

Causation, ‘Humean’ Causation and Emptiness

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Abstract One strategy Mādhyamikas use to support their claim that nothing has intrinsic nature (*svabhāva*) is to argue that things with intrinsic nature could not enter into causal relations. But it is not clear that there is a good Madhyamaka argument against ultimate causation that understands causation in ‘Humean’ terms and understands dharmas as tropes. After exploring the rationale behind the intrinsic-nature criterion of dharma-hood, I survey the arguments Mādhyamikas actually give for their claim that anything dependently originated must be devoid of intrinsic nature, and suggest that none actually succeeds in ruling out this hypothesis about how ultimate causation might work.

Keywords Causation · Emptiness · Madhyamaka · Humean · Intrinsic nature

In trying to show that all things are devoid of intrinsic nature (*svabhāva*), Mādhyamikas employ a very wide array of different arguments. And within this arsenal one finds a large number of arguments meant to demonstrate the incoherence of ultimately real entities—dharmas or things with intrinsic nature—entering into causal relations. It should not be surprising that there are many such arguments, since there are many ways in which it might be thought that dharmas could be causes and effects. But I have recently come to wonder whether there is an argument against one account of how ultimate causation (causation among ultimate reals) might work, and this is somewhat surprising. The account I have in mind is one that understands causation along ‘Humean’

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lines,¹ and that understands dharmas in a purely trope-theoretic way. The absence of a Madhyamaka argument would be surprising given that this is an account explicitly defended by certain non-Madhyamaka Buddhists. But perhaps I have overlooked some argument in the Madhyamaka corpus, or failed to see some strategy that a present-day Mādhyamika could use. In what follows I shall lay out the ground I have already gone over in my search. Perhaps then others might help me see what I have missed.

Before I begin, a word of clarification is in order concerning something I shall *not* be discussing. I have called a certain view of the causal relation ‘Humean’, and this term has also been used in discussions concerning what a Mādhyamika might say in giving a positive characterization of causal relations. This position is roughly that causation is best understood as a conventionally real relation among things that are empty of intrinsic nature and thus are interdependent; the relation is conventionally real in that it consists in explanatorily useful regularities; it is not however ultimately real since there are no such things as causal powers connecting cause and effect (Garfield 2002, pp. 70–73). For my own part I am not sure Madhyamaka has much to say about how causation is or should be understood by ‘the folk’ in everyday life, and so should be in the business of giving a positive characterization of causation as something that is conventionally real. But that will not be my concern here. Nāgārjuna has much to say about causation, in Chaps. 1 and 20 of *Mūlamadhyamakakārikā* (MMK) especially, but also in scattered passages in other parts of the text. The commentators understand these discussions to be aimed at something negative: showing that it is not ultimately true that things with intrinsic nature originate in dependence on causes and conditions. Since the Buddha taught that things originate in dependence on causes and conditions, Mādhyamikas take these arguments to help show that a Buddhist should not hold there are things with intrinsic natures. My concern is whether these arguments succeed in that aim.

Sources of the *svabhāva* Criterion

Ābhidharmikas claim that all and only that which bears its *svabhāva* or intrinsic nature is ultimately real.² Their term for an entity that does bear its intrinsic nature is *dharma*. According to what I believe is the best formulation of the dharma theory (the version championed by Dārṣāntikas and Sautrāntikas), a dharma turns out to be the momentary occurrence of a trope. The line of reasoning that leads to this outcome has two key parts: an argument to the effect that realism about truth requires that the

¹ I put ‘Humean’ in scare quotes because there is no consensus among Hume scholars as to exactly what Hume meant by his various pronouncements on causation. For a useful summary of what he said and what interpretive options are currently considered live, see Chaps. 4 and 5 of Coventry (2006). I take no position as to which of the options gets Hume right. All I shall mean by a ‘Humean’ view of causation is that causation involves constant conjunction without necessary connection.

² That *svabhāva* is best translated as ‘intrinsic nature’ or ‘inherent nature’ is now widely accepted among scholars of Abhidharma and Madhyamaka. But one still encounters ‘own-being’ or ‘intrinsic existence’, especially in writings on Madhyamaka. For a recent instance of this see, e.g., Burton (2004, p. 80); for a slightly older example see Ruegg (1981, 3ff.). The difficulty with this translation is that it turns the target of Madhyamaka critique into a straw man.

entities that enter into truth-makers have intrinsic natures; and an argument for mereological reductionism, the view that anything either partite or analyzable is a conceptual construction and so not ultimately real.

The Ābhidharmikas are realists about truth. By this I mean just that they understand the truth of a statement or belief to consist in its representing a state of the world as it objectively is independently of our interests and cognitive limitations. This requires that in representing the world the concepts we employ must, as it were, 'carve nature at its joints'. An example of a concept that does *not* do this is the concept *the average Wisconsin taxpayer*. It is readily agreed that there is nothing in the world that this concept picks out. The world may well contain persons who are residents of Wisconsin, some of whom pay taxes. But none of these taxpaying residents is the average Wisconsin taxpayer. For instance, each of them has a determinate sex, while the average Wisconsin taxpayer does not. Nor is the average Wisconsin taxpayer an additional resident who was somehow missed by the census. Instead we understand the concept *the average Wisconsin taxpayer* to be a way for us to discuss certain facts about the taxes paid by Wisconsin residents, a way that is useful for us given our interests and cognitive limitations.

