difference in content between the awareness, "These are all cows," and this latter awareness. This yields the *Difference in Content Premise*.

The second step of the argument involves an appeal to the *Causal Constraint on Content*: the claim that two awareness-events can differ with respect to content only if they are brought about by distinct causal conditions, which explain why these distinct sets of entities appear as their respective intentional objects. This seems especially plausible in the case of perception. Consider Praśastapāda's example again: the case where I see a number of objects—a hide of an animal, a cloth, a blanket—that are all blue. In this case, I could undergo two perceptual awareness-events. One of them represents all these objects *as blue*. The other represents those very objects without registering any similarity or uniformity amongst them. The difference in content between two these awareness-events is explained by the causal histories of these two awareness-events. Both involve a causal interaction between my visual system and the relevant objects. But, in the first case, my perceptual awareness has at least one additional causal condition: namely, the blue colour that comes into contact with my visual sense and thereby enables me to identify all these objects as blue. In the case of the second awareness, the presence of the blue colour on these same objects plays no causal role in the production of my awareness. This, in turn, makes the *Causal Connection Premise* plausible.

Uddyotakara claims that the same is true of the awareness of the uniformity of different cows with respect to cowhood. Compare the two awareness-events: the one that represents the distinct cows as cows, and the one that simply represents them as discrete objects without registering any similarity or uniformity amongst them. Uddyotakara wants to say that this difference in content should be explained with reference to the causal conditions

of the two awareness-events. Just as my awareness of the different objects as blue is brought about by the blue colour which is distinct from the blue substances, so too the awareness of the different animals as cows is brought about by a causal condition—presumably, the cowhood—that is distinct from the cows themselves. This causal condition plays no role in producing the perceptual awareness that represents exactly those animals without registering any similarity or uniformity amongst them. This is our *Conclusion*. This suggests that cowhood is an entity that is distinct from individual cows.

One problem with argument (1) is that it doesn't decisively establish the stance-independent existence of repeatable properties. Argument (2) is slightly different.

*The Argument from the Distinctness of Properties*

*The Distinctness of Properties Premise*. If an awareness-event ascribes a property *F*-hood to a particular *o*, then *F*-hood is an independently existing object that is distinct from *o*.

*The Ascription of Cowhood Premise*. An awareness of a cow as a cow ascribes cowhood to an independently existing cow.

*Conclusion.* Cowhood is an independently existing object that is distinct from a cow.

The first premise of this argument is partially motivated by the *Causal Constraint on Content*. Imagine two awareness-events: the first is a visual awareness of a cloth as blue, while the second a tactile awareness of that very cloth as smooth. The difference in content between these two awareness-events is explained by the fact that the two awareness-events ascribe the different perceptible properties to the same cloth. The first awareness ascribes a visible quality—the blue colour—to the cloth. By contrast, the second awareness ascribes a tactile quality—smoothness—to the cloth. The crucial claim is this: not only must the cloth in this case be a stance-independently existing particular, but the two properties—the blue colour and the tactile quality of smoothness—must also be stance-independently existing properties that are distinct from it. This follows from the *Causal Constraint on Content*. The common element of the contents of these two awareness-events is the cloth. So, both awareness-events are causally connected to the cloth. But the difference in content between them consists in the fact that one is directed towards a visible quality, while the other is

directed towards a tactile quality. So, in one case, the visible quality must play a causal role in producing the relevant awareness; in the other case, the tactile quality must play a causal role in producing the relevant awareness. But that can only happen if the visible and tactile qualities are stance-independent properties that are distinct from the cloth. Generalizing slightly, this means that, if an awareness ascribes a certain property to a particular, the property in question must be a stance-independently existing object that is distinct from the particular itself. This yields *The Distinctness of Properties Premise*.

The second premise of the argument is simpler. Consider a perceptual awareness of an individual cow as a cow: an awareness whose content can be expressed as, "That is a cow." Compare this to another perceptual awareness that is simply directed at the cow, but doesn't involve perceiving it as a cow. For example, it could be a non-conceptual awareness of the cow that doesn't represent the cow as anything, or it could be an awareness that takes the form, "This is an animal," which represents the cow as an instance of some other kind. Plausibly, there is a difference in content between these two awareness-events. What explains the difference is the fact that the first perceptual awareness ascribes cowhood to the cow, while the second doesn't. This confirms the *Ascription of Cowhood Premise*. Together, these two premises yield the conclusion that cowhood is a stance-independently existing property that is distinct from the relevant cow.

Both arguments are what I shall call *content-to-existence arguments*: each of them moves from a premise about the content of awareness-events or a sentence to a claim about ontology, the claim that repeatable properties exist separately from the individuals that instantiate or possess them. This transition from a claim about content to a claim about existence depends on the *Causal Constraint on Content.* In each argument, Uddyotakara starts out by pointing out that we undergo awareness-events where universals like cowhood appear as intentional objects distinct from the individuals they belong to. From that, using *Causal Constraint on Content*, he concludes that the relevant repeatable property must serve separately as a cause of the relevant awareness in addition to the individuals that instantiate or possess them. This, in turn, shows that the relevant repeatable property exists separately from the individuals that instantiate or possess them. In what follows, I show how Uddyotakara uses the second of these arguments to address Vasubandhu's objection from the absence of evidence.

**3.3 Uddyotakara against the Absence of Evidence**

Uddyotakara states the objection as follows.

> Some say that cowhood isn't something distinct from the individual (*piṇḍa*), because it is not apprehended in the intermediate gaps (*antarāla*) between the individuals.[37]

The opponent is arguing, as Vasubandhu does, that we don't perceive universals, but only particulars. But the opponent's argument here goes like this. If cowhood (as a universal) were distinct from the individual cows themselves, then it would be perceived in the gaps (*antarāla*) between the individual cows (more generally, apart from the individual cows). Cowhood isn't apprehended in the space between the individual cows. So, cowhood isn't distinct from the individual cows. Uddyotakara offers two responses here. The first response attacks the first premise of the argument, while the second involves shifting the explanatory burden onto the opponent.

> The first response is this:

> That is not true, since the alternatives are impossible. The person who says, "because it is not observed in the intermediate gaps between the individuals," is to be reproved regarding "the intermediate gap between the individuals." What is this intermediate gap between the individuals? Is it ether (*ākāśa*), or an absence, or a distinct substance? If it is ether, then cowhood doesn't reside there. For ether isn't a cow. By this [reasoning], [the other alternatives, i.e., that it is] an absence and [that it is] a distinct substance, are explained away.[38]

According to the opponent, if cowhood were distinct from individual cows, then it would be found somewhere other than in the cows themselves, e.g., in the gaps between them. What are these gaps? According to some physical theories popular amongst Sanskrit philosophers, the gap in question simply ether (*ākāśa*) which fills up all space. Alternatively, it could be just the absence of any concrete material object, or a completely different substance. In either case, the gaps between individual cows are not themselves cows. But, like other Nyāya-Vaiśeṣika theorists, Uddyotakara doesn't think repeatable properties, like cowhood, can reside anywhere other than their instances, e.g., cows. So, if the gaps between cows aren't themselves cows, there's no reason to expect that cowhood will be present in those gaps. So, the argument fails.

The second response appeals to a version of the *argument from the awareness of uniformity.*

> [That is not true, also] because distinct awareness-events cannot be causeless (*ākasmika*). Moreover, this awareness [of certain individuals as cows], which involves a distinction from a [mere] awareness of the individuals and which is produced, arises from a distinct condition (*nimitta*). Certainly, it is observed that awareness-events that involve a distinction from the awareness of [mere] individuals are produced from distinct conditions. For example, there is an awareness of blue [colour] with respect to garments, hides of animals, and blankets.[39]

Uddyotakara is asking us to imagine two kinds of perceptual awareness. In one sort of case, I am merely perceptually aware of many individual cows as animals, but don't identify them as cows. In the other sort of case, I am perceptually aware of them as cows. The second kind of awareness has a different content from the first one, since it ascribes cowhood to the individual cows. So, by the *Causal Constraint on Content*, it follows that cowhood is causally connected to the second kind of perceptual awareness. Uddyotakara repeats Praśastapāda's analogy involving blue substances. When an agent is aware of distinct kinds of things, e.g., hides of animals, clothes, blankets, *as blue*, the awareness-events are produced due to a causal interaction with a distinct property—the blue colour—possessed by these objects. Similarly, we might think that our awareness of different animals as cows is produced due to perceptual contact with a distinct property: cowhood.

Here, the Buddhist nominalist could acknowledge the basic premise of Uddyotakara's argument, but point out that we don't have to posit any repeatable property to explain how we are aware of different individuals as cows. We can simply appeal to the physical resemblance or similarity amongst those different individuals as the condition in virtue of which they are all identified as cows.

> [A nominalist:] [Such awareness-events arise] due to the similarity (*sāmānya*) of physical form.

> [The realist:] Suppose you think, "True. Let this be the case: the awareness of uniformity arises due to a separate condition which is distinct from the individuals. However, the condition for this is not a kind property. Rather, there is an awareness of

uniformity due to the similarity of the physical form of the head, hands and legs."
[We say:] No, since physical form is just as specific as an individual. Just as the
individuals don't reside in other individuals, so also physical form—insofar as it
resides in a single individual—doesn't reside in other individuals.

Moreover, if you accept the claim that the physical form [that belongs to one
individual] resides in other individuals, then this is only a verbal dispute, not a
substantial one. If no similarity (*sāmānya*) other than the individual is accepted, even
then—given that unitary universals have been refuted—some other source for the
similar awareness-events (*samānapratyaya*) [with respect to different objects] would
have to be stated. For we don't observe similar awareness-events [with respect to
different cows] when there is no similarity (*sāmānya*).[40]

Uddyotakara is posing a dilemma here. What does similarity of physical form amount to? If
we take it to be sharing the same physical form, then we have two options. Either we'll have
to say that physical form is a repeatable property that can be present in multiple individuals,
or we'll have to deny that. If we say that physical form isn't a repeatable property (as the
Nyāya-Vaiśeṣika philosophers claim), then the same physical form cannot reside in multiple
individuals. In that case, it's hard to explain how two individuals can have the same or similar
physical form. But if physical form is a repeatable property that can be shared by many
individuals, the nominalist's case against universals is undermined.

