

Rethinking Rhetoric from an Indian Perspective: Implications in the *Nyaya Sutra*

As Aristotle began to codify rhetorical practices in Greece, a theoretical and pragmatic text on argument, the Nyaya Sutra, emerged in Ancient India, founding one of six key philosophies of India. Though it describes in detail a procedure of reasoning based on a five-part method of dialogic presentation, the rhetorical emphases of the Nyaya approach have been mostly overlooked. This essay proposes Nyaya's inclusion in the field of rhetorical studies, exploring its methods within their historical context, comparing its approach to the traditional logical syllogism, and relating it to the contemporary perspectives of Stephen Toulmin, Kenneth Burke, and Chaim Perelman.

In *Contemporary Perspectives on Rhetoric*, Sonja Foss, Karen Foss, and Robert Trapp note that “challenges to mainstream rhetorical perspectives . . . develop through a two-step process” of “inclusion” and “reconceptualization” (274).¹ The authors trace three such challenges—feminist, Chinese, and African; this essay offers for inclusion an ancient Indian rhetorical perspective called *Nyaya*. Proceeding from very different assumptions and reasoning processes, the *Nyaya Sutra* implies significant reconceptualizations of Western rhetorical history and practices—especially those related to argument formation and articulation.

This essay focuses on the heart of the *Sutra*,² the *avayava*, or “members,” basic elements of argument presentation, relating them to surrounding elements. The essay offers historical context for the *Nyaya* method, describes *Nyaya's* perspectives on argument, provides explanations as to its relation to prevailing rhetorical models, and explores how *Nyaya* challenges the ways we conceptualize and practice rhetoric.

Nyaya methods originated in rhetorical concerns regarding debate (*katha*) and honest discussion (*vada*). Debate, logic, and rhetoric in India are interrelated. *Nyaya's* casuistic (case-specific) methods vividly respond to concerns about rhetoric's applicability to practical matters voiced by philosophers Stephen Toulmin and Albert Jonsen. Because Toulmin created a model of reasoning most influential

in modern rhetoric, comparing *Nyaya* methods to his model provides a pertinent entry into Western rhetorical practices.

According to Wayne Brockreide, there are “two writers whom historians of twentieth-century rhetorical theory are sure to feature,” Kenneth Burke and Chaim Perelman, who “may dominate an account of rhetorical theory in this century as Adam Smith and George Campbell dominate Wilbur Samuel Howell’s characterization of eighteenth-century rhetoric” (76). This essay compares their perspectives to the *Nyaya Sutra*.

Nyaya’s History

Traditionally attributed to ancient philosopher Gautama (Gotama), the origins of the *Nyaya* perspective are difficult to date. Heinrich Zimmer believes the *Sutras* were “composed perhaps as early as 150 BCE, but more probably between 200 and 450 AD” (610). Sarvepalli Radhakrishnan places its origins in the “third century B.C. . . . though some of the contents of the *Nyaya Sutra* are certainly of a post-Christian era” (36–37). According to M. M. Satista Chandra Vidyabhushana, the Ancient School of *Nyaya* “extended over a period of one thousand years, beginning with Gotama about 550 BC and ending with Vatsyayana about 400 AD” (vii).

Because “the ground rules for the *Nyaya-Pramana* system were laid by Gautama and formalized around 400 AD in a commentary by Vatsyayana,” the number and nature of the original *Sutras* are also debated because it is difficult to distinguish Gautama’s words from Vatsyayana’s later commentaries (Rogers and Jain 389).³ The basics of the methods, however, are relatively certain.

Though familiar to the field of comparative logic (*Nyaya* still appears in some logical texts), the perspective remains unexamined in Western rhetorical studies. Eastern rhetorical practices appeared first in the West in Robert Oliver’s 1971 groundbreaking text, *Communication and Culture in Ancient China and India*. Though a valuable introduction to Chinese and Indian rhetoric, it makes no mention of *Nyaya*, which is one of the six key schools of Indian thought (Bochenski 117–18; Zimmer 605; Radhakrishnan and Moore 356).⁴ Even George A. Kennedy’s *Comparative Rhetoric: An Historical and Cross-Cultural Introduction* (1998) provides a rich background for understanding Indian rhetoric but never mentions *Nyaya*. He does note that “the conceptualization and naming of rhetorical techniques by Indian scholars is doubtless an extension of the analytical process that had begun in religion and philosophy . . . taking place about the same time in India and Greece” (184).

The West’s relative ignorance of *Nyaya*, according to Jonardon Ganeri, stems from a misperception that the East is more mystical, less interested in

systematic thinking. Reviewing nineteenth-century philosophical reactions to *Nyaya*, Ganeri observes that philosophers made “a deliberate choice” in both the “exclusion of [Indian] texts dealing with the canons of sound argument, or with the criteria governing rational assent” and the “promotion of quasi-religious, soteriological texts whose theme is the introspective methodology underlying what is called ‘the science of the soul’” (2). Kennedy and Oliver follow this assumption, tracing rhetorical thought in India to predominantly religious texts.

Ganeri also believes “these selections were, to a great extent, a product of the colonized Indian intellectual struggle for an indigenous, non-European identity” (2). Ancient logical/rhetorical texts of India fell into relative obscurity both in India and in the West.