This means that for a realist about truth no statement about the average Wisconsin taxpayer (save perhaps the statement that there is no such thing) can strictly speaking be true. Yet many such statements can be useful, and the realist thinks this needs explaining. The explanation comes in the account of what averaging is and what it is that is averaged in arriving at the statement in question. If the concepts used in this account all 'carve nature at its joints', then the account may be strictly speaking true. If not, then our accepting it as true will require explaining. The realist about truth holds that this explanatory process must terminate at some point. The statements making up this final account will all be strictly speaking true.

To say this is not to say that we should reject as false any of the countless things that we might say about the average Wisconsin taxpayer. While no such statement is strictly speaking true, many of them do deserve an alethic compliment of some sort. Sider's general term for statements that are not strictly true but still deserve such a compliment is 'quasi-true' (Sider 1999). Ābhidharmikas call certain quasi-true statements 'conventionally true' (they are said to have *samvṛti-satya*). These are statements acceptance of which generally leads to successful practice, and that would be (strictly speaking) true if, given how the things that actually exist are, there were also those non-existent entities to which one is committed in asserting the statement. Their term for a non-existent entity to which one expresses commitment in using a conventionally true statement is 'conceptual construction' (*prajñapti-sat*). A statement or cognition that represents how things objectively are is said to be ultimately true (it has *paramārtha-satya*). The entities to which one is ontologically committed in using such statements are dharmas.

The dharmas are those things that bear their own *svabhāva*. In ordinary Sanskrit the term *svabhāva* means something like 'essential nature'. This comes out in Candrakīrti's defense of Nāgārjuna's claim that a *svabhāva* cannot be adventitious (MMK 15.2c). He comments that in the world adventitious properties, such as the heat of water, or the red color of quartz containing hematite, are not considered

svabhāva. And these examples are contrasted with the heat of fire and the red color of the ruby; heat, he later says, is something fire has at all three times or always.³ Now the example of red quartz suggests that *svabhāva* does not mean just what ‘essence’ is usually taken to mean, namely a property that an entity must have to be the sort of thing that it is. (The name *karketana* is derived from ‘white’ and ‘shining’.) But the heat of water and the red color of the quartz are cases of adventitious properties because special circumstances are required in order for the entity involved to bear the property: the water must be in proximity to fire, there must be hematite in the soil. So here *svabhāva* means something like ‘normal nature’, where what is normal may or may not be exceptionless.

This is not, however, just what is meant by *svabhāva* as a technical Abhidharma term. There its principal use is in the project of constructing a taxonomy of those entities involved in the Buddha’s reduction of the person to its constituent psychophysical elements. Each of these ultimate reals is said to have both a specific characteristic (*svalakṣaṇa*) and general characteristics (*sāmānyalakṣaṇas*). Earth element, for instance, is said to have the specific characteristic of resistance and the general characteristics of impermanence, suffering and non-self. The latter triad of properties is shared by all psychophysical elements; this reflects the Buddha’s teaching that all existents have these three characteristics (the doctrine of the *trilakṣaṇa*), part of his account of the origin of suffering. But each existent belongs to a specific kind, and its specific characteristic is what determines its membership in that kind. This is said to be the entity’s *svabhāva*.

This does not explain why Ābhidharmikas would think that only an ultimately real entity bears its *svabhāva*, for it would seem that any taxonomy must rely on specific differences, yet most taxonomies do not terminate in what Abhidharma considers to be ultimately real entities, nor need there be just one specific difference at the tip of each branch.⁴ Part of the reasoning behind their claim is no doubt captured in the idea that a *svabhāva* is an intrinsic property. For then it can be argued that since there are no extrinsic properties unless there are intrinsic properties, a realist account of truth-conditions requires that there be things with intrinsic properties. The claim that extrinsic properties depend in general on intrinsic properties is intuitively appealing: Jill cannot have the property of being taller than Jack unless Jill has some determinate height of her own. But recent work on the notion of an intrinsic property shows that caution is called for here.

Here is a first pass at explaining what an intrinsic property would be: a property that something might have were it the only thing currently existing. To this it is objected that the property of being *lonely*, of existing currently unaccompanied, is one that such an entity has, yet it is extrinsic—its occurrence depends on the absence of other entities. Langton and Lewis (1998) propose to remedy this defect by introducing the notion of a property that is independent of accompaniment:

³ Pp. 257–258. See also *Prasamapadā* on MMK 13.4 (LVP 263), where an entity’s *svabhāva* is said to be a quality that is invariably concomitant with the entity and not dependent on another.

⁴ For the first point see Aristotle’s account of ‘man’ as a substance-term in *Categories*. For the second point see his point in *Metaphysics* VII.12 that ‘featherless biped’ and ‘rational animal’ could equally well serve as definitions of the term.

Property P is independent of accompaniment just in case it is possible for there to be something either lonely or accompanied that has P , and it is also possible for there to be something either lonely or accompanied that is non- P . But this complication is unnecessary if we agree to restrict our discussion to the concept of an *intrinsic nature*, where by 'nature' is meant a non-relational natural property. The notion of a natural property has intuitive appeal—it is what lies behind the notion of 'carving nature at its joints'—and various attempts have been made to spell out just what it means, but none commands universal assent. The suggestion here is that we follow something like the approach of Nyāya. This (non-Buddhist) school proposed a number of tests to determine whether a predicate expression denotes a real universal or instead is a mere pseudo-universal (*upādhi*). It is their view on the reality of purported negative properties that is relevant here. They hold that an absence is real only if it has an existing counter-positive. While there can be the absence of an elephant in the study, since there are no jackelopes there cannot be the absence of a mounted jackelope on the walls.⁵ Consequently the entity in a world with just one inhabitant cannot be said to be qualified by the real absence of world-mates. And the property of being lonely is the property of being qualified by the absence of world-mates. Consequently the property of being lonely is not a nature, so the question of its being an intrinsic nature cannot arise. Adopting something like the Nyāya approach will also screen out other problematic properties standing in the way of a successful analysis of 'intrinsic nature', such as disjunctive properties, or the property of being such that $2 + 2 = 4$.⁶

