

On Jain Anekāntavāda and Pluralism in Philosophy of Mathematics

Landon D. C. Elkind*

I claim that a relatively new position in the philosophy of mathematics, pluralism, overlaps in striking ways with the much older Jain doctrine of *anekāntavāda* and the associated doctrines of *nayavāda* and *syādvāda*. I first outline the pluralist position, following this with a sketch of the Jain doctrine of *anekāntavāda*. I then note the strong points of overlap and the morals of this comparison of pluralism and *anekāntavāda*.

I direct this comparison to pluralism's prospective critics and pluralism's prospective defenders. Prospective critics of pluralism may rethink tried critiques of pluralism, especially after noting the frequent conflation of pluralism and relativism. Prospective defenders of pluralism in turn will see the benefits of further exploration of Jainism.

1. Anekāntavāda and Associated Jain Theses

Let us first understand the Jain doctrine of *anekāntavāda* and its closely related doctrines of *nayavāda* and *syādvāda*, also called '*sapta-bhaṅgī-naya*'. Jeffrey Long calls all three theses "the Jain doctrines of relativity", and, as Long notes, *anekāntavāda* is a metaphysical claim, *nayavāda* is "an epistemic corollary of [*anekāntavāda*]", and *syādvāda* is a constraint on the analysis and evaluation of assertions that follows in turn from *syādvāda*.ⁱ

I begin with *anekāntavāda*. *Anekāntavāda* claims that substances (*dravya*),ⁱⁱ or all those entities that comprise reality, have infinitely many modes and qualities.ⁱⁱⁱ Modes dictate in what respect a substance possesses a quality; the qualities never leave the substance, but only change in their metaphysical expression from the substance.^{iv} To take Long's example (taken from Mookerjee), a pot possesses pot qualities in the affirmative mode, and a pot also possesses pen qualities in the negative mode.^v

We thus find two metaphysical facts: that the pot has pen qualities and that the pot does not have pen qualities, but both these statements obtain in some respect, or in some way.^{vi} This leads us to the doctrine of *nayavāda*, which holds that the truth or falsity of a statement "depends upon the perspective" from which the statement is asserted.^{vii} In the above case, 'The pot is pen-like,' will be false from the existence (of the pot) viewpoint and true from the non-existence (of the pen) standpoint. A standpoint ('*naya*') is a perspective from which an object is viewed.^{viii} Understanding and right knowledge requires understanding the *nayas* from which claims are made.^{ix} As an example, let us take the substance standpoint and the modification standpoint from Siddhasena Divākara; from the substance standpoint, the self is permanent (the self never comes to be or ceases to exist), but from the modification standpoint, the self is changing (undergoing successive states).^x Jain authors vary on the question of how many *nayas* are admitted, but for our purposes, we need only keep in mind that the truth of a statement and the proper understanding of an object, all take place from a particular *naya*.

This largely epistemic thesis brings us to the final "Jain doctrine of relativity", *syādvāda*, or "conditional or qualified assertion".^{xi} As the name suggests, this Jain doctrine dictates that

* Visiting Assistant Professor in Philosophy at the University of Iowa, Alumni ISSJS (2014)
E-mail: landon-elkind@uiowa.edu

philosophical claims must be formulated, expressed, and analysed from a some *naya*; this is achieved by prefacing statements with the particle ‘*syāt*’.^{xii} So *syāt* acts as a sentential operator that qualifies an assertion by some *naya*, for in the Jains technical sense of ‘*syāt*’, ‘*syāt* means “in some respects” or “from a certain point of view”’.^{xiii} For example, ‘The self is permanent’ would be ill-formed according to *syādvāda*; “*Syāt*, the self is permanent,” is properly formed, and from one perspective (the substance standpoint), the claim holds, while from another one (the modification standpoint), the claim does not.

