

# From Nescience to Science: Buddhist Reflections on Human/Nature

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**Abstract:** A Buddhist system of two truths provides a descriptive framework with criteria for what counts as real in contrast to what does not. This paper looks at the relationship between these two truths in the works of two seventh-century Indian philosophers, Dharmakīrti and Candrakīrti, and draws implications for comparison and contrast with modern scientific understandings of the world. It highlights important features of Dharmakīrti’s epistemology that aim to circumvent cultural conventions in a way that resonates with scientific representations of knowledge. It also contrasts this approach with one inspired by Candrakīrti in order to argue for the place of ethics and persons in a hybrid Buddhist–scientific picture of the world.

**Keywords:** anti-realism; Madhyamaka; Yogācāra; epistemology; Candrakīrti; Dharmakīrti

## 1. Introduction

A Buddhist system of two truths provides a descriptive framework with criteria for what counts as real, or true, in contrast to what does not. This paper looks at the relationship between these two truths in the works of two seventh-century Indian philosophers, Dharmakīrti and Candrakīrti, and draws implications for comparison and contrast with modern scientific understandings of the world. It highlights important features of Dharmakīrti’s epistemology that aim to circumvent cultural conventions in a way that resonates with scientific representations of knowledge. It also contrasts this approach with one inspired by Candrakīrti in order to argue for the place of ethics and persons in a hybrid Buddhist–scientific picture of the world.

## 2. Frameworks of Reality

At the heart of Dharmakīrti’s epistemology is a distinction between that which is more fundamental and that which is less so. Specifically, a distinction is made between (1) the “real” entities that underwrite the cultural artifacts we conventionally designate within language, and (2) the “unreal” cultural artifacts that are nothing more than cultural constructions. For Dharmakīrti, what is real has a unique and determinate time (*kāla*), place (*deśa*), and form (*ākāra*) (Dreyfus 1997, p. 70); in contrast, linguistic universals distributed across time and space are deemed unreal. He thus contrasts a surface level of linguistic superimposition with a deeper causal process. Dharmakīrti defines the real, or ultimate truth, as that which is causally efficacious, in contrast to that which is ineffective (Dharmakīrti n.d.).<sup>1</sup> In a significant way, he presents a pragmatic account of truth.

Dharmakīrti’s epistemology creates a wedge between two levels of reality—the ultimate truth of causally efficacious particulars and the conventional truth of that which lacks causal power, like linguistic universals. Creating a wedge between two domains enables him to make a distinction between what is real and what is unreal (or rather, what is efficacious and what is ineffective) within a particular framework of explanation. The dichotomous contrast between the potent and impotent elements of a framework is at the heart of Dharmakīrti’s system and is a powerful tool that enables pragmatic distinctions to be made between what is real and what is unreal, *even in a virtual world*.<sup>2</sup> That is, an important facet of Dharmakīrti’s distinction between two truths is that it gives him a means to account for causal processes without reference to a *metaphysically* real external world.



**Citation:** Duckworth, Douglas S. 2024. From Nescience to Science: Buddhist Reflections on Human/Nature. *Religions* 15: 873. <https://doi.org/10.3390/rel15070873>

Academic Editors: Jeffrey Theodore Kotyk and Ru Zhan

Received: 22 May 2024  
Revised: 11 July 2024  
Accepted: 19 July 2024  
Published: 21 July 2024



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The distinction between more and less real need not presume a metaphysical reality, since these distinctions can be made in virtual worlds, as in the difference between, for instance, a good and bad movie, a comedy movie and a horror movie, or simply the difference between a movie and disjointed flashes of light appearing on a screen. There need not be anything that is *most* real, or a final truth, to ground these kinds of distinctions; a pragmatic distinction is enough. In other words, with a purely pragmatic criterion there is a way to account for “better” explanations without necessarily presuming there to be a “best” or “most real” explanation.