Suppose, then, that we understand a *svabhāva* to be an intrinsic nature. We will then be able to see why Abhidharma should claim that all dharmas must have *svabhāva*. But it is still not clear why they would hold that only dharmas have *svabhāva*. The mass of the chariot would appear to be an intrinsic nature of the chariot, yet all schools agree that chariots are not ultimately real. Seeing why they say this about the chariot and other mereological sums will help us see how the *svabhāva* doctrine came to have its final form. Mereological nihilism is the view that no mereological sum exists. Some mereological nihilists stop there, but others—those I call mereological reductionists—claim that some composite objects might be said to exist in a 'loose and popular' sense. The Abhidharma term for this 'loose and popular' sense is 'conventionally existent' (*samvṛti-sat*); things that exist in this way are termed conceptual constructions (they are *prajñapti-sat*). Abhidharma thus posits a two-tier ontology: ultimately real entities (the dharmas) that are genuinely impartite or non-composite; plus the ontological back-benchers, those composite objects to which we express ontological commitment in our everyday speech and thought. The Abhidharma bias against the composite can be seen as an expression of their uncompromising realism about truth: the real is the concrete particular, and aggregation of particulars is the mark of the mental. But this is little more than an appeal to intuition, and so an argument is supplied.

⁵ The fact that there are no jackelopes may be construed as the absence of contact between horns and head of rabbit.

⁶ The approach here will only be 'something like' that of Nyāya because Buddhists are officially nominalists, and they deny the existence of absences.

Suppose there to be a chariot composed of 287 suitably arranged parts.⁷ (We suppose these parts to themselves be simple or impartite.) If both the chariot and its constituent parts are real, then either the chariot is identical with the suitably arranged parts or else it is distinct. Identity would seem to be the obvious choice here, since even those of a reductionist bent will say that the chariot *just is* the suitably arranged parts, and ‘is’ expresses identity. The difficulty with this choice may be seen from the fact that it fails to account for the ‘just’. Identity is ruled out by the violation of Leibniz’s Law: the chariot has the property of *having 287 parts*, while the parts do not have this property but rather the property of *being 287 in number*. What the ‘just is’ expresses is that ‘chariot’ is a mere *façon de parler*, a convenient way of designating the parts when suitably assembled. Those who want the chariot to be as real as its parts will need to embrace distinctness.

Suppose, then, that the chariot is distinct from the parts. While much attention has been given to cases where what are ostensibly distinct objects (e.g., a statue and a piece of clay) occupy the same space, less has been given to the case where a small object is wholly contained in a distinct larger object. But since the chariot and one of its parts are both present in the space occupied by that part, we may ask whether the chariot is wholly present in the part or is only partly present there. This may seem like an odd question, but we think we know how to make sense of an equivalent question about temporal location, for this is the point of the dispute between endurantists and perdurantists concerning persistence: the endurantist claims the persisting person is wholly present at each time the person exists, while the perdurantist claims they are only present in part. So suppose the chariot is striped, while the individual planks making up its body are each painted a solid color. If we say that the chariot is wholly located in a blue plank, then we must say that something striped is wholly located just where something solid blue is, which is absurd.⁸ The sane choice would therefore be that the chariot is only partly present where the blue plank is. But now what is meant by ‘partly present’? When we say this what we seem to have in mind is that the chariot has a large spatial extent and the plank occupies just one part of this. This means that the chariot must contain a number of distinct spatial regions, only one of which is where the blue plank is located. Consider this region, and now consider in what sense this can be said to be a part of the whole that is the chariot. To explain this we shall need to once again ask whether the larger whole is wholly present in this part, or only partly present. The difficulties with the first choice will be the same as before, but the second choice will lead to introduction of yet another sense of ‘partly’. The distinct-but-partly-present option leads to an infinite regress of senses of ‘partly’.

According to Vasubandhu, a consequence of this argument is that something belonging to kind *K* is ultimately real if and only if the concept *K* continues to apply

⁷ Throughout I shall use ‘part’ to mean ‘proper part’.

⁸ Nyāya resorts to limitors (*avacchedaka*) to solve the related problem of local extrinsics: when the monkey hangs from a branch of the tree, the tree may be said to have the property *contact with monkey*; that this does not hold with respect to the roots (where the tree is equally located) is explained by the fact that *contact with monkey* is characterized by the limitor *at the branch*, so that what we think of as a two-place predicate ‘*x* is in contact with *y*’ turns out to be a disguised three-place predicate: ‘*x* is in contact with *y* as delimited by *z*’. But it is evident that this approach won’t solve the problem of local intrinsics.

both after separation and after analysis. The 'after separation' clause tells us why the chariot is not ultimately real: when the suitably assembled parts are separated, the word 'chariot' no longer applies. But important work is done by the 'after analysis' clause. Suppose that water is an element (and not the chemical compound H₂O), and that any sample of water is only finitely divisible (i.e., that there are indivisible water atoms). Then what remains after separation of portions of a sample of water will always count as an instance of water. But now consider the final remaining portion, a water atom. It allows of the following analysis: at any one time the occurrence of a wetness trope, a roundness trope, a colorlessness trope, a tastelessness trope, etc., in the same spatial region. Since none of these things may properly be called water, it follows that our water atom is likewise not ultimately real. To this it will be objected that the analysis has left out the water atom itself as the substance in which those different quality-particulars inhere. The response is that there is no such thing as the substance, only the co-occurring tropes. The water atom is, like the chariot, a many masquerading as a one. The argument for this is a variant on the 'neither identical nor distinct' argument just rehearsed. The atom cannot be identical with the many tropes. And if it is distinct, does each of the many tropes inhere in it as a whole or only in part? If as a whole then since the substance in which wetness inheres is also inherited in by roundness, the haptic trope wetness should be visible. If a given trope inheres in the atom only in part, then we are owed an explanation of how the presumably impartite substance has parts.