Nevertheless, ancient India developed a rhetorical tradition while codifying methods for philosophical debate. According to Matilal, “by the second century BC, the intellectual climate in India was bristling with controversy and criticism,” and the “discipline dealing with the categories of debate over various religious, philosophical, moral, and doctrinal issues” was called *vadavidya*—“correct ways of seeing” (2). The *Nyaya Sutra*, one of the “more systematic” debate manuals, was widely available by 150 AD.

The term *Nyaya* means “right” or “just,” and refers to “the science of right and wrong reasoning” (Ramakrishnan and Moore 356). The first book of the *Sutra* (literally “thread”) includes sixteen “categories of proof”—guiding assumptions for argument (Simonson 402). The additional four books provide examples and applications. The text and later commentaries explain the categories and goals of debate, providing rhetorical guidelines for all aspects of argument presentation and motivation, including means of knowledge, objects of knowledge, motive, purpose, rules for discussion and confutation, fallacies, etc. A “collection of *sutras* or succinct aphorisms in five books or ‘lectures,’ each divided into two days or diurnal lessons” (Colebrooke 26), the *Nyaya Sutra* offers a guide for studying “logic, debate, and the study of inference” (Matilal 1).

The *Navya Nyaya*, or New *Nyaya*, remains a vital school of Indian philosophy. As Ramakrishnan and Moore note, “systems of Hindu thought generally accept the fundamental principles of *Nyaya* logic” (356). As *Nyaya* is new to the field of rhetoric, this essay focuses on the earliest text rather than on more recent developments.

Nyaya and “Honest” Debate

The *Nyaya Sutra* begins: “[S]upreme felicity is attained by the knowledge about the true nature of the sixteen categories” (Ramakrishnan and Moore 358). “Felicity” means liberation from ignorance and release from the common human

condition of desire and fear. Three types of debate (numbers 10–12 below) aid or hinder this process. Helpful is “honest” debate (*vaya*), “where both sides are seeking the truth.” Hindering are “tricky” debate (*jalpa*), “where the goal is to win by fair means or foul,” and “destructive debate” (*vitanda*), where the goal is to defeat or demolish the opponent, no matter how” (Matilal 2).

Applying the sixteen categories implies release, or *moksha*⁵—“pain, birth, activity, faults [defects], and misapprehension [wrong notion]—on the successive annihilation of these in the reverse order, there follows release” (Ramakrishnan and Moore 358).

Numbers one through ten below mark aspects of *positive* discussion (*vaya*), while eleven through sixteen focus on possible *misuses* of argument—familiar failures. The categories imply how argument *should* (1–10) and *should not* (11–16) proceed.

These are the categories, with Vidyabhusana’s explanations in English:

1. *pramana*: the means of right knowledge
2. *prameya*: the objects of right knowledge
3. *samsaya*: doubt
4. *prayajana*: purpose
5. *drstanta*: example
6. *siddhanta*: tenet
7. *avayava*: members [the five-part method]
8. *tarka*: confutation
9. *nirnaya*: ascertainment
10. *vada*: discussion
11. *jalpa*: wrangling
12. *vitanda*: cavil
13. *hetvabhāsa*: fallacy
14. *chala*: quibble
15. *jati*: analogue (“futile objections”)
16. *nigrah-asthana*: the point of defeat

The first element, *pramana*, means “reliable knowledge,” and *prameya* (2) its objects. (*Prama*, often translated as “valid,” means “accurate” or “true,” rather than adhering to formal elements.) *Pramana* includes perception (*pratyaksha*), the meeting of the senses and the object, and inference (*anumana*), “knowledge which follows other knowledge . . . preceded by perception” (Ramakrishnan and Moore 357). The other *pramana* are analogy (*upamana*), and word, *sabda*, which are reliable words of trustworthy people. The *-mana* identifies *anumana* (*anu*, “after”) and *upamana* (*upa*, “near to,” “toward”) as types of knowledge. Singh defines inference/*anumana* as “classification, knowledge gained after perception,”

and analogy/*upamana* as “comparison, a knowledge gained by comparison” (137, 190). All knowledge stems from perception.

Samsaya, doubt, “an uncertain knowledge” (Singh 22), establishes the need for debate, leading to the arguer’s purpose (*prayojana*), to properly understand the matter. “Example” *drstanta*, from *drst* “to see,” implies a sharable comparison, literally, “the end of what is seen.”⁶ According to Matilal, “the example is a particular case, well-recognized and acceptable to both sides” (4).

Avayava, the so-called “Indian syllogism,” a five-part method of argument presentation, provides the center of the *Nyaya* perspective. Its categories outline the rhetorical context—the method removes doubt by combining perceived and inferred relationships with an acceptable example—while the “members” provide “limbs” from which to hang one’s arguments. This method became so dominant that *Nyaya*, a “speech with five parts,” came to mean “logic” around the first century AD (Vidyabhusana v, vii). The “members” are detailed in the next section.

After presenting the five-part argument, the arguer offers “supporting arguments,” *tarka* (Matilal 4). The rhetor and respondents begin “ascertainment” (*nirnaya*), “the removal of doubt, and the determination of a question by hearing two opposite sides” (Ramakrishna and Moore 363). This leads to “discussion” (*vada*), where others seek agreeable solutions using the method for their arguments.

