Logic and religion working together: implications within India's Nyāya reasoning

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Generally, in the West, religion and philosophy have taken differing paths; however, in India, various scholars of one particular philosophy, Nyāya, developed, over time, a bridge between a materialist, pragmatic model of philosophy and argumentation and Vedic religion, creating a blended scientific and theistic view of reality. Significant Naiyayika scholars offered arguments for the existence of God from within those contexts. In the West, science and religion are often at odds. This paper discusses the possibilities for a bridge between logic and religion implicit in Nyaya's history, emphasizing and describing how each are, and can be, enriched by the other.

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1. Introduction

Generally, in the West, religion and philosophy have taken differing paths, and though some philosophers were religious, and some philosophies made room for and or theorized about religion, the two have often been interpreted as separate channels of human expression, often at odds with one another. The lines between them range from thin to extreme. While metaphysical philosophies like Plato's describe philosophy in quasi-religious terms, most materialist philosophies, like Epicureanism, Stoicism, or even modern Marxism, question any reality beyond the natural world.

In India, various scholars of one particular philosophy, Nyāya, developed, over time, a bridge between a materialist, pragmatic model of philosophy and argumentation and Vedic religion. The solution seems simple: the goal of philosophical discussion becomes *mokṣa*, or liberation from the cycles of birth and death. Philosophy, in this sense, remains tied to its pragmatic truth-seeking motives, even while aligning with a theistic interpretation of the world. Over the course of several centuries, significant practitioners of Nyāya, Naiyayikas, created a materialistic philosophy that potentially offers a way to combine scientific and theistic views of reality. Though some modern interpreters of Nyāya philosophy insist that it functions without its *Vedic* associations, in order to take that position, one must bracket significant verses of the *Nyāyasūtra*, including those that identify its purpose – to provide release from karmic cycles. One also has to bracket its associations with Hindu *Vaiśeṣika* philosophy, with which it became aligned to the extent that they are now referred to as *Nyāya-Vaiśeṣika* philosophy. *Vaiśeṣika* holds that "perceptible experiencable things are effects whose material causes are the atoms together with a certain relation [and]… the efficient cause … is of course God" (Monanty 74).

Though definitions of both religion and philosophy vary, this paper interprets the term philosophy as seeking meaning through logical reasoning, most often seen in the West as a capacity and function of the human mind. Religion is a very broad term, and this paper uses the term to refer only to "theistic"

elements of the philosophy. *Nyāya* philosophy is "religious" only to the extent that 1) its foundational text refers to both karma and a dispenser of karma, a creator god who oversees karmic processes, and 2) many of its key commentators offered proofs of God's existence based on its methods. However, it is not religious in that it does not involve religious rites or mythologies. In any case, neither term really applies since such distinctions do not fit the Hindu contexts. Perhaps this non-distinction enabled the hybrid approach that this paper explores.

In any case, a series of Naiyayikas combined a general theistic and karmic worldview with a practical form of reasoning adaptable to both physical and internal deliberation, aligning itself as religious in this very narrow sense. While not all Naiyayikas, present or past, believed Nyāya reasoning is necessarily theistic, the reflections of those that developed Nyāya theism provide a rich basis for considering how science and religion might work together in fruitful ways in our present environment.

2. Review of Literature

Ancient Hindus, like many in the West, were suspicious of logical arguments because they can be used to deny or sidestep the precepts of religion (Vidyabhusana xv-xvi). In the three largest religious traditions in the West, this tension led to a separation of "faith" and "reason." Christian figures from the Apostle Paul, to Thomas Aquinas, to Søren Kierkegaard assert that ultimately, we have to surrender to God in faith, even if that is "unreasonable." In Islam, "both reason and faith or rationalism and traditionalism are interlinked and interdependent." Though they are inter-connected, reason is limited: "Abraham, yes, he arrived at the door of faith through the path of reason. But once he entered that palace, he rose far beyond" (Ali 2012).

Similarly, Nyāya "instead of relying entirely upon reasoning came to attach due weight to the authority of the Vedas" (Vidyabhusana xvi). In doing so however, it never loses its basis in logical thought, creating a hybrid of religion and philosophy unique from both and Indian and Western perspective.

In Nyāya philosophy, the creation of this hybrid involved three specific permutations. First, pragmatic practices of logical debate and argumentation were theorized through broad mental and philosophical contexts; second, that context was joined with a Vedic (Hindu) perspective; and third, arguments are made for the existence of God that align with those contexts.