Thus, *syādvāda* claims that no assertion is correct unless it is qualified by ‘*syāt*’; combined with ‘*eva*’, the phrase ‘*syāt eva*’ qualifies an assertion by ‘in this particular respect’.^{xiv} Four factors may be associated with this particular respect: (1) a specific being or object (‘*sva-dravya*’), (2) a specific location (*sva-kṣetra*), (3) a specific time (*sva-kāla*), and (4) a specific state (*sva-bhāva*).^{xv} In one assertion, all other times, places, objects, and states are excluded; any specific assertion thus leaves room for many more.

But while there may be infinitely many standpoints, qualities, and modes from which a substance may be understood or from which a claim concerning a substance may be asserted, only seven truth-values are possible for such a statement and from a particular perspective. All statements are thus partial or limited; this is the doctrine of *sapta-bhaṅgī-naya*, “the theory of sevenfold predication”. Seven statements, where ‘statement’ is understood to include the necessary specifications, may be made concerning any object: (1) in some respects it is (*syāt asti eva*), (2) in some respects it is not (*syāt na asti eva*), (3) in some respects it is and it is not (*syāt asti eva syāt na asti eva*), (4) in some respects it is inexpressible (*syāt avaktavyam eva*), (5) in some respects it is and it is inexpressible (*syāt asti eva syāt avaktavyam eva*), (6) in some respects it is not and it is inexpressible (*syāt na asti eva syāt avaktavyam eva*), and (7) in some respects it is and it is not and it is inexpressible (*syāt asti eva syāt na asti eva syāt avaktavyam eva*).^{xvi}

Let us summarize our findings. We start with *anekāntavāda*, a metaphysical thesis that all substances possess infinitely many qualities and modes. We proceed to an epistemic corollary of *anekāntavāda*, *nayavāda*, an epistemic qualification of any truth by the standpoint from which a substance is understood in its infinitely many qualities and modes. We finally reach *syādvāda*, a linguistic thesis and principle of philosophical analysis that insists on disambiguating philosophical claims by formulating, expressing, and analysing assertions via the perspective from which one asserts such claims - most transparently, by qualifying every statement by a *syāt* particle. These are “the Jain doctrines of relativity”.

2. Pluralism as a Philosophy of Mathematics

I proceed to characterize pluralism. For a first approximation of pluralism in the philosophy of mathematics, let us start with Friend’s description of someone who subscribes to pluralism:

A pluralist in the philosophy of mathematics is someone who places pluralism as the chief virtue in his philosophy of mathematics. He brings the attitude to bear on mathematical theories and on different philosophies of mathematics. Pluralism is founded on the conviction that we do not have the necessary evidence to think that mathematics is one unified body of truths, or is reducible to one mathematical theory (foundation).^{xvii}

Thus, a pluralist refuses to privilege one mathematical theory (or foundation) over others.

Let us, with Friend, distinguish three levels at which one might be a pluralist: first, at the level of specific theses or results within some theory; second, at the level of multiple theories, usually viewed within some full-fledged mathematical theory; and third, at the level of full-fledged mathematical theories.^{xviii} Someone might be a pluralist at the level of particular theses or the level of theories without being a pluralist in the “deeply radical” sense meant by Friend (and me), for dogmatism of all sorts coheres with first-level or second-level pluralism.^{xix} Pluralism properly so-called, what Friend calls “third-level pluralism”, at least requires first-level pluralism and second-level pluralism; Friend writes:

Third-level pluralism is pluralism towards at least: (i) mathematical activity at the [(first) level] of working within a mathematical theory, or working with several mathematical theories to prove or verify purported theorems, (ii) mathematical activity at the [(second) level] of developing whole mathematical or logical theories, or working within a theory to compare ‘smaller’ theories to each other, (iii) philosophical work concerning particular results or notions in mathematics...with, or without, having any particular philosophical tradition informing the work, and (iv) philosophical work at the (second) level of developing a foundational philosophy of mathematics.^{xx}

But we may push pluralism further, to apply the pluralist bent to pluralism itself, as Friend does.^{xxi} A pluralist of this sort (at the third level) concedes that the background (para consistent) logic of pluralism admits of multiple coherent (because non-trivial) interpretations.^{xxii} Thus, the para consistent logic underpinning pluralism tolerates pluralisms, or pluralism towards pluralism, meaning multiple non-trivial interpretations of the same position in philosophy of mathematics admit of approximately the same degree of epistemic confidence; a pluralist may thus remain agnostic even on the privileged interpretation of the para consistent logic that supports the pluralist position.^{xxiii}