This argument can be generalized into a challenge for resemblance nominalism.
Resemblance nominalists seek to explain the uniformity of awareness-events that take the
form, "That's the cow," or the awareness of uniformity, "These are all cows," by appealing to
some form of resemblance amongst the individual cows. Uddyotakara is willing to grant that
there is such resemblance. But he wants to make two claims. First, this resemblance cannot
be a brute fact about the relevant individuals; it needs to be explained. Second, we cannot
explain such resemblance without appealing to some repeatable property, e.g., physical form,
that can be shared by all the relevant individuals. However, positing such a repeatable
property would be detrimental to the nominalist.

This argument doesn't seem convincing. A resemblance nominalist could argue that
Uddyotakara is begging the question against her. He is assuming that the physical
resemblance amongst individual cows must be explained with reference to the fact that they

share certain properties. This needn't be the case: the resemblance can be explained in other ways. Since Vasubandhu and other Abhidharma nominalists adopt a monocategorial trope-theoretic ontology, they have two salient options here: (a) they could either say that there are resemblance tropes that are shared by different objects, or (b) claim that the relevant relations of resemblance are mind-dependent.

Explore option (a). Suppose we think that two individual cows—Daisy and Maisie—are *cows* because they resemble each other with respect to physical form. For the Ābhidharmika, Daisy and Maisie are simply bundles of tropes. But physical form itself may be regarded as a trope that occurs in one bundle of tropes and not anywhere else. So, we can explain the resemblance between Daisy and Maisie with respect to physical form by appealing to the resemblance between a physical form trope $x$ that constitutes Daisy and a physical form trope $y$ that constitutes Maisie. But this resemblance between $x$ and $y$ needn't be fleshed out in terms of properties; rather, it may be explained by appealing to another *resemblance trope R*, i.e., a relational trope that can be shared (as a constituent) by two physical form tropes.

This option suffers from at least two problems. The first is a *problem of location*. Suppose we think that two different physical form tropes located in different bundles share a resemblance trope. Then, we need an account of what it means for two such tropes *to share a resemblance trope*. Typically, trope theorists say that two tropes $x$ and $y$ can share a resemblance trope $R$ just in case $R$ is a part or a constituent of both $x$ and $y$. But if $R$ is a part of both $x$ and $y$, and both $x$ and $y$ have other parts over and above $R$, then $x$ and $y$ would be mereologically dependent for their existence on those parts. So, they cannot be ultimately existent. Moreover, if $x$ and $y$ are located at different places, $R$ must be spatially extended and therefore must also have parts. But, in that case, the resemblance trope will be mereologically dependent on its parts. So, it too cannot ultimately existent. Therefore, there cannot be any ultimately existent physical form tropes that are located at different places and share ultimately existent resemblance tropes.

The second problem is a *problem of regress*. Suppose there are three physical form tropes that resemble each other: $w$, $x$, $y$. Then, since $w$ resembles $x$, and $x$ resembles $y$, and $y$ resembles $w$, we must posit three resemblance tropes $R_1$, $R_2$, $R_3$, to explain these resemblances. If we accept that these resemblance tropes resemble each other, we would then to posit three further second-order resemblance tropes to explain their resemblances. This

will continue *ad infinitum*. So, a version of Vasubandhu's regress worry will arise for this view.

If we take these objections seriously, the best option for Vasubandhu would be to take option (b) and say that the resemblances amongst different objects—which explain the uniformity of our awareness-events—are in fact stance-dependent. So, when we classify or group together different objects that we perceive as sentient beings or as humans or as cows, there is nothing about those objects themselves that causally explains why we group them together in that way. Any similarity that we ascribe to them is a conceptual construction that isn't grounded in the perceived features of those objects. This is precisely the move that philosophers like Dignāga and Dharmakīrti make against realists about universals: they appeal to the theory of the *exclusion of other objects* (*anyāpoha*) to explain how such similarities (and universals) are conceptually constructed.[41] In effect, this strategy involves rejecting the *Causal Constraint on Content*: a conceptually constructed relation of resemblance needn't exist independently of the awareness in which it appears, nor does it have to be causally connected to the awareness in which it appears. Elsewhere, Uddyotakara resists a version of this theory due to Dignāga.[42] Even though I won't explore Uddyotakara's arguments against this theory in this essay, I will explain why this theory is costly in the conclusion of this essay. For now, the important lesson is just this: irrespective of whether option (b) is successful, Uddyotakara has shown that, if the *Causal Constraint on Content* is true, it's difficult to resist the conclusion that repeatable properties exist in a stance-independent manner.

## 4. Uddyotakara's Sparse Theory of Universals

So far, I've been considering how Uddyotakara supports the stance-independent existence of repeatable properties. It is now time to focus another important aspect of his view: namely, that not all repeatable properties are universals. In endorsing this claim, Uddyotakara adopts a *sparse* theory of universals. According to such a theory, we should posit only universals that are necessary to account for the most fundamental or irreducible respects in which things can be similar to each other.[43] Uddyotakara defends:

> *Uddyotakara's Theory of Universals.* A universal is an irreducible, essential property that inheres in multiple objects.

The theory has three consequences: (i) it says that a universal is irreducible; (ii) it says that a universal is an essential property; (iii) it says that a universal inheres in multiple objects. These three consequences of the view are important to resolve certain other worries about universals. So, let's take them in turn.

## 4.1 Irreducibility

The fact that Uddyotakara doesn't regard all repeatable properties as universals is clear from his commentary on *Nyāyasūtra* 2.2.69. There, following Vātsyāyana and Praśastapāda, Uddyotakara offers the following definition of kind properties: they are objects that give rise to the awareness of uniformity (*anuvṛtti*) and distinction (*vyāvṛtti*).

> That in virtue of which multiple different entities are established as causes of the awareness of uniformity and distinction with respect to each other is a kind property. For example, [in the awareness,] "These are bowls," the relevant objects are uniform, and, [in the awareness], "These are not bowls," they are distinguished. Therefore, the single existent condition (*nimitta*) which is the cause of [an awareness of] uniformity and distinction is a specific universal; that is a kind property. [44]

But Uddyotakara cautiously adds that the uniformity of our awareness-events doesn't give us any decisive reason to posit universals. He says:

> The claim that a kind property is the cause of the production of the same awareness [with respect to different objects] is a rule about kind properties, but not about the production of the same awareness. For the production of the same awareness is observed even without a kind property. Even without a kind property, the same awareness is observed, as in the case of cooks and so on.[45]

The claim: even when a number of accurate awareness-events uniformly assume the form, "That is *F*," with respect to different objects, those objects needn't instantiate any kind property such as *F*-hood. For example, I may uniformly and correctly identify Ainslie Harriott, Gordon Ramsay, and Jamie Oliver as cooks. But, according to Uddyotakara, that doesn't give us any reason to posit a separate kind property called *cookhood* (*pācakatva*). Later Nyāya-Vaiśeṣika theorists like Udayana (10th/11th century CE) make the same point by drawing a distinction between genuine kind properties (*jāti*) and imposed properties (*upādhi*):

on Udayana's view, cookhood (insofar as it cross-cuts other recognized kind properties) is an imposed property and not a genuine kind property.[46] While this distinction is absent from Uddyotakara, he does have other resources to draw a similar distinction. On his view, even though cookhood is present in many distinct individuals, it cannot be treated as a genuine universal, because it isn't an irreducible property of cooks.

This point emerges clearly from Uddyotakara's discussion of Vasubandhu's *objection from regress*. Recall what the objection was. If we were to posit universals to account for *any* uniformity of awareness-events, then we would have to accept the existence not only of universals like cowhood and horsehood, but also of higher-order universals like universalhood that reside in these universals. But, then, since these higher-order universals are also universals, we would to accept the existence of further universals of a higher order. This would not only lead to an infinite regress, but would also contradict the Vaiśeṣika claim in *Vaiśeṣikasūtra* 8.5 that specific universals like cowhood and horsehood don't possess further specific universals like universalhood.

Uddyotakara reports and responds to the worry as follows.

[The nominalist:] Even when there is no universal, an awareness of uniformity is observed.

[The realist:] Suppose you think, "For example, though there are no universals in the universals themselves, an awareness of uniformity is observed: [there are awareness-events that take the form,] 'This is a universal,' 'This is a universal,' etc. with respect to cowhood, horsehood, and pothood. Therefore, since the awareness of uniformity is inconclusive, it isn't a good reason for the purposes of demonstrating that some distinct object is the cause [of our awareness of different animals as cows]." That is not true, since this is not accepted. We don't accept the awareness of uniformity with respect to cowhood, horsehood, and pothood to be causeless. Therefore, this is not a good reason.[47]

Uddyotakara's claim is *not* that an awareness of uniformity must always be explained by a universal. Rather, he wishes to say that, since an awareness of uniformity cannot be causeless and the individuals alone cannot bring about the awareness of uniformity, something over and

above the individuals must be posited to explain the awareness of uniformity. This might be a repeatable property, but needn't be a *sui generis* universal.

This reply isn't satisfying for two reasons. First, it doesn't tell us why we identify different universals like cowhood and horsehood as *universals*. Second, it doesn't explain how we can reconcile the awareness of uniformity with respect to different universals with the Nyāya-Vaiśeṣika doctrine that universals don't reside in other universals. The Buddhist raises precisely this point:

[The nominalist:] Then, you will contradict a *sūtra*.

[The realist:] Suppose you think, "If a universal resides in a universal, then you will surely contradict a *sūtra*, namely, 'Since a specific universal doesn't reside in specific universals, there is an awareness simply from those [universals]' (VS 8.5)." No, since you haven't fully understood the meaning of the *sūtra*. The following is the meaning of the *sūtra*: even though an awareness that takes the form, "It is a substance," arises with respect to a substance qualified by substancehood, nevertheless the same does not happen with respect to specific universals. However, the following is not the meaning of the *sūtra*: namely, that the awareness of uniformity is causeless.

[The nominalist:] What is the cause?

[The realist:] Suppose you think, "What is the cause of the awareness of uniformity with respect to cowhood and so on, in virtue of which [there is an awareness of the form], '[This is] a universal,'? And, in virtue of what is there [an awareness of the form, '[This is] a universal'?" [We reply:] Due to their inherence in many objects. Just as cowhood inheres in many objects, so also do horsehood and so on. So, since the inherence of those [properties] in many objects is common [to all these universals], there is an awareness of uniformity with respect to cowhood and so on.[48]

Uddyotakara's argument is simple. The uniformity of awareness, or the awareness of uniformity, with respect to different universals like cowhood and horsehood isn't explained by the existence of a further universal. Rather, it is explained by a further feature of these universals: namely, their inherence in many objects (*anekārthasamavāya*). This, strictly speaking, is not a universal like cowhood and horsehood, but a *reducible* property that all

universals share. It can be reduced to other items within the Nyāya-Vaiśeṣika ontology like multiplicity, objects like substances, movements, and motions, and inherence. Since this is not a universal, we don't need to posit an infinite hierarchy of universals.