Specifically, a five-part argumentative method called the *avayava* ("members," as in a body) is aligned with four possible ways of knowing the world (*pramāṇa*). Speakers use dialogue and debate to help one another remove doubt, fear, and desire om order to clearly comprehend the world. These practices, combined with meditation, lead to *mokṣa*, liberation from the cycles of death and rebirth. Theistic religion, from this point of view, is not something set aside from practical reasoning, but directly implicated in its processes.

Because we are all human beings, Naiyayikas believed that what we can know about the world is sharable and universal. Though we may differ in culture, practices, and mythologies, the basic questions and meaning of life are accessible and understandable to all. Though Nyāya is known as a philosophy, both terms, religion and philosophy, blur together in this context. In practice, Nyāya calls for meditation and debate with others who seek truth beyond selfish desires, which leads to a shared knowledge of the universe and its karmic implications. Thus, ancient Hindu philosophers combined the dominant method of reasoning, *Nyāya*, to Hindu *Vaiśeṣika* philosophy, marrying logic with a particular view of God, life, and the afterlife. Given the karmic and liberating motivations for reasoning identified in the Nyāyasūtra, Naiyayika's, beginning with Udayana's *Nyaya Kusumanjali* (tenth century CE), used their methods to argue for the existence of God, discussed below.

In India today, Nyāya is considered a logical and philosophical system as foundational as Plato's or Aristotle's in the West, one of six orthodox Hindu schools. Its methods were also adopted and adapted by

non-Orthodox schools like the Buddhists and the Jains. Though its formal teaching has been within the confines of the Brahmin caste, Nyāya-type arguments are common in India, much as Aristotelian arguments are common elsewhere. Scholars like J.N. Mohanty, Bimal Krishnan Matilal and Jonardon Ganeri are recovering its teaching and bringing its ideas to the West.

This paper discusses the possibilities for a bridge between logic and religion implicit in Nyaya's history, emphasizing and describing how each are enriched by the other.

3 Research Methodology

This essay first considers the history and nature of Nyaya reasoning, then explores its relation to theistic religion.

4 Findings Results

The *Nyāyasūtra*, the book of *Nyāya* aphorisms extending from the second century BCE and collected in the first century CE by Akṣapāda Gautama, allies itself with the teachings of the *Veda* (foundational teachings of Hinduism) by saying that most human beings are living in a state of sleep - *saṁśaya*. The function of debate and reasoning is to create a state of wakefulness in the interlocutors. Once one recognizes, through the study and application of sixteen principles of Nyāya (detailed below), that one has been living in a state of illusion, one can use its methods to accurately perceive the world, to accurately make inferences and comparisons, and to stop embodying the actions of sleeping person—getting caught up in fear, desire, and ignorance. The goal of life in Nyāya, as in Hindu Vedic teaching, is *mokṣa*, or liberation for the cycles of birth and death. What is unique about Nyāya then is that we can find enlightenment not only through meditation, intuition, and revelation, but also through Nyāya *vada*, truth-seeking deliberation among interlocutors committed to helping each other to find fruitful solutions. The goal of dialogue is to create and support a caring community, and most of all, to create a state of *mokṣa* for all involved (Lloyd 2007, pp. 365, 370-71; 2013 pp. 290, 292, 294, 297). Reason can provide some basis for karmic theism.

If we are to ask not what we know, but how we know, the best place to begin are with our ways of knowing (*pramāṇa*). Nyāya philosophers decided that only four ways of knowing were truly separate and identifiable. The first is perception, the *pramāṇa* from which all the others stem. Perception (*pratyakṣa*) extends here beyond the five senses, as in Nyāya the mind is also an organ of sense. The mind functions like the palm of a hand for the five senses or fingers, directing that to which we pay attention. In the modern scientific West, the mind is the home of everything that makes a person a person. In Nyāya, however, the mind is an instrument of human consciousness, which in turn is an instrument of the soul, or Atman, the "self." Therefore, perceptions can be both internal and external. In Western terms, Naiyayikas erase boundaries between physical and mental, and this advantages the Nyāya system because it sidesteps Western scientific limitations on what is empirical. What we sense though intuition and/or an experience of revelation – provided it is sharable and experience-able by other human beings – is nonetheless empirical, experiential, verifiable, perceptual knowledge. Nyāya then provides a true science of the self, as that which is testable, repeatable, and sharable. A second advantage is that this point of view allows that consciousness is a result of being in a body, which generally fits with current scientific understandings of consciousness, without losing a sense the divine/eternal in human beings.