In *Nyaya* reality is discernable by perception and the mental processes proceeding from it—inference, memory, etc. Doubt arises from misperception (Singh describes it as “uncertain knowledge” 22). From an Indian perspective, it is fully possible to perceive rightly (*prama*), both on an individual and societal level, provided one is willing to apply the methods and look beyond desire and fear.

The *Nyaya* Method

The *Nyaya* method is most often described in Western terminologies, as with Ramakrishnan and Moore, as:

The Proposition (*pratjna*): “the declaration of what is to be established”

The Reason (*hetu*): “the means for establishing what is to be established through the homogenous or affirmative character of the example”; or the “heterogeneous or negative character of the example”

The Example (*drstanta*): “a familiar instance which is known to possess (or be “devoid” of) the property to be established”

The Re-Affirmation (*upanaya*): “that which, on the strength of the instance, reasserts the subject as being ‘so’”

The Conclusion (*nigamana*): “the re-stating of the proposition, after the reason has been mentioned” (362–3)⁷

However, the Sanskrit terms for each element of the argument reveal terminological relationships needed to properly understand *Nyaya*, as shown here in the classic example:

Hypothesis (<i>pratjna</i>):	The hill (<i>paksha</i>) is on fire (<i>sadha</i>)
Reason (<i>hetu</i>):*	Because there is smoke (<i>hetu</i>)
Examples (<i>drstanta</i>):	Like in a kitchen (<i>sapaksha</i>) [Positive example] Unlike a lake (<i>vipaksha</i>) [Negative example]
Re-Affirmation (<i>upanaya</i>):	This is the case
Conclusion (<i>nigamana</i>):	The hill is on fire

(*Because Sanskrit terms may apply to both individual terms and sentences, the *hetu* applies both to the argumentative step [the reason] and the term used as that reason, “smoke.”)

Through linguistic/conceptual overlap, we observe the fire/smoke relation often enough in the kitchen, infer a relation between the two, and then apply it to the situation before us. This is *anumana*, knowledge from knowledge.

A similar linguistic relation holds among the positive and negative examples and the object of discussion. The positive *sa-paksha* (kitchen) is like the *paksha* (hill), and the negative *vi-paksha* (lake) is unlike the *paksha*, in that they share/don’t share the common characteristic of smokiness. The examples embody/signify the connection that holds the whole argument together.

The linguistic/inferential orientation⁸ of the method is even more clear in the alternate Indian use of the term *linga*, or “sign”⁹ for the *hetu* (Singh 140). Classically, smoke is a sign that must be “present” on both the *paksha* (hill) and the positive *sa-paksha* (kitchen).

Though it differs significantly from the syllogism,¹⁰ some form of the traditional model of argument attributed to Aristotle—a major premise, followed by a minor premise, followed by a conclusion¹¹—is usually misapplied. A general principle is added, one that enables the reason (*hetu*). According to Matilal, such an addition is misleading. He adds such a principle to illustrate:

Wherever there is smoke, there is fire
There is smoke on yonder hill
Therefore, there is fire there

He contrasts that with a three-part model “actually used in Indian texts”:

The hill is fire possessing
 Because it is smoke-possessing (or because of smoke)
 For example, the kitchen

The two are not equivalent. The Nyaya method “cannot be reconstructed as a purely deductive argument” (Matilal 16). He illustrates this further with an alternate recasting:

Wherever there is smoke, there is fire, as in a kitchen
There is smoke on yonder hill
Therefore there is fire there
 [emphasis added]

In this case, the general premise includes the necessary specific example, which “shows that it is a universal proposition along with existential import” (Matilal 16). The example is integral. Similarly, Vidyabhusana places the general principle next to the example (emphasis added):

1. Proposition—This hill is fiery,
2. Reason—Because it is smoky,
3. Example—**Whatever is smoky is fiery**, as a kitchen,
4. Application—So is this hill (smoky),
5. Conclusion—Therefore this hill is fiery. (Vidyabhusana 32)

J. F. Staal makes the differences even clearer. The traditional syllogism repeats the same pattern three times [B (x, y)] with two premises and one conclusion. His formulation appears the reverse of the familiar “All As are B,” but “C, all D” means “All Ds are C.” etc.:

B (C, all D) (All men are mortal.)
 B (D, all E) (Socrates is a man.)
 B (C, all E) (Therefore Socrates is mortal.)

He observes that unlike the syllogism the *Nyaya* method has only one premise.¹² To clarify, I use full terms where he uses letters (h, p → s, p), and include a verbal version:

A (*hetu, paksha*) → A (*sadhya, paksha*)
smoke, mountain (infers) → fire, mountain

As he notes, “the *paksha* is the locus on which both the *hetu* and *sadhya* happen to occur” (153).

This relation, to better reflect the Sanskrit, should read, “This specific mountain presently exhibits smokeness, implying fireness.” As Roy M. Perrett explains, “a fundamental Indian assumption about the nature of knowledge . . . is that it is presentative (*anubhava*), not representative. . . . [T]he Sanskrit word . . . [for] ‘knowledge’ is *prama*. A *prama*, however, is really a knowledge episode, a ‘knowing’” (319). He continues: “[A] knowing episode is an awareness or experience that is the culmination or end-product of a perceptual or inferential process” (320).