The result of all this is that the ultimate ontology contains just one category, that of trope.⁹ Substances as ordinarily conceived are bundles of bundles of tropes. What we take to be a water atom is at any one time a bundle of co-occurring tropes such as wetness, colorlessness and the like. But these are all momentary.¹⁰ What we take to be a persisting water atom is actually a series of bundles, each such bundle being caused to occur by its immediate predecessor bundle in the absence of countervailing conditions (such as high heat). The substance we think of as water—the enduring bearer of such properties as wetness and colorlessness—is a conceptual construction. The utility of such a construction is obvious: given our bodily needs, we will want to track cases where we can expect there to be trope co-occurrences of this sort, and the cognitive load is lightened if we collapse the many mans into a persisting one. But this one is a useful fiction, no more ultimately real than the average Wisconsin taxpayer. What are ultimately real are just momentary tropes, such as the occurrence of wetness here and now. These are the dharmas.

We are now better positioned to understand a claim concerning *svabhāva* that relies on the distinction between it and *parabhāva* or extrinsic nature: that since *parabhāva* is ontologically dependent on *svabhāva*, there can be no *parabhāva* without *svabhāva*. (MMK 15.3) The distinction between *svabhāva* and *parabhāva* is not that between intrinsic and extrinsic *properties*, such as the distinction between

⁹ For accounts of *dharmas* as tropes see Ganeri (2001, pp. 98–103) and Goodman (2004).

¹⁰ To say of something that is momentary is to say that it exists for just one atomic moment (the shortest duration possible). The claim that everything is momentary is clearly much stronger than the claim that everything is impermanent. The Buddha taught the latter, but most Abhidharma schools asserted the former, stronger claim. Some schools did, however, hold that certain dharmas—those that are 'uncompounded' or not arising due to cause and conditions, such as nirvana and space—are eternal.

mass and weight. An extrinsic nature is said to be ‘borrowed’ in some sense, and it would be odd to say that an object’s weight is borrowed. Something is typically said to be borrowed when it is owned by one person but permissibly under the control of another. The weight of an object is dependent both on its mass and on its location in a gravitational field, so it would be odd to say that the weight is owned by the gravitational field or by a location in that field. The nature of the chariot, on the other hand, can be said to be borrowed from the natures of its parts. Its mass, for instance, depends wholly on the masses of its parts.¹¹ If the chariot were something that was still found after separation and analysis, then any natural non-relational property of the chariot, such as its mass, would count as its intrinsic nature. Since the chariot dissolves under separation and analysis, its mass cannot count as intrinsic nature: there being ultimately no ‘it’ there cannot be any ‘its own’ with respect to the chariot. If the chariot’s mass is to be thought of as a nature at all, it must be an extrinsic nature. But this mass does real explanatory work: that the chariot has a mass of 57 kg. explains such facts as that the particles of soil beneath its left wheel are displaced in a certain way. It follows that there must be things with intrinsic nature. Otherwise there would be nothing to borrow.¹²

Vaibhāṣika Eternalism and Vasubandhu’s Presentist Response

While anti-substantialism follows from the argument against aggregates, it is not uniformly adhered to in Abhidharma. This comes out clearly in a dispute between Vasubandhu and a Vaibhāṣika over the nature of existence in time (AKB 296–301). The Vaibhāṣika school is famous for its espousal of the view known as *sarvāstivāda*, the theory that every existent thing exists in all three times. To say this is to say that our ontology contains not only those things that exist now, such as the device on which these words are presently being read, but also past things such as the 3rd Avenue El, and future things such as the first child to be born in the twenty-second century. A view of this sort is currently called ‘eternalism’, but in the Buddhist context this term means something quite different (namely the view that the subject of experience is eternal), so I shall call the Vaibhāṣika view *sarvāstivāda*. Vasubandhu and other Sautrāntikas reject this theory and espouse what is now known as presentism, the view that only the present exists. According to the presentist, to speak of things in the past or in the future is not to speak of things that exist at all, but instead of things that do not exist but did exist or will exist. It is in the context of the debate between presentism and *sarvāstivāda* that the question arises whether there are substances or only tropes.

¹¹ This turns out to be not exactly true: the mass of a solid object is typically just slightly greater than the sum of the masses of its constituent particles. The extra mass represents such things as the energy involved in forming molecular bonds. But what this tells us is that the particles that we once thought of as fundamental—first the atoms, then the classical sub-atomic particles—are not in fact fundamental. The mass of the electron turns out to itself be relational—which means that the electron is something that dissolves under either separation or analysis.

¹² For a particularly clear expression of this thought see MMK 13.3–4ab, which represents a Vaibhāṣika objection to the Madhyamaka claim that all things are devoid of intrinsic nature.