This also shows us how Uddyotakara can escape the objections from redundancy and overgeneration. As we noted earlier, Uddyotakara acknowledges that we undergo an awareness of uniformity with different people when we identify them as cooks, even though there is no universal called "cookhood" that unifies them all. If we were to take any awareness of uniformity to be evidence for the existence of a universal, we would have to admit that cookhood is a *sui generis* universal. We might worry that this will force us to posit universals where there is neither any need nor any evidence for positing universals. Uddyotakara addresses the case of cookhood as follows.

> [The nominalist:] This is just like expressions such as "cook" and so on.

> [Reply:] Suppose you think, "Just as there is an awareness of uniformity on the basis of expressions such as 'cook' and so on but there is no universal called cookhood, so also is there an awareness of uniformity with respect to cows and so on." [We reply:] No, since you haven't fully understood the meaning of the reason [we have presented]. This is the meaning of this reason, "because distinct awareness-events cannot be causeless": an awareness that is distinct from the awareness of an individual is produced from a distinct cause. Moreover, every awareness of uniformity doesn't arise simply from a universal. If that is so, then something that serves as the primary cause of the activity of cooking is referred to by means of the expression "cook." And, since that primacy also resides in other cooks, there is no problem.[49]

A cook is the primary cause of the activity of cooking, i.e., an agent who brings about that event. So, cookhood is simply the property of being the primary cause of an event of cooking. Since this sort of primacy can be shared by multiple cooks, cookhood is a repeatable property. But it is not a universal, since, like universalhood, it isn't an irreducible property. It can be reduced to other items in the Nyāya-Vaiśeṣika ontology.

The lesson is this. We can escape problems of redundancy, regress, and overgeneration simply by accepting the thesis that universals are irreducible properties that cannot be explained away by other items in our ontology.

## 3.2 Essentiality

So far, I've shown that Uddyotakara avoids the objections from redundancy, regress, and overgeneration by treating universals as irreducible properties. But, interestingly, he also seems to think that universals are essential properties of the objects that possess them. Here, I explain what motivates him to accept this view.

Recall that, according to Nyāya-Vaiśeṣika, the objects that possess universals are thin particulars, i.e., particulars (substances, qualities, and movements) abstracted from their properties. But, if these thin particulars are distinct from the relevant universals, then it's somewhat mysterious what they are. For example, if we think that there are certain thin particulars that possess cowhood, we might wonder what these thin particulars are independently of their connection with cowhood. Are they cows or non-cows? If they are cows, then what's point of positing a relation between them and cowhood? After all, we think that the particulars in question are cows in virtue of their connection with cowhood. If they are cows independently of being connected to cowhood, then there would be no point in positing that connection. If they are non-cows, then why can't other animals that aren't cows—horses, rabbits, and mules—become cows in virtue of being connected to cowhood?

We can formalize this argument as follows.

P1. For any universal *F*-hood, *F*-hood resides in thin particulars that are either *F*s or non-*F*s independently of a connection with *F*-hood.

P2. If *F*-hood resides in thin particulars that are *F*s independently of a connection with *F*-hood, then *F*-hood is explanatorily redundant (since a connection with *F*-hood won't explain why these particulars are *F*-s).

P3. If *F*-hood resides in thin particulars that are non-*F*s independently of a connection with *F*-hood, then *F*-hood should reside in non-*F*s.

P4. If there is a universal *F*-hood, it is neither explanatorily redundant nor can it reside in non-*F*s.

C. There is no universal *F*-hood.

P1 seems natural: if there are thin particulars, then, independently of any connection with *F*-hood, those thin particulars can only be either *F*s or non-*F*s. These is no third alternative. P2 also seems right: if the thin particulars are already *F*s, then *F*-hood plays no role in explaining why they are *F*s. P3 is also intuitively correct: if the thin particulars are non-*F*s, we need to explain why non-*F*s also cannot become *F*s in virtue of being connected to *F*-hood. But the Nyāya-Vaiśeṣika philosophers should accept P4: they cannot take universals to be either explanatorily redundant or located in things that aren't—properly speaking—their own instances. If the premises are all true, there cannot be any universal *F*-hood.

In response, Uddyotakara rejects P1 by appealing to a form of essentialism.

[The nominalist:] [This is not the case,] since it is located neither in cows nor in non-cows.

[The realist:] Suppose you think, "This cowhood [on your view] is the cause of the awareness of uniformity with respect to cows. Does that reside in cows, or in non-cows? First of all, if it were to reside in cows, then this [animal] would simply be a cow prior to being connected to cowhood, so cowhood would be useless. If it were to reside in non-cows, then even horses and so on would end up being cows in virtue of being connected to cowhood. There is no other option. Therefore, there is no awareness of uniformity due to cowhood." [We reply:] No, since the alternatives are not accepted. Cowhood resides neither in cows nor in non-cows, because these animals are neither cows nor non-cows prior to possessing cowhood. What is the reason? Both of these awareness-events [i.e., the awareness of something as a cow and the awareness of something as not a cow] are awareness-events regarding qualificands. Two awareness-events regarding qualificands don't take place without a relation to a qualifier. Moreover, prior to being connected to cowhood, an object [that is a cow] doesn't exist. And a non-existent object cannot be called either "cow" or "non-cow." Whenever there is an object [that is a cow], then it is connected to cowhood. Therefore, these alternatives are untenable.[50]

Uddyotakara's response depends on two assumptions. First, he thinks that universals like cowhood, horsehood, and so on, are *essential* properties: something that possesses any of these universals couldn't exist without possessing it. Thus, a thin particular that possesses cowhood couldn't exist independently of its connection with cowhood. Second, he thinks that

we can correctly identify something as a cow or a non-cow only if it exists and therefore can be a bearer of properties. So, we cannot be correctly aware of, or correctly identify, a non-existent object either a cow or a non-cow. What do these assumptions imply? Since a thin particular that possesses cowhood cannot exist independently of its connection with cowhood, it cannot either count as a cow or as a non-cow independently of that connection. For, in a state where the thin particular is unconnected to cowhood, it is non-existent and therefore cannot correctly be identified as either a cow or a non-cow. So, P1 fails.

This form of essentialism helps Uddyotakara dissolve other similar puzzles. Recall that, according to the Nyāya-Vaiśeṣikas, existence is also a universal. We could ask whether a thin particular in which existence resides is either existent or non-existent independently of its connection with existence. If it is existent, then its connection with existence is explanatorily redundant. If it is non-existent, we might wonder why non-existent objects, like a hare's horn, also doesn't become existent in virtue of becoming connected to existence. The response is the same as before:

> By this reasoning, the alternatives of existence and non-existence are explained away with respect to the connection with existence (*sattāsaṃbandha*). Neither an existent object nor a non-existent one has [or comes to have] a relation with existence. Whenever there is an object, it is related to existence. So, the problem that is based on [the alternatives of] existence and non-existence doesn't make sense. Therefore, kind properties are tenable.[51]

The point is the same as before. It simply doesn't make sense to ask whether something is existent or non-existent independently of its connection with existence. Something that possesses existence simply couldn't exist without being connected to existence; it's not as if it exists for a bit, and then becomes connected to existence. Existence is an essential property of existent objects. So, independently of being connected to existent, an object would simply be non-existent. Such an object could never be connected to existence. Therefore, the puzzle is dissolved.

## 3.3. Inherence in Multiple Objects

This finally brings us to the third component of Uddyotakara's theory of universals: namely, that a universal inheres in multiple objects. Praśastāpāda defines inherence as follows:

Inherence is that relation which holds between objects that don't exist separately (*ayutasiddha*) and are either supported [by the other] or its support, and which is the cause of the awareness, "In this…."[52]

When we see the red colour of a pot, we undergo the awareness, "In this pot, there is red colour." The pot is the support or the substratum (*ādhāra*) of the red colour, while the red colour is supported (*ādhārya* or *ādheya*) by it. But notice that plenty of other relations—like conjunction (*saṃyoga*)—by which one object can be supported by another. For example, if I place an apple in a bowl, I may also undergo the awareness, "In this bowl, there is an apple." The apple—in virtue of being physically conjoined to the bowl in a certain way—is supported by it. What distinguishes inherence from such other relations of support is that it only holds between things that cannot exist separately from one other. The apple and the bowl can independently of each other: if I drop the bowl and it smashes on the floor, the apple may remain unscathed; if I slice up the apple into pieces, no harm will come to the bowl. But this isn't the case for material objects and their qualities and movements. The bright red colour of the pot is supported by the pot but doesn't exist without it. Neither the movement of a cow around the field exist without the cow. The Nyāya-Vaiśeṣika thinkers would say that the same is true of universals and their instances. We've already seen that univerals are essential properties of their instances: a cow cannot exist without possessing cowhood. So, the relation by which a cow serves as the support of cowhood must be inherence.

This immediately raises a puzzle about universals. The Nyāya-Vaiśeṣikas assume that they are mereologically simple or impartite entities that are spatially and temporally scattered across many objects. But how can a unitary entity be spatially or temporally scattered in this way? Consider cowhood. Either cowhood is *partially* present in each cow, or it is *wholly* present in each cow. If cowhood is partially present in each cow, then cowhood must have parts, such that each of those parts is a constituent of an individual cow. Then, it won't be mereologically simple. But, if it is wholly present in a single cow, how can it then be present elsewhere at the same time in another cow? So, we can't really make sense of how universals can be mereologically simple and be present in multiple objects at the same time.

Uddyotakara's nominalist opponent raises precisely this point in the following passage.

[The nominalist:] If cowhood resides in many objects, does it reside completely (*parisamāptyā*) in each of the individuals, or partially (*ekadeśena*)?

[Reply:] What follows from this?

[The nominalist:] If it resides completely (*parisamāptyā*) in each of the individuals, then—since it will be as specific as the individuals—it can't be a universal. If it resides partially, even then a unitary entity doesn't reside at many places; rather, many entities reside at many places, on account of which the universal will have regions (*pradeśa*). Moreover, as for these portions (*ekadeśa*) of the universals which reside individually in the individuals, are they [themselves] universals by nature or not? If they are universals by nature, then it follows that there is no unitary entity [such as a universal] that resides at many places. Moreover, it is not reasonable for many entities that reside at many places to be called universals. If these [portions of a universal] aren't universals by nature, then the following statement (*abhidhāna*) is vacuous: namely, that the portions of a universal reside in each of the individuals. If [it is said that] the universal resides [in the individuals] through those portions, then the same undesirable consequence will arise as earlier. There is no other option. Therefore, there is no universal that resides at many places.[53]

Here's how we can state the argument.