The last two steps in the *Nyaya* method emphasize this knowing-episode-ness. The reaffirmation, “this is the case,” (*upanaya*: *upa*, “near to,” “toward,” *naya*, “behavior, reason, policy”), leads to more certain knowledge, the conclusion (*nigamana*: *niga*, “bound” *mana*, “knowing”)—the hill is indeed on fire. The purpose and goal for the rhetor using the *Nyaya* method is to create and share a “knowing episode.”¹³

To clarify the method further, compare again the traditional syllogistic argument:

Major Premise: *All men are mortal.*
 Minor Premise: *Socrates is a man.*
 Conclusion: *Socrates is mortal.*¹⁴

Of course, in the traditional model, Socrates is a stand-in for a specific case. A rhetor using *Nyaya* might argue:

Proposition: [This man] (Socrates) (*paksha*) is mortal-possessing (*sadhya*)
 Reason: Because of his born-ness (*hetu*)
 Example: Like horse (*sapaksha*)
 Unlike god (*vipaksha*)
 Re-Aff.: This is the case.
 [The rhetor (and audience?) rechecks the connections.]
 Conclusion: Socrates is mortal.
 [The rhetor offers the conclusion for discussion.]

The “conclusion” (“Socrates is mortal”) appears as the first statement (“the hill is on fire”), the hypothesis. The major premise, “All men are mortal,” does not appear at all, though the relation between the reason (“born-ness”) and the example (a horse, or anything produced by another) has to be without exception. The example seals the connection.

These contrasts may seem esoteric, but we miss the importance and significance of the Indian approach if we simply assume, as many logicians have, that *Nyaya* offers little but a primitive logic better addressed by the Greeks or that we can simply restate the method in a three-part syllogism. As Simonson points out,

[T]he Hindu pattern of inference is a non-generalizing one. It moves through individual instances of comparison; the explanatory principle must always mention the analogue. . . . The Hindu, unlike the Aristotelian, even in the syllogistic form, begins with effects (i.e. smokiness) and infers causes. (404)

Further, formal logic distinguishes *validity* (proper form) from *truth* (fit to reality). One may make valid untrue arguments—"All green men have mustaches, Bob is a green man, etc." In the *Nyaya* method, truth and validity occur at once because the argument must be "fruitful." According to Singh, "successful activity is the ground for inferring validity, while validity itself consists in cognizing a thing a possessing attributes it actually has" (43–44).

Nyaya's "Discovery" in the West

When "the Indian syllogism" was first "discovered" by nineteenth-century Western philosophers, reactions, as Ganeri notes, were unenthusiastic. Philosopher A. H. Ritter wrote:

[I]n its exposition the *Nyaya* is tedious, loose and unmethodological. Indeed the whole form of this philosophy is a proof of the incapacity of its expositors to enter into the intrinsic development of ideas, whatever knowledge they may have possessed of the external laws of composition. (7)

Not all critics were so hostile and ethnocentric, but in looking for a Greek-Indian connection, most found a flawed syllogism.

However, J. R. Ballantyne observed: "[T]he five-membered exposition [is not] the Hindu syllogism at all, but the Hindu rhetorical exposition." Another philosopher, V. Kennedy, similarly noted that the approach expressed "a more natural mode of reasoning than is compatible with the compressed limits of the syllogism" (qtd. in Ganeri 8).

In 1955 philosopher Daniel H. H. Ingalls identified most precisely the rhetorical basis of the model:

[T]he Indian formula loses its strangeness, and even seems quite natural, when it is remembered that it is not the result of reflection about the Platonic *διάξεις*, but merely the fixing of a method of discussion:

A.: I state the S has the character P (1).

B.: Why?

A.: Because S has the character M (2).

B.: So what?

A.: Well, both M and P characterize X, and neither of them Y (3). So it is in our case (4). Therefore S has the character P (5). (132)

Ingall continues, “The original formula of the sutras is simply an argument by analogy from some individuals to others, rhetorical rather than logical in character. . . . [W]e may take the pretended ‘syllogism’ not as a syllogism but as a formula for inference by analogy, of a rhetorical kind” (133, emphasis added).¹⁵

Unfortunately, no one in rhetoric followed their lead. For logicians the Indian “syllogism” was one-step Indian formal logic; from a rhetorical perspective, it offers a fresh casuistic model of reasoning. The Indian reluctance to abstract logic from context, a weakness in terms of formal logic, actually foreshadows the emergence of the “informal” logic that appears in the West mid-twentieth century.¹⁶

Nyaya and Western Rhetoric

According to Burke, rhetoric’s function has been largely to bridge our *fundamental isolation* from one another: “If men were not apart from each other, there would be no need for a rhetorician to proclaim their unity” (22). In *Nyaya*/Hindu thinking, *vada* reveals our fundamental *unity*.