The second way of knowing is *anumāṇ*, inference, the basis of logical reasoning. It is reasoning from what is perceptible to what is not, like inferring that a hill is on fire because of the presence of smoke, which in turn is based on our previous perception of the relation (*vyāpti*) of fire and smoke in a hearth. Given that perception, as noted above, is both inner and outer, inference includes both physical and mental insights. The third *pramāṇa, upamāna*, or comparison is about how we name things typologically; it concerns the comparison of two things in order to identify one as of the type of the other. For instance,

someone confronted with a water buffalo, being previously told it was like a cow, but with long hair and a highly arched back, infers that this animal must be a water buffalo.

Lastly, there is *śabda*, authoritative words of others. To Naiyayikas such words are authoritative not because they are sacred or sacrosanct, rather because the speakers themselves used the processes of Nyāya to find and vet the truths they shared. Because *śabda* represents the best of previous human reasoning, it functions as a fairly stable knowledge base from which to make further connections, while its conclusions remain sharable and testable. In brief, the *guru* or teacher can teach nothing that is not readily experience-able to the *śeṣa* or student. It makes sense then that Nyāya holds the Vedas, sacred Hindu texts to be true, not because they are divine words or dictated to speakers by a higher power, but because the speakers are authoritative in this broad sense – they speak from truth that is knowable and sharable to all: "The Veda is reliable like the spell and medical science, because of the reliability of the authors" (NS II. I.130). From this point of view, Vedic religion is not some specific kind of mystical gnosis or esoteric knowledge; it is the least specialized knowledge, available to all who seek it, and discoverable by basic human processes of perception, inference, and dialogue.

As noted, before, perception is not limited to the five senses, and Nyāya even lists "soul" (*ātmā*) and "consciousness" (*bodha*), and "mind" (*māṇa*) as objects of perception (*pramāṇa*), erasing the line between physical and mental knowledge (NS I.I.9). As Mohanty notes, however, the *ātmā* is "exemplified not in the omnipresent *ātman* of the Upanisads, but in the finite individual selfs (and souls), and in the theistic God" (59). Perception refers to immediate experience, inference from the immediate to the unknown or unseen, and comparison from one thing seen or remembered to another. Though the Buddhists expressed doubt in the reliability of the senses, noting that we might confuse a snake with a stick, or take a post to be a man, *Nyāya* simply responded that in both cases we can use the senses to correct those misapprehensions. As Kisor Chakrabarti (1999) notes, for Nyaya philosopher's skepticism about cognitions is "self-refuting," since if we hold that no cognition is reliable, then that assertion is also unreliable. Our sense perceptions are basically reliable, since "a given perception cannot be disallowed without giving credence to some other perception" (p. 6). What is needed is some ability to step beyond our habitual state of sleep and ignorance.

As the *Nyāyasūtra* notes, factors in our surroundings cause *mithyā-jñāna*, or miscomprehension of the world around us. The general world for these hindrances is *doṣa*, translated as "faults." These faults are identified as desire, aversion, and "stupidity" –which are the three motives of all unenlightened human action. In the NS I.I.2 it says, "Pain, birth, activity, faults and misapprehension – one the successive annihilation of these in reverse order, there follows release" (*mokṣa*). Such a verse clearly connects *Nyāya* practice with a karmic view of reality.

Historically, *Nyāya* philosophy has progressed through series of commentaries on the original *sūtras*, as well as reactions to critics and previous commentators. One of the most important commentators, Vatsayana, notes that affection includes lust, avarice, envy, and covetousness. Aversion includes anger, envy, malignity, hatred, and implacability. Stupidity includes misapprehension, suspicion, arrogance, and carelessness (NS IV. I. 3). In short, we do not truly see the world until we look at it beyond and without any sense of attachment to it. The *Sūtra* offers a vivid analogy: "Our false apprehension is destroyed by a knowledge of the truth, just as objects in a dream come to an end on our awaking" (NS IV. I. 63). As in the snake and stick analogy, the goal is to distinguish between "essence" and "appearance' and this involves a process of both meditation and *Nyāya* discussion or *vada* (NS IV.II, 38, 46, 48).

How do we lessen the forces of misapprehension? Primarily, we study Nyāya's sixteen categories– the core tenets of *Nyāya* argumentation and philosophy (NS I. I. 1). Second, we meditate to clear our minds of distractions (NS IV. II, 38, 46). Third, we practice the tenets of *Nyāya* with others schooled in

Nyāya (NS IV. II. 48). Through arguments with others who participate in *Nyāya* discussions --- *Nyāyavada* – we can attain a liberated state of consciousness.