P1*. For any object *X*, if *X* is a universal, then *X* is a mereologically simple entity resides in many objects *a*, *b*, *c*,...

P2*. For any *X* and any object *a*, if *X* resides in a, then either *X* resides in *a* partially or totally.

P3*. For any *X* and any object *a*, if *X* resides totally in *a*, then there is no object *b* distinct from *a* such that *X* resides in *b*.

P4*. For any *X* and any object *a*, if *X* resides partially, then *X* is not mereologically simple.

C*. There are no universals.

P1* simply reflects how the Nyāya-Vaiśeṣika theorists characterise universals. P2* seems natural: we ordinarily understand the physical location of an object in a region either in terms of its complete presence in that region, or its partial presence in that region. P3* also seems right. For, if something is completely present in something, then it can't be present anywhere else. P4* is motivated by Uddyotakara's opponent as follows. If a universal resides in many objects in virtue of having parts that overlap those objects, then either those parts are universals themselves or they aren't. If they are universals, then they cannot reside in many objects because they are located completely at one place in a single object. We have the result that not all universals reside in many objects. If they are not universals, even then we have the result that universals aren't unitary entities, i.e., aren't mereologically simple. So, we end up with the result that there are no universals.

In response to this argument, Uddyotakara rejects P2*.

[Reply:] No, because none of the alternatives are accepted. These alternatives don't obtain: "Does cowhood resides in each of the individuals completely or partially?" Since the alternatives aren't accepted, this is not a good question. Why? Because cowhood isn't accepted to be either a collection or a part-bearer. Cowhood is neither a collection nor a part-bearer. The expression "part" is applied to a portion (*bhāga*) of a collection, and to a part of a part-bearer. When all the parts are referred to without setting aside anything, then the expression "totality" is applied in relation to the parts of a part-bearer, and in relation to the elements present in a collection. But cowhood is neither a part-bearer, nor a collection. Therefore, the expressions "totality" and "part" are not applied to it. If this were not so, these two expressions would be applied to it. Therefore, the question of whether cowhood resides [in an individual] totally or partially is not reasonable.[54]

The point is this: the nominalist's argument is question-begging. P2* presupposes that, if *X* resides in some object *a*, then *X* is either a part-bearer, i.e., a composite material object that has parts, or is a mere collection or sum of certain parts. Why? This is because *X* can reside in an object *a partially* only if a (proper) part of *X* is located in *a*, and *X* can reside in an object *a completely* or *totally* only if all (proper) parts of *X* are located in *a*. But, by definition, a universal resides in many objects but doesn't have any parts. So, P2* is false.

Uddyotakara's response may appear uninformative. We all know that Nyāya-Vaiśeṣikas accept universals that are mereologically simple but are located in many objects. Insofar as P2* carries a presupposition that conflicts with this view, they should indeed reject it. But this doesn't dispel the mystery around the claim that a unitary object can be located at different places at the same time.

Uddyotakara is sensitive to this worry. Towards the end of the passage, he draws an analogy between universals and ordinary material objects. For Nyāya-Vaiśeṣika philosophers, ordinary material objects like pots and cloths are distinct from their parts, but they come into exist when they parts are put together in a certain way. This view has some intuitive pull: when we look out at the world, all we see are middle-sized dry goods like pots and cloths. On the one hand, these middle-objects appear to be unitary, not simply a collection or plurality of atoms.[55] On the other hand, they also seem to have emergent properties, like the variegated colour of a multi-coloured cloth, that don't belong to the parts they are composed of.[56] For this reason, Uddyotakara and other Nyāya-Vaiśeṣika thinkers claim that the parts of ordinary material objects are in fact their substrate causes (*samavāyikāraṇa*). A substrate cause of an effect is something in which the effect comes to reside. When it comes to material objects, the substrate cause is, roughly speaking, a material cause (*upādānakāraṇa*) of that object: it's the stuff that the material object is made out of. So, when the potter moulds two pot-halves together to create a pot, a pot that didn't exist earlier emerges. And this new pot inheres in the pot-halves, which serves as its substrate causes.

However, notice that, for such objects too, we can raise a puzzle similar to the one that the Buddhist nominalist raises for universals. If a composite material object is a unitary object but resides in its many parts, it resides in each of them either totally or partially. If it resides totally in one of them, it cannot reside in the others. If it resides partially in each part, then it must have parts over and above the relevant parts in which it resides.[57] But that's untenable. In his sub-commentary on *Nyāyasūtra* 2.1.32, Uddyotakara solves this problem by arguing that an ordinary material object—the part-bearer (*avayavin*)—isn't simply a collection of its parts; rather, it's a new unitary substance that emerges out of its parts. But the question of whether an object *x* resides partially or totally in some other object *y* makes sense only if *x* can be treated as a mere collection of its parts. So, the question of whether an ordinary material object resides in their parts totally or partially doesn't quite make sense. Thus, the opponent's argument fails. Uddyotakara's proposal is that we should treat

universals in the same way: if a unitary material object can inhere in its parts without losing its unity, so also can a universal inhere in its instances without losing its unity.[58]

## 5. The Lesson

I want to close this essay with an assessment of Uddyotakara's defence of realism about universals. At first glance, his argument might seem weak because it depends on the *Causal Constraint on Content.* Despite what Uddyotakara says about non-existent objects like hare's horns, it seems difficult to deny that non-existent objects can be intentional objects of our experiences and thoughts. But, surely, such objects cannot be causally connected to any agent. So, we should reject the *Causal Constraint on Content.* However, I think we can run a version of Uddyotakara's argument using something weaker.

> *The Weak Causal Constraint on Content.* A particular or a property *E* can be an intentional object of an awareness-event, i.e., experience or thought, only if
>
> *(i)* the awareness-event is causally connected to that particular or that property *E*, or
> *(ii)* the awareness-event is causally connected other particulars or properties using which *E* can be descriptively represented.

This account leaves open the possibility that non-existent objects can be represented in our thoughts and experiences, but only through descriptions that appeal to particulars and properties with which our awareness-events are causally connected. For example, we can think about hare's horns only insofar as we can think about them under the description "horns that are part of hares' bodies," and we can think about them under that description only insofar as we have encountered hares, horns, and parts of bodies. If the *Weak Causal Constraint on Content* is true, then an experience or a thought can represent an individual as a cow only if that awareness is (i) causally connected to the repeatable property of cowhood, or (ii) causally connected to other particulars or properties using which cowhood can be descriptively represented.  Obviously, a nominalist who denies the existence of repeatable properties but accepts the *Weak Causal Constraint on Content* would avoid alternative (i), and claim that our experiences and thoughts descriptively represent properties like cowhood using particulars or properties that we are causally connected to.

However, as Uddyotakara predicts, a Buddhist resemblance nominalist cannot easily make this move. Suppose the resemblance nominalist claims that we think about cowhood under the description "the object that explains the resemblance amongst cows with respect to physical characteristics like horns, dewlaps, etc." This description appeals to the resemblance amongst cows. The nominalist must accept one of the following claims.

*Claim 1.* The resemblance amongst cows is an objective similarity relation that holds between bundles of tropes.

*Claim 2.* The resemblance amongst cows is a stance-dependent similarity relation that we conceptually construct.

As we have already seen in the last section, if the Buddhist resemblance nominalist were to accept *Claim 1* without giving up a monocategorial trope-theoretic ontology, then she would run into at least two problems: the problem of location and the problem of regress. The only other way for the nominalist to preserve *Claim 1* would be to enrich her ontology, so that it not only includes tropes but also other entities like *classes* which can help us explain how two bundles of tropes can be objectively similar to each other.[59] But abstract entities like classes are no less mysterious than universals. And we still need to explain how we can be causally connected with such abstract entities so as to represent them through our thoughts. So, accepting *Claim 1* is costly.

The remaining option is to accept *Claim 2.* But, given the *Weak Causal Constraint on Content,* it's hard to see how the resemblance amongst cows can be conceptually constructed. If we assume that such resemblance is something we can think about but doesn't exist, it must be descriptively represented through other particulars or properties that we are causally connected to. What are these other particulars or properties? For example, we might attempt to explain the resemblance amongst cows in terms of the similarity amongst the mental images that we entertain when we experience or imagine cows. So, the resemblance amongst the cows can be described as "the resemblance amongst the mental images that purport to represent cows." But, if that is right, we still have to appeal to similarity relations amongst mental images in order to descriptively represent the resemblance amongst cows. But, as we

know, such resemblance relations are hard to accommodate within a monocategorial trope-theoretic ontology. So, the problem for the resemblance nominalist remains unsolved.

More generally, the challenge is this. Even if resemblances amongst cows, horses, chariots, etc. are conceptually constructed, it is difficult to descriptively represent such resemblances without appealing to similarity relations of some kind. But since similarity relations cannot be straightforwardly accommodated within a trope-theoretic ontology, the Buddhist resemblance nominalist cannot easily accept *Claim 2*. And, if they try to enrich their ontology by accepting the stance-independent existence of abstract objects like classes, they still need to explain how we can be causally connected with such abstract entities so as to represent them through our thoughts. The lesson: if we accept the *Weak Causal Constraint on Content,* it's difficult for us to accept resemblance nominalism.

**Bibliography**

**Primary Texts and Abbreviations**

AK      Vasubandhu. *Abhidharmakośakārikā*. In *Abhidharmakośabhāṣyam of Vasubandhu.* Edited by Prahlad Pradhan and Aruna Haldar.  Patna: K.P. Jayaswal Institute, 1975. Second Edition.

AKBh  Vasubandhu. *Abhidharmakośabhāṣya*. In *Abhidharmakośabhāṣyam of Vasubandhu.* Edited by Prahlad Pradhan and Aruna Haldar. Patna: K.P. Jayaswal Institute, 1975. Second Edition.

ĀTV    Udayana. *Ātmatattvaviveka*. In *Ātmatattvaviveka: With the Commentaries of Śaṅkara Miśra, Bhagīratha Thakkura, and Raghunātha Tārkikaśiromaṇī*. Edited by Vindhyeśvarīprasāda Dvivedī and Lakṣmaṇaśāstrī Drāviḍa. Calcutta: Royal Asiatic Society of Bengal, 1907.