Burke also believes that though we use persuasion to create consubstantiation (the sharing of common interests and goals), identification (our desire for connection) and division (our aversion to it) remain in tension. “Interference,” a constant displacement of fulfillment, is the only way to sustain persuasion (275). In *Nyaya*, both what we desire and what we avoid are considered “faults” blocking true perception and helpful debate.

For instance, the ninth category (after “discussion”) is “wrangling,” which aims at “gaining victory,” and is followed by enumerations of fallacious techniques. According to Simonson,

All of Aristotelian dialectic falls within this class of wrangling; but Aristotle believed that the end of victory could be approached via the

means of fair and unprejudiced argument. This is obviously not the case with Hindu argument; if the goal is victory, the means will be spurious. (405)

Nyaya differs also in its concept of the rhetor. In Chaim Perelman's "New Rhetoric," the rhetor controls the rhetorical situation:

In *his* description of facts, truths, and values, *the orator* must *employ* language that takes into account the classifications and valuations implicit in the audience's acceptance of them. . . . The purpose of the discourse in general is to *bring the audience* to the conclusions *offered by the orator*, starting from premises they already accept. (72–73, emphasis added)

Burke similarly states that the speaker's "act of persuasion may be for the purpose of causing the audience to identify itself with the speaker's interests, and the speaker draws on identification of interests to establish rapport" (46). Rhetoric is reaching the *rhetor's ends* in at least *apparent collusion* with audience beliefs.

Similarly, the goal of *Nyaya* is "discussion, inquiry, and consensus," yet according to Simonson, "[s]eeking and obtaining a consensus may yield harmony and *self-abnegation*, predominantly the ends of Hindu thinking" (409, emphasis added). The rhetor's goal is not self-expression, persuasion, or winning, but a "seeing together." Burke's notion of "consubstantiation"—unification based on identification with common goals—is true consubstantiation. Whereas Burke says the rhetor is "both joined and separate," here the "separation" is due to ignorance (21).

Similar to Michael Gilbert's "Coalescent Argument" or Foss, Foss, and Griffin's "Invitational Rhetoric," *Nyaya* seeks commonalities. As Potter notes, "a philosopher's demonstration that something implied by his map or scheme is in fact regularly experienced by human beings is a point in favor of his system" (58). Oliver concurs: "In ancient India the rhetorical end could only be a common search by speaker and hearer for enlightenment, through penetration of unified truth which encompasses them both and all else besides" (50). The goal of the rhetor is "to explain or predict shared perceptions" (Potter 59), "to create order out of life's chaos" (Rogers and Jain 388).

Successful argument (*vada*) is immediate and practical, resulting in "successful behavior" (Rogers and Jain 387), "successful action" (Ramakrishnan and Moore 357). Singh summarizes: "[T]he validity of a cognition depends on fruitful activity" (*privritti samartha*)" (43).

Nyaya's perspective aligns somewhat with the Western "notion that the power of truth transcends the limitations of the personal agent who propounds

it.” Such a view, once identified with a Christian perspective, has now, according to Burke, “found its materialistic counterpart in the terminologies of science” (76). *Nyaya* posits a transcendent view of reality, but describes it in immediate, situated ways. Toulmin focuses on this situational aspect of argument as key to practical reasoning.

***Nyaya* Rhetoric and Toulmin’s Practical Reasoning**

Recently, lamenting formal logic’s lost connection with everyday argument, many philosophers, including Toulmin, developed “informal” alternatives. In “The Abuse of Casuistry,” he and Jonsen identify two approaches to reasoning. One is the “classical”/“theoretical” (syllogistic) approach—“idealized,” “atemporal,” and “necessary (applying most to science)”; the other is “practical reasoning”—“concrete,” “temporal,” and “presumptive” (applying most to specific and debatable situations). Once seen as “divorced,” the two approaches reflect ends of a continuum, from mathematics to physics to biology to practical reasoning. The main difference is emphasis: Syllogistic sciences seek to “understand” the world while the practical disciplines seek to “change” it (121).

Toulmin notes that even within science, argument forms vary. In *speculative* arguments, “the . . . applicability of . . . a concept (principle, method) is established.” For this second type, “reasoning is commonly based on appeals to *precedent*, *analogy*, and the other devices of case law” (“Plausibility of Theories” 626).

Nyaya resembles both practical and speculative reasoning, applying precedent and analogy to specific cases—without applying a general principle. The running example used by Jonsen and Toulmin in “The Abuse of Casuistry” can be used to illustrate both their and *Nyaya*’s methods.

In Jonsen and Toulmin’s “practical arguments,” the “outcomes of experience . . . serve to guide future action.” A “general warrant based on similar precedents” is applied to a “present fact situation,” leading to a “provisional conclusion” (Foss, Foss, and Trapp 120).