The pragmatic distinction between two truths is a powerful one, but when Dharmakīrti is confronted with the question of whether causal efficacy, the basis of this distinction between what is real (ultimate) and unreal (conventional), pertains to the ultimate or simply to what is conventional, he replies “so be it” (*astu yathā tathā*) (Dharmakīrti n.d.), suggesting that the reality of what is ultimate and efficacious—the mark of the real—is itself just conventional. A generous reading of this response suggests that the dichotomy he introduces between the real and unreal is not based on an ultimate foundation, but is simply a conventional description, and thus a tool that is useful even while the tool is contingent and falls apart under a reflexive gaze or when pushed to its limit, as in Thomas Kuhn’s notion of a “paradigm”. (Kuhn 1962).

Yet a critical reading of Dharmakīrti suggests a deep incoherence that runs through his distinction between two levels of reality (the real and the unreal): the distinction embeds a commitment not only to an intractable dualism, but to an incoherent realism. This is because the conceptual problems introduced on one level of reality tend to be unresolved on that level, and only resolvable through an appeal to another level. For instance, the problem of accounting for the efficacy of conventional truth is resolved by appealing to ultimate particulars that are the ineffable truth(s) that ground reality, yet these “ineffable” truths are also described in linguistic terms. Ineffable things, however, cannot logically be appealed to in a description of how things work because, by definition, they are ineffable. We cannot meaningfully talk about what is nonconceptual (at least in a referential way), so we cannot extract any normative or descriptive power from what is ineffable. Furthermore, the distinction between nonconceptual nature and conceptual culture is in the first place a *conceptual* distinction, so what is nonconceptual is arguably only meaningful as a relational concept—a concept distinguished from its inverse, that which is conceptual.

To address these kinds of problems, interpreters of Dharmakīrti, like Shakya Chokden, have offered what has been called a “sliding scale” or “ascending scale” of analysis to account for the inconsistency between levels of description (Dunne 2004, pp. 53–59; Dreyfus 1997, pp. 98–99). That is, what might be deemed “real” on one level of analysis is considered “unreal” within another framework of analysis. For instance, the designation of a “pot” is distinct from the actual object—the thing we call “pot” that holds water. That is, the linguistic *sign* is unreal in contrast to the *object* that it designates. Yet the object that holds water, and that we call “pot”, is designated in dependence upon its parts—its qualities that constitute it, such as earth (in the case of a clay pot), as well as its sensory qualities (like color and shape). These sensory qualities, or *dharmas*, on another level of analysis, are more real than the cultural product that we call a “pot”, given that a pot is a conceptual superimposition of something extended in time and space, a linguistic construction imputed upon a flux of events, whereas no such entity really endures in time and space. This is because for Buddhists like Dharmakīrti, it is only in language that we find permanent, spatially extended, singular things; we do not find them in reality.

Yet when pressed further, even the sensory qualities of color and shape that constitute the pot are linguistic entities, and so on another level of analysis, these too are simply cultural products on a different scale—nothing but labels superimposed upon an ineffable and indeterminate manifold; they are “convenient fictions” at best, but fictions nonetheless. Upon further analysis, even the ineffable processes that appear “out there” are subjectively constituted; that is, what is perceived is intertwined with a perceptual apparatus, and is primed and inflected by the interests of a person. Thus, these seemingly external things are

culturally intertwined, too; they are not known to exist independently, outside of perception. Thus, in the end, at his final level of analysis, Dharmakīrti deconstructs not only any and every linguistic representation, but also the entire framework of dualistically-structured reality—the subjective along with objective representations. In the deepest level of reality, what is left is only nonduality, the luminous nature of mind.

It can be instructive to consider these competing frameworks in light of the natural sciences. For instance, when we are engaged with biology, we can talk about organisms as the basic unit of ontology—a world of dogs, spiders, or bats. When we move to another framework, chemistry for instance, the entities that are most relevant are no longer organisms, but the chemicals, like hydrogen, oxygen, and carbon, that compose them. In a chemist’s framework, chemicals are the units of description that account for the causal processes of the world, including the processes of organisms. Another descriptive framework we might employ is physics, wherein chemicals, too, are composed of other units, like molecules and atoms, and we can continue this descriptive reduction by “zooming in” further to molecules, atoms, and subatomic particles (quarks, and so on).