Let us now summarize the pluralist philosophy of mathematics. Pluralists adopt an attitude of agnosticism towards the norms of mathematics, mathematical theories, and foundations of mathematics. The pluralist willingly dons the lenses of a theory to do fruitful work, thereby adopting the point of view internal to that theory (along with its corresponding norms), but has no qualms against donning multiple lenses at once (say, to see a particular mathematical theorem or theory more clearly.)^{xxiv} The pluralist refuses to privilege any of the competing theories, foundations, or norms of mathematics, even to the point of finding mathematical fruits in trivial theories, like A. N. Prior’s “Tonk Theory”.^{xxv} Pluralism is motivated by insufficient evidence for privileging any particular theory over others; we cannot know that one theory or foundation is ‘the’ correct, supposing that there even is such a thing; nor can we reasonably believe that such a theory shall be found, soon or even ever.^{xxvi} However, new evidence may remove this epistemic barrier to accepting a “unified foundation”.^{xxvii} Thus, a pluralist may develop multiple coherent but mutually inconsistent extensions of orthodox theories in mathematics, even as foundational theories.^{xxviii}

3. Points in Common

Without any suggestion of identifying Jain *anekāntavāda* and pluralism in the philosophy of mathematics, I turn to the overlapping features of *anekāntavāda* and pluralism.

First, we find both Jains and pluralists refuse to privilege one theory or perspective.^{xxix} “The worst philosophical error one can commit, and which is the root of all error, is *ekāntatā-* on-sidedness, or absolutism.”^{xxx} Again, “The Jains evaluate alternative schools of thought as

representing partially correct, but incomplete, *ekānta nayas* [‘one-sided view points’].^{xxxix} Friend also writes, “[I]s the pluralist ever intolerant, and if so, what about?...The pluralist is intolerant towards dogmatism and absolutism.”^{xxxix}

Second, we discover a similarity in the objections to each position; both Jain *anekāntavāda* and pluralism are sometimes accused of being species of rampant relativism, a relativism according to which the proponent’s view (whether Jainism or pluralism) undermines itself.

On the Jain side, we see that especially sensitive targets include *ahimsa*: “With *syādvāda*, for instance, how can one claim, as the Jains do, that violence is evil?”^{xxxix} And again:

“If all our knowledge concerning reality is relative, they say (the old Indian critics like Śaṅkara, Rāmānuja etc.), the Jaina view must also be relative. To deny this conclusion would be to admit, at least, one absolute truth; and to admit it would leave the doctrine with no settled view of reality, and thus turn it into a variety of scepticism.”^{xxxix}

Such charges have often been levelled against *anekāntavāda*; for a list of the more aptly put ones, see L. V. Joshi’s superb summary of Bhasarvajna’s *Nyayabhusana* (950 CE).^{xxxv} But Jains may avail themselves of a quick reply by reference to omniscience, or the absolute (unqualified perspective) of an omniscient being such as Mahāvīra, the 24th tīrthānkara of Jain religion.^{xxxvi} On this point, Ramjee Singh is excellent:

[T]he Jaina theory of relativism does not go against the Jaina theory of omniscience because...relativism, according to Jaina philosophy, applies to our knowledge of reality in virtue of the fact that we i.e., lay man, approach reality only from this or that point of view. Therefore, if it is made possible to approach reality from all possible points of view, i.e., from no-one-particular-point-of-view, then the resulting knowledge will not be vitiated by relativism.^{xxxvii}

I think that we must conclude that the self-refutation charge misses its target.

We encounter two similar (also apparent) problems for the pluralist, which can be put as follows.^{xxxviii} A pluralist refuses to set norms for mathematics or adjudicate between competing mathematical theories.^{xxxix} The pluralist thus seems to dispense with all principles competent to decide between competing theories. Absent setting or endorsing some norm to adjudicate between mathematical theories, does a pluralist thereby support any theory, and so embrace rampant relativism? This appears to collapse pluralism into a trivial theory, or a theory in which any well-formed proposition (because all mathematical theories) holds!