To illustrate this process, the authors use a medical decision as an exemplar of practical reasoning because it “blends theory and practice, intellectual grasp and technical skill, *episteme* and *phronesis*,” and is thus ideal for studying how practical reasoning works in context (121):

In a given case, when the doctor accepts a scientific theory or clinical procedure, his [sic] decision is not a mere hunch or matter of taste, but typically it does remain a matter of *personal judgment*. . . . When

a doctor reviews a medical history and pattern of symptoms, what exactly does he *perceive* (emphasis added)? We can define the object of clinical judgment more clearly if we think of this clinical perception as a kind of pattern recognition. (124)

Such practical *inferential* reasoning, like *Nyaya*, involves perception and analogous “pattern recognition.” They continue:

[A] description is **clinically fruitful** only when it is based on **perceptive** study of actual cases, and is practically effective only if **paradigmatic cases** exist to *show* in actual fact what can otherwise be stated: namely, the actual onset, syndromes, and course typical of the condition. Given this *taxonomy*, of known conditions and the paradigmatic cases that exemplify the various types, diagnosis becomes **a kind of perception**, and the reasons justifying a diagnosis rest on **appeals to analogy**. (Foss, Foss, and Trapp 124, bold added)

The doctor’s diagnosis then involves three elements, all based in perception—the proposition (possible diagnosis), reason, and analogy, reflecting *Nyaya’s paksā* (proposition), *hetu* (reason) and *sadhya* (example). The doctor’s goal, as in *Nyaya*, is even “fruitful” activity.

In their description Jonsen and Toulmin do not specify exactly what the warrant would be. Their “paradigmatic cases,” refer to analogies rather than a general principle, although their “onset, syndromes, and course” imply a warrant of sorts. The diagnosis, as they describe it, relies on “perception” and “analogy,” which might be (in their terms) the backing, or support for the warrant, here a general consensus or databank of applicable cases. They imply an argument structure similar to this:

Data: The patient exhibits certain symptoms

Warrant: The symptoms typify a particular disease (theory)

(Backing: applicable analogous cases)

Claim: The patient must have this particular disease

Nyaya, however, never posits such a warrant, and the doctor in Jonsen and Toulmin’s example does not seem to need one either—the cases (here plural to *Nyaya’s* singular) apply directly to the diagnosis. The example implies that in immediate practical decisions, precedent alone is enough: the doctor’s *actual*

decision is a “*perception*” based in “*analogy*.” In *Nyaya* this is the basic concept of the *hetu* (reason), the “because.”

Toulmin uses “because” in a different manner. In *Uses of Argument*, the warrant relies on a “since” relation to the data and claim, and the backing relies on a “because” relation to the warrant:

(Data) Peterson is a Swede
 So (Qualifier) Almost certainly
 (Claim) Peterson is not a Catholic
 Since (Warrant) A Swede can be taken to be almost certainly not a
 Roman Catholic
 Because (Backing) The proportion of Roman Catholic Swedes is less
 than 2%

Nyaya's *hetu* functions differently from the “backing,” as it is a relationship (most Swedes are not Catholic) rather than a “fact” (“the proportion of . . .”). Toulmin's vertical warrant/backing applies to the horizontal data/conclusion. *Nyaya* instead relies on a *property relation*: The reason (*hetu*) and the positive example (*sa-paksha*) must share a common property—fire normally emits smoke, Swedes normally aren't Catholic.

The author's illustration implies a property relation is being used by the doctor to make decisions, (symptoms are properties of diseases); thus the *Nyaya* method can be readily applied. To be consistent with the method, I inserted a specific disease and some fictional precedent cases that would lead to the examples:

Proposition: *The patient is cancer-possessing*
 Reason: *Because she/he is symptoms-possessing*
 Examples: *Like leukemia (a specific example)*
 Unlike hygeia (cancer free, healthy)
 Re-Affirmation: *This is so (the case)*
 Conclusion: *The patient is cancer-possessing*

This inference-based model functions here semiotically and rhetorically. Prior knowledge aids the doctor's decision, just as prior knowledge of smoke and kitchens helps the reasoner to infer the hill is on fire. Toulmin's model, given a more concrete example, would produce this sentence: *The patient has certain symptoms (data) identified as symptoms of cancer (warrant), so the patient has cancer (claim)*. If we recast the *Nyaya* argument as a sentence, the difference is clear: *The patient has cancer because she/he has symptoms like leukemia [any specific applicable condition], not like hygeia [any specific*

non-applicable condition]. *This is so. The patient has cancer. Nyaya matches a case, not “cases.”*

Semantically, we make meaning of things by both stereotypes (a list of characteristics) and prototypes (exemplars). The stereotype applies readily to Toulmin’s approach (“all cats have . . .”) and the prototype to *Nyaya* (“this animal is like *exemplar* cat . . .”). We use one or both in most decisions. Each informs the other.

Toulmin in *An Introduction to Reasoning* admits a modification of his model that resembles *Nyaya’s* approach. As he notes, often arguments are based in “signs,” and,

many aspects of medical diagnosis rely on reasoning from sign. Certain observable characteristics . . . may not be connected with specific diseases directly and inevitably, but they may accompany them often enough to justify the physician in making certain additionally tests when he observes enough of these symptoms. (223)

These signs, in Toulmin’s view, function as data to which a warrant is applied. *Nyaya* connects the signs more directly to a specific “case.”

Since doctors’ decisions are contingent, Toulmin adds the “rebuttal” (other possible explanations) and “qualifier” (“probably”). The *Nyaya* method offers *tarka*, the presentation of related arguments, *nirayana*, the presentation of counter arguments, and *vada*, discussion. It is a debate-based model, but the method offers ways to think through counterarguments, adjusting the five parts as needed.