When evaluating competing frameworks, we need not presume that the lower levels of analysis give us the “right” description, any more than we need to presume that a higher (or highest) level (e.g., that of a transcendent self or God) is one that is the most accurate. In fact, without pragmatic criteria, presuming a reductionist position in which the final truth is at the bottom layer, in the *dharmas* or atoms, or that the final truth lies at the highest level, in the buddha-mind or God, is nothing more than a metaphysical presumption. In fact, we need not presume that the *real* truth lies in any one level of analysis. Rather than collapsing everything into a singularity in a final level, in a final physics or a buddha-mind, there is another way of thinking about the relation between frameworks.

The criterion for what is real needs only to apply *within a particular framework*, and need not entail a framework-independent appeal to a metaphysical reality—either at the bottom level, or holistically, at the top, or anywhere in-between. Instead of a final, or ultimate, truth we can appeal to contextual, or framework-dependent truth, which is nothing more and nothing less than a way to distinguish between that which counts as real and that which does not, *within a framework*.

### 3. Rethinking the Human/Nature Divide

Two different accounts of the relationship between frameworks correspond to two interpretations of the two truths, which I want to represent here through the figures of Dharmakīrti and Candrakīrti: whereas a Dharmakīrtian offers a final layer of true reality (i.e., the ultimate, ineffable luminosity that is the nature of the nondual mind), a Candrakīrtian denies the coherency of any final or most fundamental layer of the world (i.e., the ultimate truth is emptiness).<sup>3</sup> While a Dharmakīrtian develops an account of reality by drawing conventional distinctions, a Candrakīrtian highlights the ultimate truth: the fact that that which counts as real is inextricably tied to a conceptual framework, and any description of reality always takes place within a framework. In more general terms, these two interpretations represent the difference between the perspectives of Yogācāra and Madhyamaka.

To illustrate the difference between these Dharmakīrtian and Candrakīrtian accounts, consider two explanations of what makes a car move: pressing down the gas pedal *versus* the movement of gears, cylinders, and a combustion engine. A Dharmakīrtian would say that the common description, “pressing down the gas pedal”, is underwritten by an engineer’s account of the causal process.<sup>4</sup> Yet a Candrakīrtian would point out the fact that both of these levels of description are simply linguistic accounts, so neither brings us beyond or behind the wall of cultural fabrication; they are both equally conventional truths. While both Dharmakīrti and Candrakīrti may agree on the fact that both of these descriptions are conventional and that both serve distinctive purposes, there is a difference in how these claims are situated in relation to each other, respectively, in a hierarchical or symmetrical way.

In a Dharmakīrtian analysis of an ascending scale, an underlying account—a *dharmic* or scientific description—takes priority over a folk account; a deeper level of description grounds a surface description. In contrast, the priority of natural language resonates with a Candrakīrtian explanation. That is to say, in a Candrakīrtian analysis, we can see that a scientific account, represented by the language of the mechanical engineer, is necessarily dependent on mundane language usage. Thus, scientific language is grounded in natural usage, rather than *vice versa*. For this reason, a scientific account cannot fully replace or completely explain away the mundane usages of natural language.<sup>5</sup> In either case, in a Dharmakīrtian or Candrakīrtian interpretation, while one account can be said to undergird the other, and even while one account may be accepted as the condition for the possibility of the other, neither account need be completely reducible to the other (and in fact one account can be seen to compliment the other).

On an ascending scales interpretation, represented here by Dharmakīrti, one can argue that to embrace human constructions all the way down, and to give up the quest for an immediate encounter with nature—giving up what Sellars described as the “myth of the given”—is to replace nature with culture and do nothing more than colonize nature with our conceptual constructs. Is the collapse of nature (or the buddha) into the human really better than collapsing the human into nature (or the buddha)? On the sliding-scale interpretation, represented here by Candrakīrti, there is no way to escape the fact that nature is embedded within the orbit of human values, and recognizing this itself is liberative. That is, the quest to escape the orbit of this hermeneutic circle itself is fueled by ignorance that binds one to suffering, and liberation is nothing more than dropping this misguided quest for transcendence to focus on the immanent, living world, which is always already for us humans on a human scale.