Kir      Udayana's *Kiraṇāvalī*. In *Praśastapādabhāṣyam: With the Commentary Kiraṇāvalī of Udayanācārya*. Edited by Jitendra S. Jetly. Baroda: Oriental Institute, 1971.

MBh  Patañjali. *Mahābhāṣya*. In *The Vykaraṇamahābhāṣya of Patañjali.* Volume I. Edited by F. Kielhorn. Bombay: Government Central Book Depot, 1892 (second revised edition).

NBh  Vātsyāyana. *Nyāyabhāṣya*. In *Gautamīyanyāyadarśana with Bhāṣya of Vātsyāyana*. Edited by Anantalal Thakur. New Delhi: Indian Council of Philosophical Research, 1997.

NK  Śrīdhara. *Nyāyakandalī*. In *Nyāyakandalī Being a Commentary on Praśastapādabhāṣya, with Three Sub-commentaries*. Edited by J. S. Jetly and Vasant G. Parikh. Vadodara, India: Oriental Institute, 1991.

NV  Uddyotakara. *Nyāyavārttika*. In *Nyāyabhāṣyavārttika of Bhāravdāja Uddyotakara*. Edited by Anantalal Thakur. New Delhi: Indian Council of Philosophical Research, 1997.

NVTṬ  Vācaspatimiśra. *Nyāyavārttikatātparyaṭīkā*. In *Nyāyavārttikatātparyaṭīkā of Vācaspatimiśra*. Edited by Anantalal Thakur. New Delhi: Indian Council of Philosophical Research, 1996.

PDS  Praśastapāda. *Padārthadharmasaṅgraha*. In *Praśastapādabhāṣyam: With the Commentary Kiraṇāvalī of Udayanācārya*. Edited by Jitendra S. Jetly. Baroda: Oriental Institute, 1971.

PS V  Dignāga. *Pramāṇasamuccaya*. Chapter V. In *Dignāga's Philosophy of Language: Pramāṇasamuccayavṛtti V on Anyāpoha*. Edited by O. H. Pind. Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2016.

ŚBh  Śabarasvāmin's *Bhāṣya* on *Pūrvamīmāṃsāsūtra* in *Śrīmajjaiminipraṇīte Mīmāṃsādarśane...*Edited by Kashinath Vasudev Abhyankar, and Gaṇeśaśāstrī Ambādāsa Jośī. Pune: Ānandāśrama, 1970.

ŚV  Kumārilabhaṭṭa. *Ślokavārttika*. In *Ślokavārttikam Kumārilabhaṭṭapādaviracitaṃ Pārthasārathimiśraviracitayā Nyāyaratnākaravyākhyayā Sanātham*. Edited by Dvārikādāsa Śāstrī. Varanasi: Tara Publications, 1978.

Sphu    Yaśomitra. *Spuṭārthā*. In *Abhidharmakośa and Bhāṣya of Ācārya Vasubandhu with Spuṭārthā Commentary of Ācārya Yaśomitra*. Edited by Svāmī Dvārikādāsa Śāstrī. Varanasi: Bauddha Bhāratī, 1987.

TV    Kumārilabhaṭṭa. *Tantravārttika*. In *Śrīmajjaiminipraṇīte Mīmāṃsādarśane...*Edited by Kashinath Vasudev Abhyankar, and Gaṇeśaśāstrī Ambādāsa Jośī. Pune: Ānandāśrama, 1970.

VS    *Vaiśeṣikasūtra of Kaṇāda: With the Commentary of Candrānanda*. Edited by Muni Jambuvijayaji. Baroda: Oriental Institute, 1961.

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[1] For discussions of debates about universals in Sanskrit philosophy, see Dravid (1972) and essays in Siderits, Tillemans and Chakrabarti (2011). For helpful presentations of contemporary debates about universals in contemporary metaphysics, see Oliver (1996), Oliver and Mellor (1997), and Rodriguez-Pereyra (2002, 2015). As we shall see, some of these contemporary debates will be helpful for understanding the challenge that Uddyotakara poses for the Buddhist resemblance nominalist.

[2] In Sanskrit philosophy, the discussion of universals is closely tied to the questions about the semantics of kind terms (*jātiśabda*), i.e., common nouns like "cow." Amongst grammarians, Patañjali (2nd century BCE?) says that the meaning of such a kind term is a form (*ākṛti*) (which, in this context, is simply a universal). See, for example, Patañjali's *Mahābhāṣya* ad *Pāṇinisūtra* 1.1.1, 1.2.58 and 1.2.64 (MBh I.7.8-25, I.229.9-230.21, I.233.1-14). Similarly, Mīmāṃsakas like Jaimini (2nd century CE), Śabarasvāmin (4th century CE?), and Kumārila Bhaṭṭa (7th century CE) argue that such kind terms refer to universals. See Śabara's commentary (*Śābarabhāṣya*) on the section called "*ākṛtyadhikaraṇa*" in Jaimini's *Pūrvaīmāṃsāsūtra* 1.3.30-35, along with and Kumārila's sub-commentary *Tantravārttika* on this section (TV II.229-268). By contrast, the early Naiyāyikas adopt a liberal view on what kind terms refer to. On their view, such a term could refer an individual (*vyakti*), a universal (*sāmānya* or *jāti*), or a form (*ākṛti*) (which isn't understood as a universal but rather as a configuration of parts). See Vātsyāyana's (4th-5th century CE) *Nyāyabhāṣya* on Akṣapāda Gautama's (2nd century CE) *Nyāyasūtra* 2.2.58-69 along with Uddyotakara's (6th century CE) sub-commentary *Nyāyavārttika* and Vācaspati Miśra's (9th century CE) further sub-commentary *Nyāyavārttikatātparyaṭīkā* (NBh 128-134; NV 298-318; NVTṬ 426-451). For an accessible translation of some of these texts, see Scharf (1996). On the Buddhist side, for Dignāga's (5th-6th century CE) nominalist semantics for kind terms, see the fifth chapter of his *Pramāṇasamuccaya* (PS V) as well as Pind's (2016) translation thereof.

[3] Here, I shall translate the Sanskrit term "*jñāna*" as either "awareness" or "awareness-event." Typically, this Sanskrit word picks out contentful occurrent mental states, like experiences and thoughts. But, often, it is translated as "cognition" rather than "awareness." This is slightly misleading. Typically, in contemporary philosophy and cognitive science, the term "cognition" is reserved for mental states, like beliefs and judgements, whose contents can be verbally reported and directly used for reasoning and the control of action. But, for at least some Sanskrit philosophers, a *jñāna* needn't be like this: for Buddhist philosophers working within the tradition of Dignāga and Dharmakīrti and Nyāya philosophers beginning with Gaṅgeśa Upādhyāya (14th century CE), non-conceptual perceptual experiences count as *jñāna*s, but do not have contents that can be verbally reported or directly used for reasoning and the control of action. So, I choose the more neutral terms "awareness" and "awareness-event" to refer to all *jñāna*s.

[4] Here, I will use the word "object" to refer to both particulars and properties that may either be existent or non-existent. In this sense, that word will be synonymous with the Sanskrit word "*artha*."

[5] The early Vaiśeṣika philosophers like Praśastapāda don't regard absence (*abhāva*) as a separate ontological category. But later Vaiśeṣika philosophers like Śrīdhara (10th century CE) and Udayana (10th-11th century CE) do (NK 25.4-5; Kir 4.21-5.1). Interestingly, Nyāya philosophers like Vātsyāyana, Uddyotakara, and Vācaspati, who adopted the Vaiśeṣika ontological scheme, seem to recognize absence as a separate ontological category; see the commentaries and sub-commentaries on *Nyāyasūtra* 2.2.7-12 (NBh 102.8-104.8; NV 266.1-267.16; NVTṬ 392.20-395.5). Matilal (1968) provides a translation of these Nyāya texts.

[6] I am intentionally ignoring ultimate differentiators (*antyaviśeṣa*), because they won't be relevant to any subsequent discussion. The Vaiśeṣikas—who are so-called precisely because they posit such differentiators---do so in order to fix the identity of eternal substances—like atoms (*paramāṇu*) of the material elements (*mahābhūta*) like earth, water, fire, etc. and the selves (*ātman*). At the time of dissolution (*pralaya*), when all creation is destroyed, there are no composite substances, so the atoms of the different material elements cannot be distinguished from one another in terms of their properties like qualities, motions and universals. To distinguish them, we need ultimate differentiators. Analogouousy, in the state of liberation (*apavarga* or *mokṣa*), selves lack mental qualities like awareness, pleasure, or pain, in virtue of which they could be distinguished from other selves. Once again, we need ultimate differentiators to distinguish the selves. Typically, the Vaiśeṣikas claim that ultimate differentiators reside in all eternal substances. It is not clear to me why we need to posit ultimate differentiators in other eternal substances like ether (*ākāśa*), space (*dik*), and time (*kāla*).

[7] This theory originates from Kaṇāda's *Vaiśeṣikasūtra* (VS). VS 1.2.3 says: "That there are universals and differentiators (*viśeṣa*) depends on awareness" (*sāmānyaṃ viśeṣa iti buddhyapekṣam*). The intention here is not deny to the stance-independent existence of universals, but rather to show that our evidence for positing universals (as well as differentiators) comes from solely our own awareness-events. Kaṇāda claims that the highest universal—existence (*bhāva* or *sattā*)—is that entity which generates the recurrent judgement, "That is existent," with respect to substances, qualities, and movements (VS 1.2.7). By contrast, lower universals such as substancehood, qualityhood and motionhood aren't just universals but also differentiators (VS 1.2.6). We shall soon see how Praśastapāda explains these arguments.

[8] The term "*anuvṛtti*" has different meanings in different contexts. In contexts relevant to the Nyāya-Vaiśeṣika theory of universals, Scharf (1996) translates it as "recurrence", while Patil (2009) translates it as "consistency" or "continuity." I prefer the expression "uniformity" or "uniform occurrence," because Nyāya-Vaiśeṣika commentators, e.g., Praśastapāda, Śrīdhara and Udayana, themselves explain "*anuvṛtti*" in terms of another notion, *anugama*, which refers to some sort of agreement or conformity amongst distinct objects (NK 41.7-8; Kir 16.5). For similar treatment of universals in terms of *anugama*, see Kumārila's discussion of universals in v. 116 in his *Ślokavārttika* ad *Pūrvamīmāṃsāsūtra* 1.1.4 (ŚV 125.25-26).