Nyaya allows also for some degree of probability in the method. As Subhash Kak notes, the “frequency of observation increases the probability of the universal, but it does not make it certain” (9). One could admit that fire may occur without smoke, as in hot iron, but this may not lessen the relation if the analogies work generally (smoke still goes with fire *in the kitchen*). *Nyaya* avoids the “divorce” between theoretical and practical reasoning by positing the world as predictable only to a point, a fact that the West has only slowly come to grips with in the postmodern era.¹⁷

Nyaya, then, might apply somewhat to how we *make* decisions while Toulmin’s model might explain how we “justify” them. In *Uses of Argument*, he qualifies his model as explaining only how we justify or defend our positions. The immediate *Peterson is almost certainly not a Catholic because “Swede” doesn’t go with Catholic*, a simple property relation, becomes “justified” by the general and more formal statement: “A Swede can be taken to be almost certainly not a Roman Catholic because . . .”

Interestingly, Toulmin warns against the overemphasis of warrants. In “The Tyranny of Principles,” he notes that our culture stresses the application of general rules over case responsiveness. His experiences with the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research revealed to him that although the commission had reached consensus, they had done so on different “principles”—Catholics on Catholic principles, scientists on scientific principles, etc. As he put it, “They could agree; they could agree what they were agreeing about; but apparently, they could not agree why they agreed upon it” (95).

This led Toulmin to wonder what this final “appeal to principles” really achieved. . . . Such principles serve less as foundations, adding intellectual strength or force to particular moral positions, than they do as corridors or curtain walls linking the moral perceptions of all reflective human beings, with other, more general positions. (95)

In the end, “the appeal to principles undermined the recommendations by suggesting to onlookers that there was more disharmony than ever showed up in the commissioners’ actual discussions” (95). Though decision-makers drew upon differing preconceptions, they did not need them to *express* their concerns. Communities may share observations in spite of differing principles.

Toulmin identifies another problem with warrants: “[I]n the long run, no principle—however absolute—can avoid running up against another equally absolute principle; and by those who have the experience and discrimination needed to balance conflicting considerations in the most humane way” (100). He concludes, “practical reasoning in ethics, as elsewhere, is a matter of judgment, of weighing different considerations against one another, never a matter of formal theoretical deduction from strict or evident axioms” (106).

Nyaya Reasoning: Conclusions

Toulmin notes that “new ways need to be found that answer our new needs” (“Tyranny” 99). *Nyaya* is far from a “new way,” but it certainly provides some perspective on how we make practical arguments, how we *make* and *describe* immediate decisions. The model is about *this* fire, *this* mountain, our present situation, not all fires, all mountains.

Nyaya challenges the rhetor to consider *motives*. Tracing the analogy of the clinician, the *Nyaya* reasoner focuses on the “patient” and the truth of the patient’s situation rather than the clinician’s own advantage or reputation. The desired outcome should be a “knowing episode” between the doctor and the patient, bearing in turn a fruitful result and positive relation to the community. Such a perspective and focus on immediate situations discourages conjectural rhetoric and encourages

direct involvement in practical decisions, a concern shared by Toulmin and others who seek real-world applications to rhetorical thinking.

Nyaya also explains how practical reasoning may work in context. Avoiding the West's abstracted logic, *Nyaya* never separates theory from practice and reveals how we may not need major premises or warrants to make decisions. Because it exposes the inferential structure of argument, it applies well to both ethical and scientific reasoning. Because it begins with *testing* the hypothesis, as Joseph M. Rogers and Mahendra Kumar Jain note, it also relates fruitfully to scientific inquiry, furthering connections between science and rhetoric. What took thousands of years and a paradigm shift in Western thinking was anticipated in India twenty-three hundred years ago. *Nyaya* provides a casuistic process of reasoning that short-circuits the divorce of logic and reason.

Certainly neither *Nyaya*, nor this limited overview, solves all the problems in practical rhetoric. *Nyaya's* unified theory of existence is still challenged in the West, though perhaps supported by modern physics. Its reliance on perception has been challenged in both the East and West; *Navya Nyaya* provides elaborate defenses of that position.

Nyaya has rich implications for how we make and explain immediate decisions, provoking the rhetor to more specific and communal thinking. How would rhetoric differ if rhetors sought to define their arguments beyond their desires and fears, to find sharable ideas, common perspectives?

This essay begins the process of inclusion and reconceptualization needed to recognize *Nyaya* as a significant rhetorical perspective while offering a glimpse at an alternative to Western rhetoric and history. While Jonsen and Toulmin demark two views of reasoning used in the West, *Nyaya* offers an alternate third approach, providing insight into the rhetoric of how we make decisions and arguments, who we make them for, and for what ends. It also offers a glimpse into the thinking of a culture and tradition largely unfamiliar in the West, as well as a broader view of the goals of rhetoric and the human relations that it implies.

Notes

¹Special thanks to *RR* peer reviewers George Kennedy and Richard Fulkerson, whose comments proved invaluable, and also to Uma Krishnan for her insights into Indian terminologies. Thanks also to Lindsay Brunner for editing and formatting.