As mentioned before, the first two of the sixteen categories-- *pramāṇa* (valid means of knowledge), *prameya* (objects of valid knowledge) -- refer to how and what human beings can know. The next categories refer to the processes of reasoning involved in argumentation and discussion:

saṁśaya (doubt)
prayojana (aim)
dṛṣṭānta (analogical example)
siddhānta (conclusion)
avayava (five-part method of reasoning)
tarka (hypothetical reasoning)
nirṇaya (settlement)

The search for answers begins with doubt (*saṁśaya*) which leads to our aim (*prayojana*), to define the issue and question at hand. Naiyayikas, recognizing the fundamental need for humans to make analogies, include *dṛṣṭānta,* an analogical example, as a key component in reasoning. Understanding begins with the hypothesizing and testing of relevant analogies, which leads to at least a tentative hypothesis (*siddhānta*). Whether in public or individual reasoning, arguments are then set into the five-part form (*avayava*), and discussion/reflection ensues. Through the process of tarka, *if… then* reasoning, interlocutors test reasons, applications, and analogical examples for appropriate fit. If they find agreement, they reach *nirṇaya* (settlement), literally a binding up.

The exemplar of the *avayava* (literally "members" of a body) is a smoke/fire inferential scheme:

Nyāya	*"Translation"*	*Nyāya Example*
pratijñā	claim	the hills is on fire
hetu	reason	because there is smoke
dṛṣṭānta	analogy positive:	as in the hearth;
		negative: not as in a lake
upanaya	comparison	we confirm this is the case
nigamāna	conclusion	the hills are on fire

Vidyâbhûṣaṇa's *Nyāya* process (Gotama 41).

The idea of the method is to connect a claim and reason to a reliable analogy. We know that smoke appears with fire in every known instance of our experience of hearths. On the basis of that established connection (*vyāpti*), we conjecture that the hill, also smoky, is on fire. The method does not so much prove that the hill is on fire as imply that this is a logical and plausible conclusion. Given this tentativeness, Nyāya places *Nyāyavada*, public reasoning focused on sharable and fruitful truth, as the most reliable way to reach agreement that will move the community forward in positive ways. Its method of "proof "then, is communal, sidestepping the Western conundrum of objectivity and subjectivity by offering a type of collective objectivity through shared subjective experiences (Lloyd "Reinterpreting," 2007, p.36).

As noted above, the *Sūtra* stresses seeking truth from a detached perspective (which indeed aligns it somewhat with traditional Platonic philosophy). *Nyāyavada*, is contrasted to the following two categories, two other types of argumentation:

vāda (discussion)
jalpa (wrangling)
vitaṇḍā (cavilling)

Traditionally, jalpa is arguing to "win," and *vitaṇḍā* is arguing only against the position of the other. These terms make the list of categories because the Naiyayika needs to know how they work, and perhaps

when they are necessary to use. Most of the Western rhetorical and philosophical tradition is based in these ends—to argue until one prevails, or to at least discredits, other views. The *Nyāyasūtra* is concerned with *phala*, the fruit of actions (*karma).* The fruit of actions based in attachment lead to pain and rebirth; arguing to win or against, based in obtaining one's desires, also lead to the same fruits. *Nyāyavada*, based in non-attachment, leads to *mokṣa*. *Nyāya* offers a viable alternative to argumentation that is focused on winning or skeptcism. The fruit of *Nyāyavada* is *mokṣa.*

The next three categories identify what are often interpreted as four types of fallacious reasoning -- *hetvābhāsa* (fallacy), *chala* (quibbling), *jāti* (sophisticated refutation) and *nigrahasthāna* (point of defeat). Rather than formal fallacies, these categories, in a debate, would be used to eliminate faulty arguments or to encourage the arguer to recast the argument. A careful look at the Sanskrit *hetvābhāsa* reveals that it concerns a mistaken reason, or hetu. *Chala*, literally "chatter," involves "quibbling," interpreting a key term in a way not intended by one's interlocutor (NS 2.14). In this case it refers to "fraud," or an insincere argument. *Jati* in common Sanskrit refers to species or family, the whole as sum of the parts. In this context, it refers to a misguided (unfruitful) analogy. *Nigrahasthāna,* bearing the root *sthāna,* a proposition or proposal, refers to when someone assumes what is to be proven already proven in their argument, which causes them to defeat their own argument in the process.