Vaibhāṣikas give two arguments for *sarvāstivāda*. First, they claim that if past actions no longer exist then they cannot later bring about their karmic effects. But this argument is readily answered by supposing that a karmically efficacious action produces a karmic seed when it ceases to exist, and it is the latest seed in a causal series of such seeds that produces the karmic fruit. More interesting is the second argument, which in its original formulation appealed to the claim that fully enlightened beings perceive both the past and the future. Since perception is understood to involve causal interaction with the object of perception, and the non-existent is not causally efficacious, it is said to follow that past and future objects must exist.¹³ Now Vaibhāṣikas are committed to the claim that all dharmas (with three minor exceptions) are momentary, so they must explain how the claim that past and future dharmas exist is compatible with all dharmas being momentary. They do so by distinguishing between a dharma's intrinsic nature and its efficacy (*kāritra*). Since a dharma possesses its intrinsic nature at all three times, it may be said to exist in all three times. Its momentariness, on the other hand, consists in its having efficacy at just one time. Its being considered past, present or future is determined by the location of this exercise of efficacy relative to those of other dharmas. (Temporal location is in this respect like spatial location—not intrinsic but relative to the locations of other things.) And it is here that we can see a substantialist element in Vaibhāṣika metaphysics. The distinction between intrinsic nature and efficacy requires positing a bearer of both. This would seem to run afoul of the argument against mereological sums. The view does, though, have its attractions. For instance, and as the argument from karmic efficacy may have been meant to suggest, it would allow us to explain how temporally separate events might be causally connected. For given momentariness, the presentist turns out to have a problem explaining how this connection might hold even when cause and effect are temporally contiguous. (What that problem is we will see in a moment.) The *sarvāstivāda* view also allows us to explain the appearance that persisting objects undergo qualitative change by positing just the one 'difference of situation' that a dharma has relative to the temporal location from which it is viewed.

Vasubandhu nonetheless rejects *sarvāstivāda*. The obvious difficulty lies in explaining how a given dharma with a given intrinsic nature can have its efficacy at just one moment and not at all times. The Vaibhāṣika may claim that what explains this is the fact that the ancillary conditions are only present at one time. But this will not help, since these are likewise said by the *sarvāstivādin* to exist in all three times, so yet more ancillary conditions will be required to explain why these should function as ancillary conditions at just that one moment. An infinite regress looms. The resulting rejection of *sarvāstivāda* allows Vasubandhu to raise an interesting point concerning the Vaibhāṣika's notion of efficacy (AKB 297). Consider the stock case of causation in which vision serves as a cause of visual consciousness. While some Abhidharma schools claim that the causal relation sometimes holds between simultaneously occurring events (causation being then mutual and reciprocal), it is

¹³ The claim that fully enlightened beings directly cognize the past and the future is important to these Buddhists because it is thought to bolster the authority of the Buddha's teachings.

agreed by all that in this case cause and effect occur at distinct times. So the occurrence of vision at moment t_1 and in the presence of other conditions brings about the occurrence of a visual cognition at t_2 . Presumably it is the efficacy of this vision occurrence that explains its role in producing the cognition. And since we are now supposing that it and all other dharmas enjoy just a single moment of existence, there is no longer any difficulty in explaining why this efficacy should occur when it does. But when, exactly, is that? For efficacy consists in the giving and the receiving of the effect, and the second of these can only be located at t_2 , when the vision occurrence no longer exists. What is found at t_1 is, says Vasubandhu, just half of an efficacy (*ardhakāritra*).

The argument here is strikingly similar to one Nāgārjuna gives at MMK 1.4–6. There the opponent has claimed that the productive power of the cause is what explains the arising of the effect, and Nāgārjuna asks when this productive power occurs. It cannot occur after the effect has arisen, since it would then be pointless. But neither can it occur before the effect has arisen, since there is then no trace of its productive activity. And between the time when the effect has arisen and the time when it has not yet arisen there is no third time, such as a time when the effect is undergoing production but is not yet fully produced. (The third option is presumably ruled out on the grounds that only partite entities could be said to undergo production over time.) Consequently there is no satisfactory account of how this productive power might work.¹⁴

What we find in both cases is a difficulty for any presentist who believes there can be causal relations among ultimately real momentary entities with intrinsic natures. At the heart of the difficulty lies the fact that we take the causal relation to involve production, which we understand as a kind of necessary connection. If dharmas are what Vasubandhu says they are—momentarily occurrent tropes—then there cannot be internal relations between any two dharmas. So necessary connection will require a third thing to serve as relational tie. But since cause precedes effect and both are momentary, such a tie could never succeed in fostering a connection between them. So the Ābhidharmika presentist cannot claim that there are causal relations among dharmas when these are understood in the trope-theoretic fashion.

It comes as no surprise that Nāgārjuna should give such an argument, since his task in MMK is to show that the very idea that there are things with intrinsic nature is incoherent. But Vasubandhu is another matter. Why would he endorse such an argument? As an Ābhidharmika he does, after all, believe that there are things with intrinsic nature, and that they enter into causal relations. The answer in a word is that he is a ‘Humean’ about causation. That is, he agrees that we ordinarily understand causation to involve necessary connection, but in this we are mistakenly superimposing our own expectations onto what actually happens in situations of cause and effect. Ultimately, causation is just a matter of constant conjunction: it

¹⁴ Nāgārjuna gives an argument that is even closer to Vasubandhu’s at MMK 12.5, where he is attacking the Pudgalavāda thesis that the presently existing person’s suffering depends on the psycho-physical elements that constituted the previously existing person, so that the earlier person may be considered to bestow suffering on the present person. The difficulty he points out is that bestowing requires simultaneous existence of bestower and recipient. See also MMK 20.5–6.

always happens that events of this type are succeeded by events of that type.¹⁵ And to say that this is what causation ultimately is is to say that it holds between dharmas with intrinsic natures. The question I now want to raise is whether Mādhyamikas like Nāgārjuna have any arguments against this view. One often hears it said by Mādhyamikas that the emptiness of an entity—its being devoid of intrinsic nature—follows from its originating in dependence on other things. Vasubandhu seems to hold that things with intrinsic nature can originate in dependence on earlier events—can be caused—once we understand causation correctly. Can Madhyamaka refute this position?