In contrast to a Dharmakīrtian interpretation of ascending scales that leads to the final reality of the nondual buddha-mind, in a Candrakīrtian interpretation, there is an important sense in which frameworks are not arranged hierarchically, but rather, symmetrically. In other words, whereas a Dharmakīrtian analysis can be seen as an ascending scale, a Candrakīrtian analysis can be seen as a sliding scale. Dharmakīrti’s scale is oriented toward to unitive insight of the buddha’s meditative absorption on the other side of nirvana, while Candrakīrti’s sliding scales, without prioritizing a highest (or lowest) level, enables equity among the levels of analysis and thus can keep the human scale in view.

Yet when we embrace, with a Candrakīrtian interpretation, a thoroughgoing embeddedness of scientific truths with human interests and values, if we fail to make a distinction between what is more or less real within a conceptual framework, we slide into a pernicious relativism in which anything goes, one which Tom Tillemans called “the dismal slough”. (The Cowherds 2011). That is to say, without evaluative or truth-tracking criteria, one person’s opinion is as truthful as any other’s. This is because it is impossible to reform one’s view, and needless to mention, get science off the ground, without the ability to make distinctions between useful fictions and useless fabrications. Even when all distinctions are nothing but conceptual superimpositions, some superimpositions can be more useful than others. To avoid the dismal slough of relativism, a sliding scale must not ignore framework-dependent, qualitative distinctions, and therefore must embed a hierarchy of conventional values (as is the case with a Dharmakīrtian model).

A Candrakīrtian sliding scale can also be said to maintain an ascending structure in terms of ultimate value given that it is oriented toward liberation, the culminating realization of a buddha. Also, a Dharmakīrtian ascending scale can be said to share the symmetrical structure of a sliding scale when abstracted from the Buddhist soteriological context within which it is embedded. There need not be much space between these two interpretations, but I make this contrast to highlight a point about how we can understand the interface between Buddhist values and science. I do so while acknowledging that a certain amount of decontextualization of traditional Buddhist doctrine is necessary in order to put these Buddhist traditions into conversation with the philosophy of science. In any case, what I wish to highlight here is that a sliding scale, as opposed to an ascending scale,

conveys the contingent and relational status of any conceptual frame. As long as it avoids the pernicious relativism of the “dismal slough”, a sliding scale can function to keep the focus on human meaning and personal values; since these are not completely replaced at a deeper level of an analysis with an impersonal truth, one need not lose sight of the conventional while seeing (or seeking) the ultimate truth.

When we completely reduce the personal to the impersonal, even while there may be something gained, as in a scientific explanation, there will necessarily be something lost, too. One implication of this is that a concern for the welfare of persons calls for taking seriously the level of analysis populated by persons and human values. By emphasizing that meanings and values on the human level cannot be completely reduced to non-human values, ethics are foregrounded on *this* side of nirvana—in the present, living world. Ethics are not sacrificed or instrumentalized as merely a means to an end when the immanent world of humanity is not reduced to a transcendent world of a buddha (or to an underworld of physics or some other future techno-utopia).

While qualitative distinctions between better and worse can be made within a framework, we also have to answer the following question: what makes one framework better than another (and under which meta-framework)? It is important to recognize that that which matters or counts as real within a framework depends on the purpose one has for using that framework. A Buddhist framework provides a goal, or *telos*, and the pragmatic function of promoting well-being and alleviating suffering, which is the determining factor used to ascertain what really matters.<sup>6</sup> A monistic framework might be useful when the goal is to see the commonality of things, while a pluralistic framework is useful for drawing distinctions and charting relationships between things and events. As scientists use biology, physics, etc. for different purposes, Buddhists are not limited to a single framework to serve human purposes and the ultimate goal of nirvana. Yet problems can arise when setting up relations between frameworks, and in particular when one framework is completely colonized and reduced to another, when there is a totalizing meta-framework, particularly when personal (e.g., human) values are excluded.