²I follow Matilal's phrase "*Nyaya* method" to describe the five-part "syllogism" in *Nyaya's* approach to argument. *Avayava*, or members, not a technical name for the approach, identifies its role in terms of the other elements—the "members," or elements of argument, much like Toulmin's *Elements of Argument*. Sinha quotes Vidyabhusana: "Technically the word *Nyaya* signifies a syllogism (or a speech of five parts) . . ." (Vidyabhusana v).

³See Sinha's introduction to Vidyabhusana's translation of the *Sutras* for a detailed discussion of the variances in number of aphorisms and debates on authorship. See also Daya Krishna's *Indian Philosophy: A Counter Perspective*.

⁴The six schools of thought were, according to I. M. Bochenski, *Samkhya*: dualistic ontology and cosmology; *Yoga*: systemization of mythical and ethical practice; *Purva-mimamsa*: monistic physics; *Nyaya*: epistemology, logic, and methodology; *Vaisesika*: realistic ontology and systematics (116–17).

⁵Daya Krishna believes *moksha* is not the goal of *Nyaya*, that the inclusion of the idea of *moksha* in the Sutra was a formality and *Nyaya* has “nothing to do with *moksha*” (31). He believes much of Hindu thought, like argument, is motivated by more pragmatic concerns. He admits that both ancient and modern commentators throughout time have found *moksha* integral to *Nyaya*.

⁶Definitions not attributed to a particular author come from the *Cologne Digital Sanskrit Lexicon* (<http://webapps.uni-koeln.de/tamil/>).

⁷The Greeks also had a five-part model of argument, the *epicheirme*: the *proposition*, the *reason*, the *proof of the reason*, the *embellishment*, and the *resume*. The terms resemble Toulmin's six-part model, since the “proof of the reason” is not a specific example, as in the *Nyaya* method, but arguments in support of the reason, similar to Toulmin's “backing.” The “embellishments” imply Toulmin's “conditions of rebuttal” or *Nyaya*'s “confutation” or “ascertainment.” Quintilian's *Institutio Oratoria*, Book V, Chapter 14 discusses the *epicheireme*, *sylogism*, and *enthymeme*.

⁸Matilal's explanations for the linguistic relations of the elements are most detailed. What we might refer to in linguistics or logic as a “property” of a term is more complex in Sanskrit. Properties are normally physical, like the wings of a bird, or “qualities, like color or shape, or attributes like motion of a moving body,” or even “abstract universals” like “bird-ness” or “dog-ness.” Sanskrit includes also “concrete substantial masses like the particular body of water or fire, or even objects like a post or rock” (27). Smoke can also “contain” a mountain. He uses the terms *locatee* and *loci* or *locus* instead of *property*: The fire (*locatee*) contains the mountain (the *locus*) (respectively *dharman* and *dharmins*). At its very basis, Sanskrit “is not a language without particulars, but a language of particulars only, the universal element being implicitly present only in the relational factor—the combiner of the locus and the locatee” (27).

⁹*Nyaya* bears some resemblance to Toulmin's “reasoning from signs” (Toulmin, Rieke, and Janik 222–25). However, the authors simply replace what is normally termed the “data” with signs from which an argument is inferred. They do attach an example to the reason. Discussion on this matter appears later.

¹⁰See Shayer for a detailed discussion of the differences between Aristotle's syllogism and the Indian formula.

¹¹Because *Nyaya* lacks a premise, it might be compared to Aristotle's *enthymeme*, but the syllogism's premise is still implied in the *enthymeme*.

¹²Ingalls suggests the Indian formulation is “Occamist rather than Aristotelian, since the ‘reason’ always corresponds to a singular proposition” (142).

¹³Ganeri, following the lead of some nineteenth-century philosophers, notes that the model probably was dialogic, each step a response to a “silent interlocutor.” Ingall's version reflects a similar insight:

1. What is your thesis? That the hill has fire on it.
2. Why? Because smoke is there.
3. So what? Where there is smoke, there is fire: e.g. the kitchen.
4. And? The hill is such a smoky place.
5. So? Therefore, it has fire.

¹⁴See Schayer.

¹⁵In 1932 Schayer noted that “the Indian syllogism is not a logical theorem but a combination of two rules of inference: the *upanaya* [application] and the *nigamana* [conclusion]”—the fourth and fifth steps—“this is so,” and “conclusion.” He compares these to rules of modern logic: *substitution* for “wherever there is smoke there is fire” (a concrete example is substituted—that is, this mountain is smoking and so is on fire); and *separation* (separates the reason from its implication). Schayer admits that *Nyaya* only *implies* the first rule in the fourth step, since it does not apply the general “wherever there is smoke there is fire” explicitly.

¹⁶In spite of later adaptations and the emergence of a new *Nyaya* movement (*Navya-Nyaya*) during the West’s Medieval period, *Nyaya* never dropped the immediate, the concrete from argument (see Ingalls 142–43).

¹⁷According to later *Navya-Nyaya* explanations, “the subject (*paksha*) possesses a certain property (*dharma*), (knowledge which is) qualified by the *vyapti*” (Ingalls 141). *Vyapti*, usually translated “pervasion,” is not an abstract application of a general principle, but a *property relation*, as smoke with fire. See note 6.

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