Madhyamaka Arguments Against Causation at the Ultimate Level

It is sometimes said to be just obvious that an effect cannot have *svabhāva*, since an effect is existentially dependent on its cause, while anything with *svabhāva*, being ultimately real, exists independently of all else. (For something to have an intrinsic nature it must be possible for it to exist unaccompanied.) But this argument rests on the understanding of *svabhāva* as 'intrinsic existence', and that is not what the term means in Abhidharma. It means 'intrinsic nature'. The implied contrast is with 'extrinsic nature' understood as a nature that some entity borrows from other things, in the manner in which the chariot borrows its mass from the masses of its parts, or the quartz borrows its red color from the hematite. What reason is there to think that this sort of objectionable dependence relation must hold between a dharma's intrinsic nature and its cause? That the quartz was caused to exist does not, after all, explain how it came to have red color; that its having red color is adventitious means precisely that the cause of its existence and the cause of its being red are distinct. What we must focus on is the question of what explains the effect's nature *given its existence*. This is precisely the question that classical Indian theories of causation set out to answer within the framework of the distinction between *satkāryavāda* and *asatkāryavāda*.

It should come as no surprise that these two types of theory began as attempts to explain the causal relation understood in terms of substance causation. Substance causation is, after all, the folk theory of causation. The stock examples of cause and effect that are discussed by Indian philosophers are such pairs as lump of clay and pot, milk and ghee, threads and cloth and the like. Of course the causal relation that we are interested in is that of event causation, since the momentary occurrence of a dharma is an event, and these are the only ultimately real entities that could serve as relata of a causal relation. But the issue that divides proponents of these two types of

¹⁵ It is to be noted that such a regularity account of causation is weaker than a counterfactual analysis, which says of a particular instance of cause and effect that had *c* not occurred then *e* would not have occurred. The general formula of dependent origination given in the *Nikāyas* makes *c* necessary as well as sufficient: if *c* does not occur then *e* likewise fails to occur. But the conditional is indicative, not counterfactual: it merely describes those stretches of the history of the universe where *c* fails to occur, it does not say anything about what *might have* occurred had things gone differently. *imasmiṃ sati idaṃ hoti; imassa uppādā idaṃ uppajjati; imasmiṃ asati idaṃ na hoti; imassa nirodhā idaṃ nirujjati*. M ii.32, S ii.28, A v. 184.

account of causation turns out to be one that has application in the Abhidharma context as well.

Satkāryavāda is the theory that the effect already exists in its cause: the pot is already present in unmanifest form in the clay, the actions of the potter merely effect the transformation that makes it manifest. The alternative *asatkāryavāda* holds instead that the effect does not exist in its cause; the effect is instead a new existent that is produced by a cause that is distinct from the effect. On one formulation of this type of theory (that of the Nyāya school), the cause of the pot is not the lump of clay but rather the atoms that made up the lump. When these atoms undergo the rearrangement brought about by throwing and firing, the lump of clay ceases to exist and the pot comes into existence. But the atoms, being simple substances, are eternal, and so exist simultaneously with their newly existent effect, the pot. The atoms are said to be the inherence-causes of the pot: they are distinct from the pot and are that in which the pot inheres. On another formulation of *asatkāryavāda*, the cause goes out of existence prior to the coming into existence of the effect. This is clearly the formulation of the view that is acceptable to Abhidharma.

Satkāryavāda is rejected by all Buddhists, since it requires that there be permanent entities. The standard Madhyamaka argument against *satkāryavāda* is that if the effect were already present in the cause then origination would be pointless (MMK 1.2, 13.6, 18.10). We do after all want to know the cause of something because we wish to know how to bring about its origination; and if the effect were already there then there would be no point in trying to bring about its origination. Moreover, the nature of the effect is typically not found in anything we would recognize as its cause (MMK 20.3). The *satkāryavādin* might reply that while the effect is already existent in the cause, it is present only in unmanifest form; what we call 'origination' is actually just the making manifest of something that is present but concealed. To this the Mādhyamika replies that such a manifestation account will lead to an infinite regress (*Prasannapadā ad* MMK 10.13b, LVP 210). For it must be asked whether this manifestation is something that already exists in its cause or not. If not, then the hypothesis of *satkāryavāda* has been abandoned. But if it is, then either it exists in manifest form or else in unmanifest form. If the former, then it should have already brought about the manifestation of the effect, so origination is once again pointless. If the latter, then some explanation needs to be given as to why the manifestation is made manifest at this time and not earlier. And this explanation will presumably follow the same logic, so the regress seems to be vicious.