In summary, the *Nyāyasūtra* promotes a five-part method of reasoning, *avayava*, based in a seeking together to find fruitful solutions beyond affection, aversion, and stupidity, which it calls *vada*. *Nyāyavada* moves interlocutors to experience states of *mokṣa*, release from misapprehension, and eventually from the cycles of pain, death, and rebirth.

Given this karmic orientation and argumentation, logically Naiyayikas needed either to align themselves with a Buddhist atheistic view of karma or align themselves with some sort of theistic perspective.

Several historical Naiyayikas, due to the verses that associate a karmic view of reality to *Nyāya* philosophy, found it most logical to align it with a concept of God as *Īśvara*, a general term meaning "supreme being" literally "one who is able." This move sidesteps associations with words like the *Upanisad*'s *Brahman*, or the names of personal Gods like *Vishnu, Krishna, Shiva,* or *Kali*. *Īśvara*'s function and existence is directly connected to *Nyāya*'s definition of *mokṣa.* According to Arindam Chakrabarti (1983), Naiyayikas assert that life predominantly a matter of suffering, since all pleasure is mixed with pain, but not the reverse (if for no other reason than that we anticipate the loss of pleasure even while experiencing it). *Mokṣa* is then liberation from both pleasure and pain, and as such to be sought only as a cessation of pain. In *Nyāya* form, their argument might read like this:

pratijñā	claim	*Mokṣa* should be sought
hetu	reason	to bring the cessation of life's pain
dṛṣṭānta	analogy	like the removal of a thorn

Logically, if *mokṣa* were pleasurable, we would seek it as a pleasure, and never break the chain of seeking pleasure and avoiding pain. Naiyayika's then applied the *dṛṣṭānta* "like the removal of a thorn" (pp. 180-81) because it establishes *mokṣa* as pleasurable only in its ability to end the pain.

Being empiricists, Naiyikas observe that not only pleasure and pain, but consciousness itself, is a product of the union of the body with the life force (Ram-Prasad, 2001, p. 381), so *mokṣa* must be liberation also from consciousness, or the "sense of I," as it is sometimes translated. According to Naiyayikas, the life force and karma of a person is all that survives the death of the body. If a person owes no karmic debt, they are freed from consciousness, death, and rebirth.

These conclusions are a logical outcome of discussions with Buddhists, who insisted that there is no self at all; what we call the self is but a series of interconnected sense impressions. Naiyayikas resisted this

notion because it could not explain how we can sleep in an unconscious state (an idea Buddhists did not contest) and then wake up with a sense of being the same person as before. The Buddhists had to rely on a kind of thread analogy; we literally pick up where we left off from the clues from previous impressions. Naiyayikas offered instead that there is a life force or self beyond consciousness that provides continuity to our existence. Arguments concerning the idea of a continuous self-remain current in cognitive science. What is significant in this instance is that this view of self naturally lends itself analogically to the Nyāya view of Īśvara. There is something beyond the self and beyond our individual consciousness at work in our lives; similarly, something beyond self and consciousness oversees all the various selves livng or between lives.

As noted, before, Nyāya asserts that we can find release in meditation, debate, and dialogue, through those processes prevent actions (karma) based on "faults and misapprehensions," and thus end the cycles of pain, death, and rebirth. Hindu teachings like those in the *Bhagavad Gita* ask whether the path of *jñāna* (knowledge) or *karma* (actions) lead to liberation; the *Gita* combines the two in the idea of *karma yoga*, doing one's *dharma* with no expectations of results, gain, or thought of reward. *Nyāya* similarly combines the practices of action and knowledge, but in a rather unique manner. *Jñāna* normally involves renunciation of action and withdrawal into a meditative state. *Nyāya* offers a more community-centered path. It is through dialogue that we can attain the true results of meditation – truth-seeking through discussion. It is no coincidence that the five-part *Nyāya* method became the primary mode of argument for debate among differing schools of thought -- for centuries.

Orthodox Hinduism, and most other Indian philosophies, offer that life is fundamentally suffering and that the goal of life to somehow end that suffering. Most all schools of thought supported the idea of karmic merit and demerit according to our actions. One of the key principles of Nyāya involves simplicity; simpler explanations are preferable and more likely true. It makes sense, from the Naiyayika commentator's point of view, that some higher power dispenses justice rather than it just happening on its own. Though Buddhists admitted that perception and inference as *pramāṇa*, they limited their function to the conceptual world (our experience of "reality" is conceptual, not actual) while *Nyāya* tied them to the physical and meta-physical world. This interpretation left openings for *Nyāya* arguments. While the Buddhists posit that the world is *either c*ompletely unreal, no more than a dream, or unreal only in the sense that we are not separate from it, Nyaiyayikas, being atomistic materialists, conceptualize reality much as a modern Westerner – the world is material, and perceptions and inferences can me more or less aligned with it. Both Buddhists and Naiyayikas agree that life is fundamentally suffering in karmic cycles of death and rebirth; the meaning of life is to liberation from those cycles and that suffering.