Friend responds by noting that not all contradictory theories are trivial theories: considering a proposition from two different but together inconsistent theories do not entail triviality, for we can reason in inconsistent settings without lapsing into triviality.^{xl} Moreover, a pluralist does not accept trivialism, since not every judgment holds good: two plus nine is not equal to thirty-four in Peano Arithmetic, and for this judgment, we need not appeal to mathematical norms, but simply the axioms of Peano Arithmetic.^{xli} In Jain vocabulary, fixing a *naya* determines the truth-values of assertions.

Third, we can note that *anekāntavāda* applies to itself, just as pluralism self-applies. We already saw that Friend is pluralist towards pluralism; for *anekāntavāda* applied to itself, we can turn to Mahaprajna (quoted in Long): “The propounder of non-absolutism...admits both

non-absolutism and absolutism in their proper perspective. This is why the system of sevenfold predication is applicable to non-absolutism...itself".^{xlii}

We thus see some points of overlap in Jain *anekāntavāda* and pluralism in the philosophy of mathematics; first, both positions refuse to privilege one among competing perspectives or theories, second, both positions endure frequent criticisms of relativism or self-refutation against each view (which fail), and third, each position applies to itself.

4. Points of Difference

Let us now turn to the points of difference between Jain *anekāntavāda* and pluralism in the philosophy of mathematics. The pluralist will thereby be informed about a number of these presenting distinct takes on and justifications for pluralism.

In the first place, Jain *anekāntavāda* does not endorse contradiction, whereas pluralism decidedly does. Against criticisms that Jainism endorses contradiction, Jains may reply:

This criticism, however, is easily met with the recognition that it is based on a misunderstanding of the system of *nayas*. As mentioned earlier, the Jain position is not that contrary assertions can be made of an entity in the same sense, but only in different senses and from different perspectives - perspectives which the Jains spend a great deal of time and energy delineating.^{xliii}

In contrast, Friend embraces paraconsistent logic according to which inconsistency does not entail triviality: "I am starting with a paraconsistent logic, so the standard model is already paraconsistent."^{xliv} In Friend's case, the endorsement of contradiction is straightforward. But one may object that the Jains do in fact endorse contradictions.

B. K. Matilal, for instance, suggests an affinity of paraconsistent logics and *anekāntavāda*, focusing especially on the third primitive predication of *sapta-bhaṅgī-naya*: "This metalinguistic predicate 'Inexpressible' as a viable semantic concept has been acknowledged in the discussion of logical and semantical paradoxes in modern times."^{xlv} He writes:

The 'Inexpressible' as a truth-like predicate of a proposition has been explained as follows: It is definitely distinct from the predicate 'both true and false'. For the latter is only a combination of the first two predicates. It is yielded by the idea of the combinability of values or even predicates that are mutually contradictory. Under certain interpretation[s], such a combined evaluation of the proposition may be allowed without constraining our intuitive and standard understanding of a contradiction and consistency...However, the direct and unequivocal challenge to the notion of contradiction in standard logic comes when it is claimed that the same proposition is both true and false at the same time in the same sense. This is exactly accomplished by the introduction of the third value - 'Inexpressible,' which can be rendered also as paradoxical.^{xlvi}

We find in Matilal a different answer from Long. We must therefore decide whether the Jain truth-value of inexpressible matches contradictions in modern paraconsistent logics.