Despite these difficulties, *satkāryavāda* does have one distinct advantage over its rival, *asatkāryavāda*: it purports to explain why a given type of effect is produced from a certain kind of cause. Our interest in causation is not simply theoretical. What we want to know is not just why this particular entity or event appeared at this moment. What we typically want to know is how to produce things of this sort in the future. In this search, knowledge of connections between natures seems to be useful. If we can understand why something with the nature of a pot can only emerge from something of the nature of clay, we will be further along when we wish for something in which to store our ghee. *Satkāryavāda* supplies an answer: if it were

true then we would know that the effect is produced from things of this nature because only within things of this nature is something with the nature of the effect to be found. It is more difficult for the *asatkāryavādin* to satisfy us here. The Nyāya formulation promises an answer of a sort. It claims that the rearrangement of the atoms brought about by throwing and firing explains the shape and color of the pot. But no Buddhist will find this answer satisfactory. Since pot and atoms are distinct and related by inherence on the Nyāya scheme, the earlier argument against mereological sums will apply. Moreover, Nyāya's atoms must be eternal, and the Buddhist will insist that nothing physical is eternal. So a Buddhist *asatkāryavādin* will hold that an ultimately real cause must precede effect and ceases to exist before the arising of the effect. In this case it is unclear why a cause having this nature should produce just that kind of effect and not some other. Since the cause no longer exists when the effect arises, it seems as though the effect should merely pop into existence with a nature completely unconstrained by what came before. What is no longer present cannot constrain. This is the point Nāgārjuna makes repeatedly when he says that on the view that cause and effect are distinct, the purported cause is no different from what is acknowledged to be a non-cause (MMK 20.4, 20.16, 20.20): no explanation is forthcoming from the *asatkāryavādin* of this presentist stripe as to why a given cause should produce only effects of a certain nature.

The Mādhyamika, we know, wants to show that given what dharmas would have to be like (namely things with intrinsic natures), no dharma could be the effect of distinct prior causes. What we can now see is that for them the relevant question is what explains the dharma's intrinsic nature *given its existence*. What they wish to show is that for impermanent dharmas, a dharma's having the intrinsic nature it does could only be explained by way of an objectionable dependence on some distinct entity or event. And what would make the dependence objectionable is that it allowed of being interpreted as a case of 'borrowing'. But it is not clear just how Madhyamaka can show this. What the example of the quartz (the red nature of which is borrowed) would seem to show is that the cause of the entity's existing and the cause of its having a certain nature must diverge in order for that nature to count as only extrinsic. But where dharmas are understood in pure trope-theoretic fashion there can be no such divergence: the existence of the dharma just is the occurrence of that property-particular, so that the cause of the one is necessarily the cause of the other. With an ontology of this sort it is not clear that there is room for extrinsic natures.¹⁶

Nāgārjuna says repeatedly that something with intrinsic nature would necessarily be eternal and so could not participate in dependent origination (most famously at MMK 24.16–19, but also at 15.1–2, 17.22). It is not clear just what arguments support this claim, however. The commentators' explanation of the claim at 15.1–2 has recourse to the substance-attribute model of a dharma, which drives a wedge between dharma's existence and nature and thus makes room for the divergence needed in order to make a case for 'borrowing'. Such an argument is, however, impotent against the understanding of dharmas as tropes. At MMK 17.22 we get a somewhat different argument: a dharma with intrinsic nature could not undergo

¹⁶ Such extrinsic *properties* as a dharma might have will be relational.

alteration, since it is necessarily simple, and consequently could not undergo origination or cessation, which represent kinds of alteration. But here as well the argument seems to depend on the substantialist understanding of dharmas. Alteration involves a persisting subject with different states at different times. If we think of a dharma as a thing that has its intrinsic nature, then it may seem to make sense to speak of its origination as its undergoing the alteration of coming to have that nature, one that it lacked earlier; and likewise for its ceasing to exist as its changing by losing the nature it had previously enjoyed. And if we follow the critique of the substance-attribute model that Nāgārjuna gives in MMK 5, we will agree that in fact this way of talking makes no sense: with genuine simples there can be no such 'it' that first acquires and then loses 'its' intrinsic nature. (What was fire like before it was hot? What is it like when it loses its heat?) But it does not follow from this that a simple must have its intrinsic nature eternally. The lesson might just be that we are wrong to think of simples as substances. So it is once again unclear why a dharma with intrinsic nature could not participate in causal relations, why it could not be dependently originated.

This might be put in another way. Interpreted as an attack on the Vaibhāṣika's *sarvāstivāda* account of a dharma's existence (having intrinsic nature at all three times, functioning at just one time) the Madhyamaka argument against alteration succeeds: since efficacy cannot be momentary (it must have temporal thickness), it drops out of the Vaibhāṣika analysis of a dharma, leaving just the intrinsic nature that the dharma has in all three times. Vasubandhu agrees, and likewise agrees that this constitutes a *reductio* on the Vaibhāṣika account. The Vaibhāṣika is thereby shown to be committed to an unwanted eternalism about its ultimate reals. But on Vasubandhu's presentist understanding of momentariness, there is ultimately no such thing as alteration. For instance what we call the motion of a light is reductively analyzed into a causal series consisting of the occurrence of flame f_1 at p_1 at t_1 , the occurrence of f_2 at p_2 at t_2 , the occurrence of f_3 at p_3 at t_3 , etc. (AKB 474). There thus being no alteration, a dharma's being caused to arise bearing its intrinsic nature cannot count as an alteration, so the argument against alteration has no purchase. For Vasubandhu the Vaibhāṣika's mistake lies in their distinguishing between a dharma's intrinsic nature and its efficacy. Once we see its 'doing' or functioning as nothing more than the occurrence of its intrinsic nature at a moment (an identification that Dharmakīrti will later make explicit), the argument that efficacy requires temporal thickness will lose its power to show that dharmas must be eternal.