[9] NBh 133.16-134.4 ad NS 2.2.69: *yā samānaṃ buddhiṃ prasūte bhinneṣv adhikaraṇeṣu, yayā bahūnītaretarato na vyāvartante yo 'rtho 'nekatra pratyayānuvṛttinimittaṃ tat sāmānyam | yac ca keṣāñcid abhedaṃ kutaścid bhedaṃ karoti tat sāmānyaviśeṣo jātir iti ||*

[10] PDS 15.9-13: *sāmānyaṃ dvividhaṃ param aparaṃ ca, anuvṛttipratyayakāraṇam | tatra paraṃ sattā, mahāviṣayatvāt | sā cānuvṛtter eva hetutvāt sāmānyam eva | dravyatvādy aparam, alpaviṣayatvāt| tac ca vyāvṛtter api hetutvāt sāmānyaṃ saha viśeṣākhyām api labhate ||*

[11] PDS 271.7-12: *sāmānyaṃ dvividhaṃ param aparaṃ ca | svaviṣayasarvagatam abhinnātmakam anekavṛtti, ekadvibahuṣv ātmasvarūpānuvṛttipratyayakāraraṇam, svarūpābhedenādhāreṣu prabandhena vartamānam anuvṛttipratyayakāraṇam | katham? pratipiṇḍaṃ sāmānyāpekṣaṃ prabandhena jñānotpattāv abhyāsapratyayajanitāc ca saṃskārād atītajñānaprabandhapratyavekṣaṇād yad anugatam asti tat sāmānyam iti |*

[12] PDS 271.13-19: "Amongst those universals, existence is the highest universal, and is only the cause of an awareness of uniformity. Just as there is a uniformity of awareness-events—which takes the form, "[That is] blue!", "[That is] blue!", and so on—with respect to mutually distinct hides of animals, clothes, and blankets due to a connection (*abhisambandha*) with a blue substance, so also is there a distinctionless uniformity of awareness-events—which takes the form, "[That's an] existent!", "[That's an] existent!", and so on—with respect to mutually distinct substances, qualities and motions. And that can happen [only] due to some distinct object. So, it is established that that distinct object is existence. Due to a uniform connection (*anusambandha*) with existence, there is a uniformity of awareness-events that take the form, "[That's an] existent!", "[That's an] existent!", and so on. Therefore, existence is indeed a universal." (*tatra sattā param sāmānyam anuvṛttipratyayakāraṇam eva | yathā parasparaviśiṣṭeṣu carmavastrakambalādiṣv ekasmān niladravyābhisambandhāt nīlam nilam iti pratyayānuvṛttiḥ tathā parasparaviśiṣṭeṣu dravyaguṇakarmasv*

*aviśiṣṭā sat sad iti pratyayānuvṛttiḥ sā cārthāntarād bhavitum arhatīti yat tad arthānatarm sā satteti siddha |sattānusambandhāt sat sad iti pratyayānuvṛttiḥ tasmāt sā sāmānyam eva |*)

[13] PDS 271.20-272.5: "A lower universal—like substancehood, qualityhood, and motionhood—is both a universal and a differentiator, because it causes an awareness of uniformity and distinctness. Amongst them, substancehood is a universal because it causes an awareness of uniformity in the case of mutually distinct [substances like] earth and so on. And it is a differentiator because it causes an awareness of distinctness [of such substances] from qualities and movements. In the same way, qualityhood is a universal because it causes an awareness of uniformity in the case of mutually distinct [qualities like] colours and so on. It is a differentiator because it causes an awareness of the distinctness [of such qualities] from substances and movements. In the same way, motionhood is a universal because it causes an awareness of uniformity in the case of mutually distinct motions like upward motions and so on. It is a differentiator because it causes an awareness of distinctness [of movements] from substances and qualities. In the same way, earthhood, colourhood, the property of being an upward motion, cowhood, pothood, clothhood, and so on—which are present in both animate and non-animate beings—are established to have the status of being universals and differentiators in virtue of causing awareness-events regarding uniformity and distinction." (*aparaṃ dravyatvaguṇatvakarmatvādi anuvṛttivyāvṛttihetutvāt sāmānyaṃ viśeṣaś ca bhavati | tatra dravyatvaṃ parasparaviśiṣṭeṣu pṛthivyādiṣv anuvṛttihetutvāt sāmānyam guṇakarmabhyo vyāvṛttihetutvāt viśeṣaḥ | tathā guṇatvaṃ parasparaviśiṣṭeṣu rūpādiṣv anuvṛttihetutvāt sāmānyaṃ dravyakarmabhyo vyāvṛttihetutvād viśeṣaḥ | tathā karmatvaṃ parasparaviśiṣṭeṣūtkṣepaṇādiṣv anuvṛttipratyayahetutvāt sāmānyaṃ dravyaguṇebhyo vyāvṛttihetutvād viśeṣaḥ evam pṛthivītvarūpatvotkṣepaṇatvagotvaghaṭatvapaṭatvādīnām api prāṇyaprāṇigatānām anuvṛttivyāvṛttihetutvāt sāmānyaviśeṣabhāvaḥ siddhaḥ ||*)

[14] See Vasubandhu's commentary on AK v. 6.4 (AKBh 334.1-14).

[15] See Ganeri (2001), Goodman (2004) and Siderits (2007).

[16] AKBh 190.2-7 ad AK 3.99cd: "Moreover, since the label "atom" is applied simply to colours (*rūpa*) and so on, it is established that the atoms are destroyed when those qualities are destroyed. [The Nyāya-Vaiśeṣika opponent:] An atom indeed is a substance. And a substance is distinct from colour and so on. So, it isn't established that, when those qualities are destroyed, the substance is destroyed. [Vasubandhu:] It is unreasonable for this substance to be distinct. For no one makes the following determination, 'These are earth, water, and fire. And these are their colours, etc.' Rather, these are known [or understood] (*prajñāyante*) insofar as they can apprehended by the visual and haptic sense. Moreover, when wool, cotton, safflower, and incense are burnt, since there is no awareness of those objects, the awareness of those objects arises simply with respect to the individual colours and so on" (*rūpādiṣv eva ca paramāṇusaṃjñāniveśāt tadvināśe siddhaḥ paramāṇuvināśaḥ | dravyaṃ hi paramāṇur anyac ca rūpādibhyo dravyam iti na teṣāṃ vināśe tadvināśaḥ siddhyati | ayuktam asyānyatvaṃ yāvatā na nirdhāryate kenacit imāni pṛthivyaptejāṃsi ima eṣāṃ rūpādaya iti | cakṣuḥsparśanagrāhyāṇi ca prajñāyante dagdheṣu corṇākarpāsakusumbhakuṅkumādiṣu tadbuddhyabhāvād rūpādibhedeṣveva tadbuddhiḥ |*).In the context of this passage, it makes sense to translate "*rūpa*" as "colour", since that is what "*rūpa*" means for Vasubandhu's Vaiśeṣika opponents. However, within Vasubandhu's own system, "*rūpa*" has a broader scope: it includes visible qualities like colour (*varṇa*) as well as shape (*saṃsthāna*). For discussion, see AKBh 6.9 ad AK 1.10a.

[17] See, for example, his arguments against the Vātsīputrīyas at AKBh 463.3-5: "Moreover, when a person is conventionally designated (*prajñapyate*), is it conventionally designated after one initially apprehends the aggregates (*skandha*) or after one apprehends a person? If it is the aggregates, then the conventional designation 'person' applies to those alone" (*yadā ca pudgalaḥ prajñapyate ki tāvatskandhān upalabhya prajñapyate āhosvit pudgalam | yadi tāvat skandhāṃsteṣveva pudgalaprajñaptiḥ prāpnoti | pudgalasyānupalambhāt |*)

[18] AKBh 190.7-8 ad AK 3.99cd: "When a heat-induced quality is produced, the awareness of a pot arises due to a similarity of configuration (*saṃsthānasāmānyāt*), just as in the case of a row. For there is no such awareness for someone who doesn't perceive a mark [of the pot]." (*pākajotpattau ghaṭaparijñanaṃ saṃsthānasāmānyāt paṅktivat|cihnam apaśyataḥ parijñānābhāvāt |*)

[19] In the *Abhidharmakośabhāṣya*, Vasubandhu systematically considers all the different causally unconditioned *dharma*s (*asaṃskṛtalakṣaṇadharma*) that are posited by his Abhidharma interlocutors, i.e., the Vaibhāṣika

philosophers, and shows that they all are conceptually constructed. For the Vaibhāṣikas, the causally unconditioned *dharma*s include cessation after deliberation (*pratisaṅkhyānirodha*), cessation without deliberation (*apratisaṅkhyānirodha*), and space (*ākāśa*); for accessible discussion on the basis of original sources, see Dhammajoti (2007, ch. 16). For example, at AKBh 92.4-5 ad AK 2.55, Vasubandhu writes, "The Sautrāntikas say that every causally unconditioned object without exception is substantially non-existent; for that object doesn't exist as a separate entity like matter, hedonic states, and so on" (*sarvam evāsaṃskṛtam adravyam iti sautrāntikāḥ | na hi tad rūpavedanādivat bhāvāntaram asti |*). Similarly, at AKBh 193.2-194.14 ad AK 4.2-3, Vasubandhu argues that all conditioned *dharma*s are momentary on the basis of the Buddhist assumption that all conditioned dharmas are destroyed; for accessible discussion on the basis of original sources, see von Rospatt (1996, ch. II.D).

[20] Cox (1995, p. 231).