5a Discussion

Nyāya's historical arguments for the existence of God reflect this unique perspective. While they offer arguments similar to the so-called "design" arguments familiar in the West (the design/designer or more recent clockmaker/machine analogies), they build a reason for the designer to design based in the view of *mokṣa* outlined above. Designer arguments rely on an artifact analogy (Brown). Clocks must have clockmakers. The universe is orderly, and as such must have a creator. As those who promote designer arguments must allow, there is always a great leap between a designer and a benevolent God. As Arindam.Chakrabarti (1983) notes, such arguments fail to show that the unmoved mover [as in Aquinas] is a spirit" (169). Naiyayikas sidestep that issue somewhat by saying that creation exists for karmic purposes. The universe is designed to produce consciousness (which is found to some degree in all living beings), and consciousness is designed for karmic reasons. We experience the world of pleasure and pain in order to learn who and what we truly are. From this point of view, God is necessarily eternal (in order to dispense merit and demerit when we are between bodies) and all-knowing (so as to dispense karma justly) --- but no more. *Nyāya* theism remains untied to any specific mythological constructs.

Though the *Nyāyasūtra* assumes a karmic role for argumentation and dialogue, it does not tie that perspective, which could be atheistic, to any particular view of God until the fourth book (out of five). It appears in a context in which the author is trying to explain inferential reasoning. Since much of the *Nyāyasūtra* focuses on five-part arguments against Buddhist interpretations, the author considers positive as well as negative examples. Naiyayikas aligned themselves with a belief in the atomic nature of the world—that everything material is made up of atoms. They also believed that ether, the fifth element, is eternal. If one is to argue that something is created, one would look to things like pots. If one were to argue that something, like the soul, is eternal, one would look to ether. We infer a hill is on fire because it exhibits smoke; we infer it rained up river when the river exhibits rising; but what about pots and potters? We find a pot and infer a human made it because it exhibits creation-ness. Skeptical schools of thought like the Carvaka claimed that only what we can perceive is real, and what we cannot perceive is not real, therefore there is no God since God is not perceptible. The Naiyayika commentator Vacapati responded that since the heart of inference is moving beyond perception, inference is not possible, especially if the second Carvaka assertion is allowed (Vattanky 1993, p. 75).

These kinds of discussions become inter-related in Nyāya commentaries. What things come to be and what things always exist? Is the earth eternal, or did it come to be? Humans seem to be made up of both material and immaterial substances, so are we eternal like atoms? Are we creations like pots? Which *dṛṣṭānta* apply; which are positive and which negative?

Thinking about the origins of the earth, as implied above, stems from conjectures about the nature of human beings. The foundation for this way of thinking about the origins of humanity and the earth are found in three simple aphorisms in the *Nyāyasūtra* (IV.I.19-21). They begin, as said before, with the idea of the dispensation of karmic justice.

> God must be the cause of the fruits of actions since they don't depend solely on human exertion.
> Some fear this isn't the case since there are no fruits without human action.
> But since results are not dependent on human action, humans cannot be the sole cause of (karmic) fruits.

Francis X. Clooney (2001), in his book *Hindu God, Christian God*, attempts to create inter-religious dialogue through focusing on what religions have in common, including the idea that God exists. His book is a model of comparative religion. However, he holds that these verses from the *Sutra* are an attempt to *disprove* God's oversight of karma, taking the verses literally as a postulate and consequence followed by a contradictory view to which it concurs (p. 37). However, in the context of the S*utra's* hundreds of aphorisms, it seems clear that the last line affirms, rather than contradicts, the first. Many of *Nyāya's* earliest commentators took the passage in just such a manner. The *Nyāya* philosopher Vidyabhusana explains Gotama's *sūtras* with this simple summary, formulated here in its implicit *Nyāya* form:

> *Pratijñā*: An individual soul cannot get the results desired through her or his actions
> *Hetu*: Because the results depend on [something/someone] else
> *Dṛṣṭānta*: Like a farmer's harvest. (Vattanky 1993, p.18).