The argument for the temporal thickness of efficacy makes use of the opponent's assumption that causation involves production, where this is understood as a kind of necessary connection. To say that y is produced from x is ordinarily understood to mean that there is some sort of internal relation between the natures of x and y . This is what makes the argument against *asatkāryavāda* seem plausible: if cause and effect are utterly distinct then the nature of the cause cannot explain the nature of the effect. And as Nāgārjuna points out (MMK 9.4–5, 12.5–6), the requisite sort of internal relation can only hold between things that exist simultaneously. Since cause and effect cannot ultimately be simultaneous (MMK 4.4ab), it follows that the presentist's ultimately real things cannot enter into relations of causation—

understood as production. But if we understand causation differently, in a 'Humean' fashion, the conclusion does not follow. If causation is no more than universal concomitance of event-types, then it should come as no surprise that knowledge of ultimate causal relations does not confer understanding of why these specific regularities should hold. Of course our folk conception of causation leads us to expect such understanding to follow. But this may be because cases of successful reduction have conditioned us to expect this. We know that the pot's coming to be red in color is explained by reflectance properties of the constituent particles when suitably rearranged by firing. That this should count as an explanation turns on the macro-physical property of color reductively supervening on reflectance properties of micro-particles in some arrangement. The pot's being red *just is* the particles being arranged in a certain way. Once we grant this and also see how firing affects arrangements of particles, we come to see exactly why the firing should alter the color of the pot. But the key linkage here is between things at two different levels—the pot and the particles. About these things Nāgārjuna was right: for the determination relation to hold, they must exist simultaneously, so this cannot ultimately count as causation. But this also shows that it may be a mistake to expect causal connections between ultimately real entities to yield enlightening explanations. It might be that this is where explanation stops.¹⁷

We have not yet looked at all the Madhyamaka arguments against causal connections among things with intrinsic nature. Perhaps some other argument rules out the possibility of 'Humean' causation among dharmas understood as momentary trope occurrences. Here is another argument. First, it is claimed that there can be no ultimately satisfactory account of succession in time. This is because such an account would require that we be able to explain what it is for an event to be between an earlier event and a later event. And we cannot give such an explanation if we cannot say what it is for an event to be at the mid-point in the series of moments. This we cannot do, since no moment can be said to be the mid-point in the absence of a first moment and a last moment in the series (MMK 11.1–8). So it cannot be ultimately true that one moment succeeds another. But if there can ultimately be no succession in time, there can be no causal relations between ultimately distinct successive events. (See *Buddhapālitaṭṭi* on MMK 21.13ab.) So the 'Humean' account of causation is incoherent.

This is an interesting argument, but it is not clear that it succeeds. As the example of the natural number series illustrates, it seems we can construct a well-ordered series without supposing the series to be bounded at either end. While no number could be said to be the mid-point of the series of natural numbers, each number can still be said to have both a predecessor and a successor in the series, where these are distinguished in terms of some function such as that of 'greater than' or 'lesser than'. It is not clear why Vasubandhu could not say something similar about the time-series.

I once (2004) claimed that a Mādhyamika might refute the possibility of distinct things with intrinsic natures entering into causal relations by using the claim that the

¹⁷ Thinking otherwise might be a sign of the anti-realist's 'narcissism'—their expecting that the world must answer to our epistemic demands—that Johnston (1993) complains of.

causal relation is itself conceptually constructed (on the basis of the arguments of MMK 1.1–7 and MMK 20), and then appealing to the following principle:

If a relational tie is conceptually constructed, then any property of one of its relata that involves essential reference to that tie must likewise be conceptually constructed.

I am not convinced that this strategy will work. For it to work it must be assumed that one cannot refer to the intrinsic nature of a dharma without referring to its occurring in dependence on a cause. And it seems to me that the ‘Humean’ could reasonably object that this is question-begging. I am thus not certain that a successful Madhyamaka argument against the ‘Humean’ option is to be found in the Madhyamaka literature. Now I also believe there to be no such thing as a Madhyamaka ‘master’ argument, one that somehow proves that all things are necessarily empty of intrinsic nature. The Mādhyamika is in this respect like the Pyrrhonian skeptic, someone who only gives *reductios* in order to refute particular views held by particular opponents. And perhaps no Mādhyamika author ever gave due consideration to the ‘Humean’ view and formulated a *reductio* to refute it. So even if I am not simply overlooking an existing Madhyamaka argument against the view, it remains possible that one might yet be devised. And Madhyamaka has many able defenders today. So I look forward to seeing what others have to say on the matter.¹⁸

Abbreviations and References

- AKB *Abhidharmakośabhāṣyam of Vasubandhu*, ed. Prahlad Pradhan, Patna: Jayaswal Research Institute, 1975.
- MMK *Mūlamadhyamakakārikā* of Nāgārjuna.
- LVP Louis de la Vallée Poussin, ed., *Mūlamadhyamakakārikās (Mādhyamikasūtras) de Nāgārjuna avec la Prasannapadā Commentaire de Candrakīrti*. Osnabrück: Biblio Verlag, 1970.
- P Pandeya, Raghunath, ed., *The Madhyamakaśāstram of Nāgārjuna, with the Commentaries Akutobhayā by Nāgārjuna, Madhyamakavṛtti by Buddhapālita, Prajñāpradīpavṛtti by Bhāvaviveka, and Prasannapadā by Candrakīrti*, Delhi: Motilal Banarsidass, 1988.
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¹⁸ I should add that a ‘Humean’ regularity account of causation is hardly without difficulties of its own, such as that of accommodating our intuition that there is a difference between causation and mere accidental generalizations. For surveys of some of the major problems see Chaps. 2–4 of Armstrong (1983) and Chap. 2 of Carroll (1994). The projectivist strategy for fixing some of these problems might recommend itself to a friend of Sautrāntika, since it can easily be made to accord with the two-truths strategy of Buddhist reductionism. See for instance Ward (2002, pp. 207–208) for how a projectivist account of laws of nature might answer one common objection to a regularity theory.

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