Let us see how Friend defines contradictions: "A contradiction is a sentence of the form ' α and not α '."^{xlvii} Now, let us grant (as Long does not) that the Jains endorse a contradictory

sentential operator, *syāt avaktavyam eva*. Even those favouring this reading, like Matilal, admit that the modern notion of contradiction differs from the Jain notion:

Samantabhadra and Vidyānanda both explain the difference between the ‘true and false’ and the ‘Inexpressible’ as follows: The former consists in the gradual (*kramarpaṇa*) assigning of the truth-values, true and false, while the latter is joint and simultaneous (“in the same breath”) assigning of such contradictory values (cf. *saharpaṇa*). One pat suggestion is that the predicate is called ‘Inexpressible’ because we are constrained to say in this case both ‘true’ and ‘false’ in the same breath. Something like ‘true-false’ or ‘yes-no’ would have been better, but since these are only artificial words, and there are no natural-language-words to convey the concept that directly and unambiguously flouts non-contradiction, the Jains have devised this new term ‘Inexpressible’ to do the job - a new evaluative predicate, non-composite in character, like ‘true’ and ‘false’.^{xlviii}

The last line is key, namely that the Jains treat contradiction to be a matter of contrary predicates being assigned simultaneously to the same object, not a matter of truth-functional contradiction by conjoining a proposition with its negation; as Matilal notes, truth matrices are anachronistic in understanding *sapta-bhaṅgī-naya*.^{xlix}

Furthermore, simultaneous affirmation of contrary predicates does not commit Jains to paraconsistency. Jonardon Ganeri is helpful on this score:

[The Jains’] goal is, to be sure, to reconcile or synthesize mutually opposing philosophical positions, but they have no reason to suppose that a single philosophical standpoint [*naya*] can itself be inconsistent. Internal consistency was, in classical India, the essential attribute of a philosophical theory.^l

Ganeri continues by quoting Prabhacandra’s Prameyakalamārtaṇḍa:

[I]n the fourth value “non-assertible”, there is no grasp of truth or falsity. In fact, the word “non-assertible” does not denote the simultaneous combination of truth and falsity. What then? What is meant by the truth-value “non-assertible” is that it is impossible to say which of ‘true’ and ‘false’ it is.^{li}

We see that a non-paraconsistent interpretation of *sapta-bhaṅgī-naya* offers itself. We already noted that the paraconsistent understanding of contradiction relies on truth-functional operators (conjunction and negation) rather than contrary predicates, and we also noted some disagreement amongst scholars (say, Long and Ganeri versus Matilal) as to whether the Jains truly endorse inconsistent *nayas*. All of this leads me to say that pluralism departs from Jainism in admitting true contradictions, as opposed to inexpressible assertions.^{lii} This is our first main difference, and the lesson seems to be that a pluralist-friendly philosopher could assume pluralism from a classical logic and see where this leads; such a pursuit, seemingly, would be really aided by a thorough investigation of *sapta-bhaṅgī-naya* and *anekāntavāda*.

Next, Friend’s “external paradox [of pluralism]” resembles absolutist criticisms of Jains:

[I]f we are tolerant towards other positions than our own, then what if the other position is intolerant of our own? In the name of tolerance, if we accept that the other position is, in some sense correct, then the intolerance towards us is correct, and we should give up our original position.^{liii}

But the resolution in Friend's case is quite different from the Jain resolution:

Again, the limiting factor upon the universalization of the Jain philosophy of relativity is the fact that the perspectives from which particular truth-claims can be affirmed must finally be coherent with the total Jain worldview."^{liv}

The Jains thus resolve the external paradox by appeal to a transcendental understanding of reality, that of omniscient beings. Pluralism, in contrast, resolves this paradox by flatly refusing to admit dogmatism "all the way up":

Under this third-level pluralism, each mathematical and philosophical theory at lower level[s] is tolerated up to the point of dogmatism, that is, up to the point where the dogmatic claim is made...By refusing to recognise as legitimate, particular dogmatic claims, the pluralist solves the external paradox of tolerance for the pluralist...the pluralist does not even have to insist on the dogmatism (of rival positions) being incorrect. It is enough to remain agnostic, and insist on scientific honesty: that unless we have further evidence for the truth of a dogmatic position, we remain pluralist. Should such evidence present itself, then it is, of course, correct to give up pluralism. Remember that pluralism includes a principled agnosticism, not fanatical agnosticism.^{lv}

The basis for this refusal is lack of evidence; Friend simply notes, "Intolerance is no guarantee of correctness!"^{lvi} A pluralist cannot be refuted by pretensions towards intolerance, but only on the basis of reasoned argument. This is quite a marked difference in response, and shows how the Jain relativism transforms into pluralism on the backs of omniscient Jinas, whereas pluralism skirts relativism (and trivialism) by deferring to epistemic uncertainty.