Delimiting the framework-dependent boundaries of a claim gives explanatory power to claims within that framework, but does so at the expense of alternative frameworks. For instance, scientific accounts, in being partial and limited, are useful, albeit for limited purposes. Problems creep in when a single framework is conceived to provide *the* single and complete account of the world. This is the case with the dogma of scientism, as it is with the case of the dogma of a religion. Science, however, as a methodological stance rather than a reductionist metaphysical position, is pluralistic and open-ended. In this way, it permits multiple, competing frameworks and need not be held to be a totalizing dogma.

Like a scientific methodology, Buddhist epistemology also allows for fluidity among multiple frameworks, since a Buddhist criterion of truth, like one of science, can be rendered pragmatically. A Buddhist can make use of frameworks, like those of Abhidharma or the modern sciences, but a distinctively Buddhist claim to truth is not guided by only a reductionist ideal that excludes personal interests and values. Persons (sentient beings) and freedom (nirvana) are arguably the first and final resting place of Buddhist values, so in light of the priority of these values, a Buddhist orientation toward truth can be said to be fundamentally opposed to that of science.

In Buddhist epistemology, the factor that determines what counts as real in a given framework, as well what guides the choice of framework, is interest. Interests motivate goal-directed behavior and guide the construction and maintenance of a given framework (Dunne 2011, pp. 91–93). Interests are rooted in personal values, a subjective dimension. The place of interest is explicit for Buddhists—nirvana; interest is rarely explicit (or is explicitly shunned) in the case of scientific goals. Since scientific methods are structured impartially to exclude personal interests, which is a feature that gives a scientific model its explanatory power, science on its own lacks the ability to distinguish values among frameworks; thus, science alone cannot offer a totalizing account of the world. Buddhism,

in contrast, for better and for worse, offers a totalizing meta-framework grounded in interests and an orientation toward nirvana.

#### 4. Conclusions

To conclude, inspired by a contrast between Dharmakīrti and Candrakīrti, I want to put forward a way of thinking about the relation between science and Buddhism in the modern world. Dharmakīrti's epistemology, like scientific knowledge, purports to move us from conceptual ignorance (nescience) to perceptual knowledge (science), even while it is rooted in the Buddhist project of liberation. Yet since this system is explicitly grounded in interests, and is embedded in a Buddhist purpose and *telos*, in a significant way it is also at odds with the modern ideal of scientific objectivity. This is not, however, necessarily a problem; rather, it is simply a fact, a fact that—like other scientific facts—I contend, are rooted in human values. It is in articulating the place of human values in a scientific world, and the contingency of all truths, that we find insight from Candrakīrti.

While we might presume that the ultimate truth is a scientific truth or natural law and that the conventional truth is a human truth or cultural norm, in fact, both of these truths can be said to be embedded in cultural values. Ethical matters, in particular, involve personal values, and these are not completely reducible to non-human things. While persons may be composed of things like chemicals or molecules, or the five aggregates, including feeling and consciousness, persons are not completely reducible to them. These are different levels of description that track different things and thus enable different worlds to come into view. These worlds are shaped and guided by interest. While scientific frameworks of the world, like physics and chemistry, are certainly useful, we need not presume that they are completely value-free, nor should we presume that scientific images are sufficiently complete for Buddhist interests and personal values to be outsourced to the sciences.

There is a clear difference between scientific and humanistic models of truth, and I have tried to explore the implications of this difference in light of a relationship between a (Dharmakīrtian) ascending scale of reality and a (Candrakīrtian) sliding scale of truth. As opposed to a reductionist approach that totally collapses human values into impersonal descriptions, or *vice versa*, I want to propose a hybrid approach as a way forward, one in which the first- and third-person perspectives both supplement each other. Neither a first-person phenomenology that “brackets” the world nor a third-person attempt to extract the subject out of the world is an actual possibility, and neither can provide a complete account of the lived world. Cultural and natural worlds can certainly be differentiated, but they are arguably never completely separable. This intertwined relation is important to acknowledge, particularly as we are confronted with the question of how to articulate, without reducing one to the other, the place of Buddhism in a scientific world and the place of science in a Buddhist world.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** Data is available in Tibetan Buddhist canon.