[21] AKBh 67.15-18 ad AK 2.41ab: *sabhāgatā nāma dravyaṃ sattvānāṃ sādṛśyam | nikāyasabhāga ity asyāḥ śāstre saṃjñā | sā punar abhinnā bhinnā ca | abhinnā sarvasattvānāṃ sattvasabhāgatā | pratisattvaṃ sarveṣu bhāvāt | bhinnā punas teṣām eva sattvānāṃ dhātubhūmigatiyonijātistrīpuruṣopāsakabhikṣuśaikṣāśaikṣyādibhedena pratiniyatā | dharmasabhāgatā punaḥ skandhāyatanadhātutaḥ |*

[22] AKBh 67.19-20 ad AK 2.41ab: *yadi sattvasabhāgatā dravyam aviśiṣṭaṃ na syāt anyonyaviśeṣabhinneṣu sattveṣu sattvas sattva ity abhedena buddhir na syāt prajñaptiś ca | evaṃ skandhādibuddhiprajñaptayyo 'pi yojyāḥ |*

[23] AKBh 67.25-26 ad AK 2.41ab: *yadi pṛthagjanasabhāgatā nāma dravyam asti kiṃ punaḥ pṛthagjanatvena | na hi manuṣyasabhāgatāyā anyan manuṣyatvaṃ kalpyate |*

[24] AKBh 67.26-68.2 ad AK 2.41ab: *naiva ca lokaḥ sabhāgatāṃ paśyaty arūpiṇītvāt na caināṃ prajñayā paricchinatti pratipadyate ca sattvānāṃ jātyabhedam iti satyā api tasyāḥ kathaṃ tatra vyāpāraḥ |*

[25] AKBh 68.2-3 ad AK 2.41ab: *api cāsattvasabhāgatā 'pi kiṃ neṣyate | śāliyavamudgamāsāmrapanasalohakāñcanādīnāṃ svajātisādṛśyāt | |*

[26] AKBh 68.3-4 ad AK 2.41ab: *tāsāṃ ca sabhāgatānām anyonyabhinnānāṃ katham abhedena sabhāgatā prajñaptiḥ kriyate |*

[27] Sphu 232.17-21: "The homogeneous character of sentient beings is distinct; the homogeneous character of elements is distinct; the homogeneous character of destinies (*gati*) is distinct. Thus, homogeneous characters that are distinct from each other are accepted. How do you apply the conventional designation "homogeneous character" for those homogeneous characters, [in the following form,] 'This is a homogeneous character,' 'This is a homogeneous character," and so on, without any distinction? How do linguistic usage and awareness arise? If a distinct homogeneous character were accepted even in this case, on account of which there would be an awareness of a common characteristic amongst the homogeneous characters, then this would an improper position, since it would contradict your earlier position." (*anyā sattvasabhāgatā 'nyā dhātusabhāgatā 'nyā gatisabhāgateti anyonyabhinnāḥ sabhāgatā iṣyante | tāsāṃ sabhāgateti prajñaptir iyaṃ sabhāgatā iyaṃ sabhāgatety abhedena kathaṃ bhavadbhiḥ kriyate | vyavahāraḥ pratyayaś ca kathaṃ jāyate | yady atrāpi sabhāgatāntaraṃ pratijñāyeta yena sabhāgatāsāmānyabuddhir bhavet | bhavet so 'yam apakṣaḥ prākpakṣavirodhāt |*)

[28] AKBh 68.4-7 ad AK 2.41ab: *vaiśeṣikāś caivaṃ dyotitā bhavanti |teṣām api hy eṣa siddhāntaḥ |sāmānyapadārtho nāmāsti yataḥ samānapratyayotpattir atulyaprakāreṣv apīti | ayaṃ tu teṣāṃ viśeṣaḥ | sa eko 'py anekasmin vartate |* In his commentary *Sphuṭārthā* (Spu 232.21), Yaśomitra glosses the word "*dyotita*"— translated here as "supported"—as "*jvalita*" (which literally means "lit up" or "made bright") and as "*samarthita*" (which literally means "supported").

[29] AKBh 68.7-10 ad AK 2.41ab: *yadi dyotitā yadi na dyotitā | asty eṣā tu sabhāgatā sūtre vacanād iti vaibhāṣikāḥ | uktaṃ hi bhagavatā "sa ced itthantvam āgacchati manuṣyāṇāṃ sabhāgatām" iti | uktam etan na tūktaṃ dravyāntaram iti | kā tarhi sā | ta eva hi tathābhūtāḥ saṃskārā yeṣu manuṣyādiprajñaptiḥ śālyādiṣu sabhāgatāvat |*

[30] Spu 232.14-17: *na dravyāntarasabhāgatānimittā sattvaḥ sattva iti sāmānyabuddhiḥ | sāmānyākārapravṛttatvāt | śāliyavamudgamāṣādisāmānyabuddhivat | śāliyavasvajātisādṛśyakṛtā hy eṣā sāmānyabuddhiḥ | na ca teṣāṃ svajātisādṛśyaṃ svato 'rthāntaraṃ bhavati |*

[31] See AKBh 341.10-14 ad AK 6.14cd.

[32] See Uddyotakara's commentary on NS 1.1.4 (NV 28.19-30.2).

[33] NV 492.8-9 ad NS 4.2.36: *mithyābuddher nimittam asti | kiṃ punas tat? Sāmānyadarśanaṃ viśeṣādarśanam avidyamānaviśeṣādhyāropa iti |*

[34] For recent discussions of the early Nyāya misplacement theory of error, see Dasti (2012) and Vaidya (2013).

[35] NV 323.4-11 ad NS 3.1.1*: idaṃ ca śaśaviṣāṇaṃ nāstī bruvāṇaḥ praṣṭavyaḥ kim ayaṃ sāmāyapratiṣedho 'tha viśeṣapratiṣedha iti | yadi sāmānyapratiṣedhaḥ, tan na yuktam aśakyatvāt | śaśasya viṣāṇaṃ nāstīti gavādiviṣāṇāny api śaśasya na santīti prāptam | etac cāśakyam | na hi tāni na santīti | atha viśeṣapratiṣedhaḥ, kiñcid viśāṇaṃ śaśasya pratiṣidhyate, yasya śaso na kāryam, yac ca śaśasya na kāraṇam iti | so 'yaṃ kāryakāraṇasaṃbandha eva pratiṣidhyate | kāryakāraṇasaṃbandhas tv anyatra dṛṣṭa iha pratiṣidhyata iti nātyantāsattvapratipādane dṛṣṭānto bhavati | etena khapuṣpādyasattvaṃ vyākhyātaṃ veditavyam |*

[36] NV 318.7-11 ad NS 2.2.69: *gavādiṣv anuvṛttipratyayo dṛṣṭaḥ piṇḍavyatiriktāt nimittāt bhavati viśeṣavattvāt nīlādipratyayavad iti | goto 'rthāntaraṃ gotvaṃ bhinnapratyayaviṣayatvād rūpasparśapratyayavat |...gor gotvānuvṛttipratyayo bhinnanimittaḥ viśeṣavattvād rūpādipratyayavad iti |*

[37] NV 303.6 ad NS 2.2.64: *na hi piṇḍebhyo 'rthāntaraṃ gotvaṃ piṇḍāntarālesv agrahaṇād iti kecit |*

[38] NV 303.7-10 ad NS 2.2.64: *tan na, vikalpānupapatteḥ | piṇḍāntarālesu adarśanād iti bruvāṇaḥ piṇḍāntarālaṃ paryanuyojyaḥ | kim idaṃ piṇḍāntarālam? kim ākāśam, āhosvid abhāvaḥ, uta dravyāntaram iti ? yadi ākāśam | na tatra gotvam na hi ākāśam gaur iti | etena abhāvaḥ dravyāntaram ca vyākhyātam |*

[39] NV 303.11-13 ad NS 2.2.64: *viśeṣapratyayānām anākasmikatvāc ca | ayaṃ ca piṇḍapratyayavyatirekabhāk pratyaya upajāyamāno nimittāntarād bhavati | dṛṣṭā khalu piṇḍapratyayavyatirekabhājāṃ pratyayānāṃ nimittāntarād utpattiḥ | yathā vastracarmakambaleṣu nīlapratyayaḥ iti |*

[40] NV 303.13-21 ad NS 2.2.64: *ākṛtisāmānyāt iti cet | atha manyase satyam ayam astu piṇḍavyatirekanimittād anuvṛttipratyayo bhavati, na punar asya jātir nimittam | api tu yad śiraḥpāṇipādākṛtisāmānyam, tasmād anuvṛttipratyaya iti | na piṇḍavad asādhāraṇatvāt ākṛteḥ | yathaiva piṇḍāḥ piṇḍāntaravṛttayo na bhavanti, tathā ākṛtir api ekapiṇḍavartitvāt piṇḍāntaravartinī na bhavati | atha ākṛteḥ piṇḍāntaravartitvam abhyupagamyate, nāmni vivādo nārtha iti | atha piṇḍavyatiriktaṃ sāmānyam nābhyupagamyate tathāpy ekasāmānyanirākaraṇāt samānapratyayabījam anyad vaktavyaṃ syāt | na hy asati sāmānye samānapratyayaṃ paśyāma iti |* This passage is slightly confusing because the word "*sāmānya*" can refer to either a universal, or a common characteristic, or similarity. It's clear in the context, however, that the Buddhist opponent is a resemblance nominalist. So, to make sense of the argument, I have translated word "*sāmānya*" at least two places as "similarity," but at one place (where Uddyotakara speaks of "*ekasāmānya*") as "universal."

[41] For the relevant texts and their translations, see Pind (2016) and Eltschinger, Taber, Much, and Ratié (2018).

[42] See Uddyotakara's commentary on NS 2.2.66 at NV 307.5-316.9. For a translation, Matilal (2002).

[43] The abundant/sparse distinction comes from Lewis (1986). See also Armstrong (1979), Bealer (1982), Swoyer (1996). For a useful overview, see Mellor and Oliver (1997).

[44] NV 318.2-5 ad NS 2.2.69: *yayā bhinnāny anekāni vastūni itaretarato 'nuvṛttivyāvṛttipratyayahetubhāvena vyavatiṣṭhante sā jātiḥ | yathemāni kuṇḍānīty anuvartante, nemāni kuṇḍānīti vyāvartante, tad ekam sannimittam anuvṛttivyāvṛttikāraṇaṃ yat tat sāmānyaviśeṣaḥ sā jātir iti...*

[45] NV 318.5-6 ad NS 2.2.69: *samānapratyayotpattikāraṇaṃ jātir iti jātau niyamo, na samānapratyayotpattau, jātim antareṇāpi dṛṣṭatvāt | jātim antareṇāpi samānapratyayaḥ dṛṣṭaḥ, yathā pācakādiṣu |*

[46] In his commentary *Kiraṇāvalī* on Praśastapāda's *Padārthadharmasaṅgraha*, Udayana explains the distinction by appealing to a set of six kind-blockers (*jātibādhaka*) (Kir 23.3-4). Cross-cutting (*sāṅkarya*) is one of them. For discussion, see Pellegrini (2016).