In summary, we saw a number of point of overlap and points of difference between Jain *anekāntavāda* pluralism in the philosophy of mathematics. The present article, hopefully, will underscore the following: further work bridging pluralism, perhaps philosophy of mathematics more broadly construed, and Jainism stands to offer fruitful results.

References & Notes:

- ⁱ Long, Jeffrey D. *Jainism: An Introduction*. London: I.B. Tauris & Co Ltd: Noida, 2010: 117.
- ⁱⁱ *There are six substances (dravyas): soul (jīva), matter (puḍgal), (medium or principle of) motion (dharma), (medium or principle of) rest (adharma), space (ākāśa), and time (kāla).*
Nemichandra, Sarat Chandra Ghoshal. Trans. *Dravya-Sangraha*. Pardi: Yogeshwar Print & Pack, 1986: 23.
- ⁱⁱⁱ "Gūṇaparyāyavad dravyam", *Tattvārta Sūtra* 5/37.
- ^{iv} (a) "Dravyāśrayā nirguṇā guṇāḥ/ Tadbhāvaḥ parināmaḥ!" *Ibid*, 5/40-41.
(b) "Though modes too reside in a substance and themselves devoid of any quality, they are subject to origin and destruction...The qualities, on the other hand, are permanent, and hence they always reside in a substance." See, for instance, *Tattvārtha-bhāṣya* 5/29. (Quoted from Matilal, Bimal Krishna. *The Central Philosophy of Jainism (Anekāntavāda)*. Ahmedabad: Creative Printers Pvt. Ltd., 1981: 35.)
- ^v Long, Jeffrey D. *Jainism: An Introduction*. Op. cit., 142.
- ^{vi} "The Jains do not thereby commit to a contradiction; each predication in apparently contradictory claims is qualified by distinct perspective rather than qualified by the same perspective." *Ibid*, 143.
- ^{vii} *Ibid*, 143
- ^{viii} (a) Jain, Shugan C. *Jainism, Key to Reality (Tattvārtasūtra by Āc. Umā Svāmi, 1/6)*. Hastinapur: Digambar Jain Trilok Shodh Sansthan, 2011: 11.
(b) "Knowledge is typically understood as being of objects (not propositions or facts, say) in Jainism." Bothra, Pushpa. *The Jaina Theory of Perception*. Delhi: Motilal Banarsidass, 1976: 21.
- ^{ix} Matilal, Bimal Krishna. *The Central Philosophy of Jainism (Anekāntavāda)*. Op.cit., 41.
- ^x *Ibid*, 32.
- ^{xi} Long, Jeffrey D. *Jainism: An Introduction*. Op.cit., 146.
- ^{xii} (a) "Add a *syāt* particle to your philosophic proposition and you have captured the truth." Matilal, Bimal Krishna. *The Central Philosophy of Jainism (Anekāntavāda)*. Op.cit., 61.
(b) Long, Jeffrey D. *Jainism: An Introduction*. Op.cit., 147.