**Conflicts of Interest:** The author declares no conflict of interest.

#### Notes

- <sup>1</sup> Dharmakīrti, *Commentary on Epistemology (Pramāṇavārttika)* 3.3: “That which performs an ultimate function here is an ultimate existent. The others exist as conventional; these are said to be particulars and universals”.
- <sup>2</sup> In other words, a pragmatic causal account can function both in an external realist ontology and in an idealist framework in which an external world is virtual.
- <sup>3</sup> I use “Dharmakīrtian” and “Candrakīrtian” to illustrate two philosophical stances that are inspired by the works of these two figures. These labels are *not* meant to represent the authorial intent of these figures, but are rather used as a heuristic to illustrate

two philosophical trajectories. A Dharmakīrtian view can be understood as relating to the meaning of the Sanskrit term *sat* as *reality* whereas a Candrakīrtian view presents its meaning as *truth*. On the complex and intertwined relation between these two philosophical trajectories, see (The Yakherds 2021).

<sup>4</sup> This example of “causal framing” is from James Woodward, cited in (Gold 2015, p. 111). Gold brings up this issue in an excellent discussion of the “three natures” in Yogācāra.

<sup>5</sup> A similar point is made by Wilfrid Sellars in his “Philosophy and the Scientific Image of Man” (Sellars 1962, pp. 8–9).

<sup>6</sup> This feature of Buddhist truth reflects the twofold meaning of the Sanskrit term *artha*, which is at once an “object” and a “goal”. This bivocality also reflects Quine’s famous slogans: “To be is to be the value of a variable” and “No entity without identity”. In his classic essay on ontological relativity, Quine stated that “Specifying the universe of a theory makes sense only relative to some background theory, and only relative to some choice of a manual of translation of the one theory into the other. (...) We cannot know what something is without knowing how it is marked off from other things. Identity is thus a piece with ontology”. (Quine 1969, pp. 54–55).

## References

- Dharmakīrti. n.d. Commentary on Epistemology (Pramāṇavārttika, *tshad ma rnam 'grel gyi tshig le'ur byas pa*), no. 4210. In *Sde dge mtshal par bka' 'gyur: A Facsimile Edition of the 18th Century Redaction of Situ chos kyi 'byung gnas Prepared under the Direction of H.H. the 16th rgyal dbang karma pa*. Delhi: Delhi Karmapae Chodhey Gyalwae Sungrab Partun Khang.
- Dreyfus, Georges. 1997. *Recognizing Reality: Of Dharmakīrti's Philosophy and Its Tibetan Interpretations*. Albany: SUNY Press.
- Dunne, John. 2004. *Foundations of Dharmakīrti's Philosophy*. Boston: Wisdom Publications.
- Dunne, John. 2011. Key Features of Dharmakīrti's Apoha Doctrine. In *Apoha: Buddhist Nominalism and Human Cognition*. Edited by Mark Siderits, Tom Tillemans and Arindam Chakrabarti. New York: Columbia University Press, pp. 84–108.
- Gold, Jonathan. 2015. *Paving the Great Way: Vasubandhu's Unifying Buddhist Philosophy*. New York: Columbia University Press.
- Kuhn, Thomas. 1962. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Quine, Willard V. 1969. *Ontological Relativity and Other Essays*. New York: Columbia University Press.
- Sellars, Wilfrid. 1962. Philosophy and the Scientific Image of Man. In *Science, Perception and Reality*. Atascadero: Ridgeview Press.
- The Cowherds. 2011. *Moonshadows: Conventional Truth in Buddhist Philosophy*. Oxford: Oxford University Press.
- The Yakherds. 2021. *Knowing Illusion*. 1–2 vols. New York: Oxford University Press.

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