[47] NV 303.21-304.4 ad NS 2.2.64: *asaty api sāmānye dṛṣṭaḥ samānapratyaya iti cet? atha manyase yathā sāmānyeṣv asati sāmānyānatare anuvṛttipratyayo dṛṣṭaḥ gotvāśvatvaghaṭatveṣu idam sāmānyam idam sāmānyam iti, tasmād anaikāntikatvād anuvṛttipratyayo 'sādhanam arthāntaranimittapratipādane iti ? nānābhyupagamāt | na mayā gotvāśvatvaghaṭatveṣu nirnimittaḥ sāmānyapratyayo 'bhyupagamyate | tasmād anuttaram etat |*

[48] NV 304.4-13 ad NS 2.2.64: *sūtravyāghāta iti cet | yadi manyase sāmānyṣv api sāmānyam astīti , nanu sūtravyāghātaḥ*

*sāmānyaviśeṣeṣu sāmānyaviśeṣābhāvāt tata eva jñānam ||* (VS 8.5)

*iti | na, sūtrārthāparijñānāt | ayaṃ sūtrārthaḥ, yathā dravyam iti pratyayo dravyatvaviśeṣaṇe dravye bhavati, na punaḥ sāmānyaviśeṣeṣv evam iti | na punar ayam sūtrārthaḥ nirnimitto 'nuvṛttipratyaya iti | kiṃ nimittam iti cet? atha manyase gotvādiṣv anuvṛttipratyayasya kiṃ nimittaṃ yataḥ sāmānyam iti bhavati | kutaś ca sāmānyam iti bhavati? anekārthasamavāyāt | yathā gotvam anekārthasamavāyi, tathā aśvatvādīty anekārthaiḥ tatsamavāyasya samānatvād gotvādiṣu anuvṛttipratyaya iti |*

[49] NV 304.13-19 ad NS 2.2.64: *pācakādiśabdavad iti cet? atha manyase yathā pācakādiśabdād anuvṛttipratyayāś ca bhavanti na ca pācakatvaṃ nāma sāmānyam asti, tathā gavādiṣv anuvṛttipratyayā iti? na, hetvarthāparijñānāt | viśeṣapratyayānām anākasmikatvād ity asya hetoḥ piṇḍapratyayavyatiriktasya pratyayasya nimittāntarād utpāda ity ayam arthaḥ | na punaḥ sarvo 'nuvṛttipratyayaḥ sāmānyād eva bhavatī | evaṃ sati pacanakriyāyāḥ yat pradhānaṃ sādhanam tat pācakaśabdena ucyate | tac ca prādhānyaṃ pācakāntareṣv apy astīti na doṣaḥ |*

[50] NV 305.17-306.3 ad NS 2.2.64: *gavy agavi vṛttyabhāvād iti cet? atha manyase yad idam gotvaṃ goṣv anuvṛttipratyayakāraṇaṃ tat kiṃ gavi vartate, āhosvid agavi? yadi tāvad gavi? prāk gotvayogād gaur eva asau iti vyarthaṃ gotvam | atha agavi? tenāśvādy api gotvayogāt gauḥ prāpnoti | na cānyā gatir asti | tasmāt na gotvād anuvṛttipratyaya iti? na, vikalpānabhyupagamāt | na gavi gotvam, nāgavi prāk gotvāt nāsau gaur nāpi agaur iti | kiṃ kāraṇam? ubhāv etau viśeṣyapratyayau | na ca viśeṣyapratyayau viśeṣaṇasambandham antareṇa bhavataḥ | na ca prāk gotvayogād vastu vidyate | na cāvidyamānaṃ gaur ity agaur iti ca śakyam vyapadeṣṭum | yadaiva vastu tadaiva gotvenābhisaṃbadhyata ity anāspado vikalpaḥ |*

[51] NV 306.4-7 ad NS 2.2.64: *etena sattāsambandhasya sadasadvikalpaḥ vyākhyātaḥ | na sataḥ sattāsambandhaḥ nāsataḥ | yadāiva tat vastu tadaiva sattayā saṃbadhyata iti sadasadāśrayadoṣo 'nupapannaḥ | tasmāt upapannā jātiḥ |*

[52] PDS 18.1-2: *ayutasiddhānām ādhāryādhārabhūtānām yaḥ.sambandhaḥ 'iha'pratyayahetuḥ.sa.samavāyaḥ ||*

[53] NV 304.20-305.6 ad NS 2.2.64: *yady anekārthavṛtti gotvaṃ tat kiṃ pratipiṇḍaṃ parisamāptyā vartate, athaikadeśeneti? kiṃ cātaḥ ? yadi pratipiṇḍaṃ parisamāptyā vartate, piṇḍavad asādhāraṇatvāt na sāmānyaṃ bhavitum arhati | athaikadeśena vartate, tathāpi naikam anekatra vartate, kiṃ tv anekam anekatreti | yasmāt pradeśāḥ sāmānyasya vartanta iti | ye ca te ekadeśāḥ sāmānyasya pratyekaṃ piṇḍeṣu vartante te kiṃ sāmānyātmakāḥ uta neti? yadi sāmānyātmakāḥ, naikam anekatra pravartata iti prāptam | na cānekam anekatra pravartamānaṃ sāmānyam iti yuktaṃ vaktum | atha na sāmānyātmakāḥ, śūnyam abhidhānaṃ sāmānyasyaikadeśāḥ pratyekaṃ vartanta iti | tair api tv ekadeśaiḥ sāmānyaṃ vartata iti pūrvavat prasaṅgaḥ | na cānyā gatir asti | tasmāt nānekavṛtti sāmānyam iti |*

[54] NV 305.6-13 ad NS 2.2.64: *na, vikalpānabhyupagamāt | nāyaṃ vikalpo 'sti gotvaṃ pratyekaṃ piṇḍeṣu parisamāptyā vartate, athaikadeśena vartata iti | tasmād vikalpānabhyupagamād apraśno 'yam | kasmāt? gotvasyāvayavisamudāyatvānabhyupagamāt | na gotvam avayavī na samudāyaḥ, samudāyasya bhāga ekadeśaśabdaḥ, avayavinaś cāvayave | yadā na kiñcit parihāṇyāśeṣam abhidhīyate, tadā avayavino 'vayavān apekṣya kṛtsnaśabdaḥ, samudāye ca samudāyino 'pekṣya | na ca gotvam avayavī, na samudāyaḥ | tasmāt na kṛtsnaikadeśaśabdau staḥ | na cet tatraitau śabdau staḥ tasmāt gotvaṃ kiṃ kārtsyena vartate uta ekadeśeneti na yuktaḥ praśnaḥ |*

[55] NV 229.11-13 ad NS 2.1.36: "[The person who asserts that the intentional object of perception is a collection of atoms] is to be reproved regarding the intentional object of an awareness of unity: Is this awareness, which takes the form, 'This substance is unitary,' directed at multiple objects, or is it directed at a distinctionless object? If it is directed at multiple objects, then it is inappropriate, given that an awareness of unity isn't observed with respect to multiple objects. For an awareness that takes the form, 'This is unitary,' isn't appropriate with respect to multiple objects. If it is directed at a distinctionless object, this very thing which serves as the intentional object of the awareness of unity is the part-bearer." (*ekabuddher viṣayaṃ*

*paryanuyojyaḥ | yeyaṃ buddhir ekam idaṃ dravyam iti kim iyaṃ nānāviṣayā utābhinnaviṣayeti | yadi nānāviṣayā, bahuṣv adarśanād ayuktā | na hi bahuṣv ekam idam iti yuktaḥ pratyaḥ | athābhinnārthaviṣayā, yo 'sāv ekabuddher viṣayaḥ so 'vayavīti |*)

[56] Uddyotakara accepts the existence of variegated colour (*citrarūpa*): he thinks we have perceptual evidence for thinking that the different colours of the threads that compose a multicoloured cloth produce a new colour called variegated colour. He says (NV 475.20-21 ad NS 4.2.12): "Having the theory of variegation, we say that the cloth has a variegated colour." (*upetya citravādaṃ brumaḥ paṭasya citraṃ rūpam |*) His argument here depends on a more general background assumption that tells in favour of composite objects: namely, that our perceptual states represent the world as populated by unitary middle-sized material objects. He goes on to say later in the same passage (NV 476.15-17): "From the basis of the two colours of the parts, a distinct colour is brought into existence in the part-bearer [i.e., the whole], since it is apprehended in that manner. If this part-bearer were without colour, it would not be apprehended." (*avayavarūpābhyām avayavini rūpāntaram ārabhyate, tathopalabdheḥ | yady ayam arūpo 'vayavī syāt, nopalabhyeta |*).

[57] NV 206.11-15 ad NS 2.1.32: "Since it is impossible [to apply] the expression 'totality and 'part' with respect to a unitary object, this is not a proper question. [In other words,] the question, 'Does the part-bearer reside [in its parts] as a totality or in part?' is inappropriate. A part-bearer is neither a whole nor a part. Certainly, the word 'totality is a designation for multiple objects without any remainder. And the word 'part' is a designation of one thing when there is multiplicity. Those two expressions 'totality' and 'part' don't make sense with respect to a unitary part-bearer. [The opponent:] In that case, how does the part-bearer reside in its parts? [Reply:] By the relation that holds between a substratum and what is supported by it. The part-bearer is supported, and its parts are the substrata." (*ekasmin kṛtsnaikadeśaśabdāsaṃbhavād apraśnaḥ | kim avayavy ekadeśena vartate, atha kṛtsno vartate ity ayuktaḥ praśnaḥ | nāvayavī kṛtsnaḥ naikadeśaḥ | kṛtsnam iti khalv anekasyāśeṣābhidhānam | ekadeśa iti cānekatve sati kasyacid abhidhānam | tāv imau kṛtsnaikadeśaśabdāv ekasmin navayiny anupapannau | kathaṃ tarhy avayaveṣv avayavī vartata iti? āśrayāśrayibhāvena | āśrito 'vayavī, āśrayā avayavā iti |*)

[58] NV 305.14-15 ad NS 2.2.64: "Moreover, it has been said here [in Uddyotakara's sub-commentary NV 206.21-207.13 on NS 2.1.32] that we shouldn't reprove those who claim that a unitary entity can reside in many objects. Why? Because there is a contradiction with both alternatives [i.e., that it resides wholly in each of the many objects, and that it resides partially in each of the many objects]." (*uktaṃ cātra ekam anekatra vartata iti pratijānānaḥ nānuyoktavyaḥ | kasmāt? ubhayena vyāghātād iti |*)

[59] This option is explored by Rodriguez-Pereyra (2002, pp. 156–98). One challenge for this theory is that co-extensive but distinct properties will correspond to classes that have the same actual members. So, if we take properties to be just classes, then two distinct but co-extensive properties cannot be distinguished. The standard response to this is to accept some version of modal realism according to which properties should be individuated in terms of the classes of all possible individuals that have them. See Lewis (1986) for this idea. But this kind of modal realism too—I suspect—will be unpalatable to the Buddhist.