- xiii Matilal, Bimal Krishna. *The Central Philosophy of Jainism (Anekāntavāda)*. Op.cit., 53.
- xiv Ibid, 147.
- xv (a) “Jain authors vary on the respects that a statement may be evaluated. Some list eight: time, nature, substance, relationship to substance, modification, location, contact, and linguistic expression”. Bhattacharya, Shree Harisatya. *Anekāntavāda*. Bhavnagar: Shree Mahodaya Press, 1958: 31.
 (b) Matilal, B. K. “Anekānta: Both Yes and No”. *Jaina Theory of Multiple Facets of Reality and Truth (Anekāntavāda)*. Ed. Nagin J. Shah. Delhi: Motilal Banarsidass, 2000: 7.
- xvi (a) I adopted the Sanskrit of Pragati Jain. (Jain, Pragati. “The Jaina Theory of Sevenfold Predication: A Logical Analysis”. *Philosophy East and West*. 50: 3 (2000): 386.
 (b) Ibid, 387.
 (c) Long, Jeffrey D. *Jainism: An Introduction*. Op. cit., 148.
- xvii Friend, Michele. *Pluralism in Mathematics: A New Position in the Philosophy of Mathematics*. New York : Springer, 2014: 103.
- xviii Ibid, 110.
- xix Ibid, viii.
- xx Ibid, 113.
- xxi Ibid, 189.
- xxii Ibid, 190.
- xxiii Ibid, 194-195.
- xxiv Ibid, 104-105.
- xxv Ibid, 200.
- xxvi Ibid, 19-20.
- xxvii Ibid, 154.
- xxviii Ibid, 24-25.
- xxix *For purposes of bridging Jains and pluralists, we can usefully treat nayas as inclusive of mathematical theories, and we can treat mathematical theories as different nayas*. Ibid, 25.
- xxx (a) Long, Jeffrey D. *Jainism: An Introduction*. Op. cit., 145.
 (b) “It seems to be a truism that these two Jaina doctrines [of *syādvāda* and *anekāntavāda*], which may be given the class-name of relativism, are opposed to any absolutistic position.” Singh, Ramjee. *The Jaina Concept of Omniscience*. Ahmedabad: L. D. Institute of Indology, 1974:163.
- xxxi Long, Jeffrey D. *Jainism: An Introduction*. Op. cit., 145.
- xxxii Friend, Michele. Op.cit. 2014: 29.
- xxxiii Long, Jeffrey D. *Jainism: An Introduction*. Op. cit., 151.
- xxxiv Hiriyanna, M. *The Essentials of Indian Philosophy*, London: George Allen and Unwin, 1949: 69, quoted in Padmarajah, Y. J. *A Comparative Study of the Jaina Theories of Reality and Knowledge*. Jain Sahitya Vikas Mandal: Bombay, 1963: 364.
- xxxv Joshi, L. V. “Nyāya Criticism of Anekānta (With special reference to the Nyāyabhūṣaṇa).” *Jaina Theory of Multiple Facets of Reality and Truth (Anekāntavāda)*. Ed. Nagin J. Shah. Delhi: Motilal Banarsidass, 2000.95-110.
- xxxvi Long, Jeffrey D. *Jainism: An Introduction*. Op. cit., 151.
- xxxvii Singh, Ramjee. *The Jaina Concept of Omniscience*. Ahmedabad: L. D. Institute of Indology, 1974:164.
- xxxviii Friend, Michele. Op.cit. 2014: 196.
- xxxix Ibid, 73.
- xl Ibid, 189.
- xli Ibid, 199.
- xlii Long, Jeffrey D. *Jainism: An Introduction*. Op. cit., 153.
- xliiii Ibid, 150.
- xliv Friend, Michele. Op.cit. 2014: 194.
- xlv Matilal, B. K. “Anekānta: Both Yes and No”. *Jaina Theory of Multiple Facets of Reality and Truth (Anekāntavāda)*. op. cit., 14.
- xlvi Ibid, 13-14.
- xlvii Friend, Michele. Op.cit. 2014: 114.
- xlviii Matilal, B. K. “Anekānta: Both Yes and No”. *Jaina Theory of Multiple Facets of Reality and Truth (Anekāntavāda)*. op. cit., 14.
- xlix Ibid, 15.
- ⁱ Ganeri, Jonardon. “Jaina Logic and the Philosophical Basis of Pluralism”. *History and Philosophy of Logic*. 23. 4. (2010): 273.
- li Ibid.
- lii Perhaps ‘independent of the given naya’ captures the sense of fourth predication most accurately [4, 273]. This presents another direction to develop the principled agnosticism motivating pluralism.
- liii Friend, Michele. Op.cit. 2014: 175.
- liiv Long, Jeffrey D. *Jainism: An Introduction*. Op. cit., 153.
- liv Friend, Michele. Op.cit. 2014: 178.
- lvi Ibid, 177.