In short, someone or something must be the dispenser of karmic merit or demerit, and that must be *Īśvara*, the one who is able (Vattanky 1993, p.18).

The fullest expression of these arguments lies in the work of Udayana (tenth century CE), who offered nine "proofs" of the existence of God:

> *Kāryāt* ("from effect)
> *Āyojanāt* ("from combination")
> *Dhṛité* ("from support)
> *Padāt* ("from word)

Pratyatah ("from faith
Shrutéh ("from scriptures)
Vākyāt ("from precepts)
Samkhyāviṣheshāt ("from the specialty of numbers")
Adṛiṣhṭāt (lit., "from the unforeseen")

Three of these arguments are most relevant in the current context: *Kāryāt*, cause and effect; *Āyojanāt*, the idea that atoms, being material, cannot just decide to get together; and *Adṛiṣhṭāt,* the idea that since karmic fruits are not of our own doing and must be dispensed justly, there must be a dispenser of karma. These arguments become foundational for Gangeṣa's later summary argument for the existence of God, discussed below.

The *Adṛiṣhṭāt* argument rests on the following assumptions and arguments. 1. Karmic dispensation of merit and demerit happens when we are between bodies, so none of us could be the dispensers (similar to *Nyāya* arguments for the existence of the self). 2. No human could make karmic decisions – we would all choose pleasure for ourselves and would be biased in choosing for others. 3. No power less than God could have knowledge extending throughout millions of human and other life cycles. 4. No human could possibly be as just. The being would have to be all knowing and eternal (outside time and space) and not itself karmically indebted. All of this fits the Hindu concept of *Īśvara*.

Contributions to this argument were made over many centuries by various Naiyayikas (*Vātsyāyana* 450–500 CE; *Uddyotakara,* sixth century CE; *Vācaspati Miśra,* ninth century CE; and *Udayana* thirteenth century CE, among others). The Nyāya philosopher Gangeṣa (thirteenth century CE – along with Udayana considered founders of the Navya (new) Nyaya school of philosophy) – streamlined their elaborations and created an elegant *Nyāya* summary argument:

The earth (*pakṣa*) (Vattanky1993, p. 157) is caused by an agent (*sadhya*) (Vattanky 1993, p. 161)
Being an effect (*hetu*) (Vattanky 1993, p.163)
Like a jar (*dṛṣṭānta*) (Vattanky 1993, p. 164)

Gangeṣa is trying to promote this argument against two Indian schools of thought, *Mīmāṃsa* and Buddhist, both of which proposed that the universe just is, that there is no causal agent or sustainer. For this reason, he carefully crafted the reason (*hetu*) so as to be acceptable to those schools of thought; they both supported the idea of karma, and thus of the cause and effect nature of reality (Vattanky 1993, p. 163). As Arindam Chakrabarti (1983) confirms, "a generalization (*vyāpti*) is not reliable (*prāmāṇkika*) unless it is supported by acceptable positive or acceptable negative instances and is not contradicted by any unquestionable counter examples" (163). In fact, [t]he purposes of citing examples is to show that the general proposition being used as a premise has adequate inductive support" (p. 164).

Gangeṣa now has a very workable formulation, since in *Nyāya* arguments, only the relation between the *sadhya* and the *hetu* need be proven invariable (*vyāpti*) (Vattanky1993, p. 166). The issue at hand is whether or not the analogy plausibly applies in this context. His argument is simple, his reason acceptable to all disputants, the example fits the *hetu* and *pakṣa*, and his conclusion is at least plausible, since there is not counter argument that disproves the existence of God. In addition, no material being could produce both eternal things and material things, therefore something eternal, capable of knowing how and why to create, must have. There is not one single counterexample of any material thing that is uncaused or the cause of itself.

Gangeṣa also resists the counter argument that while we can observe potters making pots, we cannot observe God making the world. However, we do not HAVE to see pots made or know how they were made to recognize the work of a potter. All inference is based on the presupposition that we can understand the unseen through the seen. He resists also the counter argument that assuming creation is the result of an eternal being is "against our normal experience," again since in any act of inference, we

need not experience all possible instances of the argument in order to make reasonable decisions. Gangeṣa's argument is also broadly logical. In his view, atoms are eternal, but things made of them are not. Unless atoms are sentient, then they have no reason to band together to make material things. In addition, Gangeṣa's argument circumvents the counter argument that though we can see a potter making pots, no one witnessed God making stones, because that only is true from one side of the debate (A. Chakrabarti 165). To the theist, there are no counterexamples, and according to the method, the premises must be acceptable to both theist and atheist.

All the elements in this argument reflect the tenets of *Nyāya* reasoning by using the *Nyāya* method of inference.

Simplicity

Acceptability of the *hetu* by all disputants
Vyāpti of the *dṛṣṭānta* to the *hetu* and *sādhya*
No clear counterexamples
Plausibility of the conclusion

God's existence is not proven, but it is offered in a way that is logical, inferential, reasonable, and based in premises accepted by both sides.

5b Conclusions

Nyāya theism goes all the way to its origins, from it establishing the goal of reasoning as *mokṣa* to the three short aphorisms concerning the dispensation of karmic fruit in the fourth section of the *Nyāyasūtra*. Since they allowed the soul as an object of knowledge (knowable), naturally Naiyayikas had to decide whether it was corporeal or eternal, and this set the stage for Nyāya theism. As Vattanky (1993) notes, "the later [theistic] developments of Nyāya were actually a logical development of the basic intuition of the author of the Nyāya Sūtras." He notes that in their arguments "we see the Nyāya system at its best" (p. 183). Though the Nyāya arguments appear and make the most sense in the context of reincarnation, given that beginning point, they prove plausible, reasonable, elegant. Even in a Western context, they reflect the kind of careful and analytical impulse to truth found in the dialogues of Socrates, even when Naiyayikas sought to establish reasonable arguments for karmic justice and the existence of God. Interestingly, Plato's *Symposium* similarly relies on the belief in reincarnation for his discussion on the origins of love.

So how do we bridge religion and philosophy? Nyāya suggests that we need not sacrifice reason to do so. We can approach life in a very pragmatic, scientific, truth-driven manner and still find good reasons to believe in a karmic and theistic universe. Being theistic, however, Nyāya's solution is not completely philosophical, at least from a skeptic's point of view. At the same time, it is not fully religious, given it supports no particular religion, gods, rites, or mythologies. That is actually what makes it so fruitful.

Widely published Buddhist philosopher Ken Wilbur (1999), lamenting the tensions between faith and science emerging in the current Western world, suggested a very similar path in his book the *Marriage of Sense and Soul*. Like the Naiyayikas, Wilbur focuses the need for evidence, even in the so-called spiritual realm: "authentic spirituality must offer direct experiential evidence" (p. 12). As in Nyāya, this comes about by applying the same rigorous processes of reasoning for both inner and outer perceptions. Humans need to see the "three strands of all valid knowledge (injunction, apprehension, confirmation; or exemplars, data, falsifia-bility) applied at every level (sensory, mental, spiritual –or across the entire spectrum of consciousness…) (p. 15). Only then, Wilbur asserts, could we bring science and religion together: "Guided by the three strands, the truth claims of real science and real religion can indeed be redeemed…" (p. 12). His suggestions not only mirror Nyāya's emphasis on the testing of experiences, he

also emphasizes a similar focus on meditation: "With this approach, religion gains its proper warrant, which is not sensory or mythic or mental but finally contemplative" (p. 12). Though Wilbur speaks without any direct knowledge of Nyāya, his remarks almost parallel the Naiyayika's call to test perception, inference, analogies, and contemplation to see which help us life the most fruitful lives. What is most amazing is that Naiyayikas were establishing these ideas millennia before Ken Wilbur was born. A Buddhist now argues from a *Nyāya* perspective.

In both *Nyāya* and in Wilbur's book, the cost of "reasonable" religion is a bracketing off the stories, rites, and notions of particular Gods. Both offer, however, legitimacy to elements of human contemplative experience many times dismissed or neglected, but nonetheless missed and/or cherished, by many in the modern world. Best of all, in both approaches, science and theistic religion can work together productively. Most of the world still believes in some kind of God. Most of it recognizes the realities of science. Unrealistic clinging to the first can lead to denial of scientific truth, lack of recognition of the beliefs of others, and even acts of resistance and terrorism. Clinging to the second ignores the reality of the first and can lead to unnecessary categorizations of religious people as ignorant, backward, atavistic. But science and religion can work together productively. Naiyayikas have been offering a solution all along.

6 Limitations and directions for future research

This essay focuses only on Nyaya theism and its development over time. References to theism in the Nyaya Sutra, as well as its history, can be read from a non-theistic perspective. Nyaya philosophy is a materialist philosophy which could readily be applied to reasoning in non-theistic contexts.

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