THE JAINA CONCEPT OF LOGIC

(1) One way of identifying the Jaina concept of logic and arriving at a level of clarity with regard to it is to inquire into how does a Jaina thinker reason things out when he is placed in a given situation. This approach would require us to specify the situation or situations in which he does this and also to outline the structure of reasoning pattern he adopts. Once we have done this, it would be possible for us, I think, to be in a reasonably good position to say what the structure and function of Jaina logic is or how at least it is to be interpreted and understood keeping in view the Jaina tradition as we are acquainted with it through the vast Sanskrit literature available to us.

(2) By 'logic', I do not mean the formal logic the paradigm of which the modern, mathematical logic is. Nor do I mean by it what is traditionally known as inductive logic. By 'logic' in the Jaina context, I mean three things taken together : *One* : the analysis of concepts like *jñāna, pramā, vyāpti,* and *tarka* and the methods of winning knowledge in the sense of having beliefs about the world–the world of facts, the world of values, and the metaphysical world if there is one; and also the criteria developed and used for assessing evidence and evaluating these beliefs as true and false consistent and inconsistent. *Two* : Within one and the same tradition, the methods and criteria used for avoiding and resolving disagreements about religious and metaphysical matters the knowledge of which is supposed or claimed to be delivered to us in the accepted Scriptures. Finally, *three*, the reasoning strategies adopted in dealing with the opponents and the critics of one's views-in the Jaina tradition particularly with the explicit aim of avoiding conflicts, violence, and strife, and if possible, to look at them as though the opponents' views could be mutually harmonized in the sense that they were different philosophical reactions to one and the same situation from different points of view.

(3) In the history of Indian philosophy, these three different jobs for which reasoning has been employed have not often been distinguished sharply. It is one of the distinctive features of the Jaina logical enterprize that, in this tradition, there have been quite a few thinkers who differentiated reasoning used for one job from

reasoning employed for the other job. Yasovijaya Gani at one place[1] remarks that the *saptabhangi* is used in the case of the *Āgama* or the Scriptures; and nowhere is the Jaina logician prepared to employ *saptabhangi* or even the *nayavāda* in relation to what is known by *pratyaksa* or *anumāna*.[2] 'There is a jar here' is known by *pratyaksa* : it is a fact of observation; and for this reason the question of its *prāmānya* from the point of view of metaphysics is not relevant to its truth or falsity. Similarly, the Jainas used there *nayavyavastha* in order to account for the different metaphysical views of their opponents and critics by interpreting whatever the non-Jaina views there were, in terms of *nayabhāsas*.[3] The Jaina theory of *Naya* thus is employed as an instrument of describing the non-Jaina views of reality. A *naya* is a relative description, it is a description of reality negative to a certain point of view. A *nayabhāsa* or the fallacy of *naya* is the fallacy of mistaking a relative for an absolute description; it is the mistake of identifying a description Di which is true for some values of X for a description Dj which is true for *every* value of x. The structure of the Jaina reasoning in such a case is as follows : A non-Jaina philosopher describes some one only facet of reality from a certain given point of view. But, reality is *anekāntika*, many-faceted; and for this reason, it is a mistake to regard a description of some one only facet of reality as the only description of reality. To do this, in other words, is to commit the fallacy of *naya* or a *nayabhāsa*. The non-Jaina philosophers make precisely this mistake. Hence, their views are false in this sense : they are *nayabhāsas* only. Again, another Jaina thinker Amirta Candra Suri differentiates the role of *pramānās* from the role of *nayas* by saying that *pramanena pramiyante niyante ca nayaistatha*.[4]

(4) By identifying the three distinct types of jobs for which the Jaina logicians used their reasoning, I am not suggesting that every Jaina thinker kept these different functions of reasoning apart from each other neatly. In fact, many of them landed themselves in conceptual confusions by mistaking the *anekāntavāda* which is a metaphysical thesis for an empirical thesis and thus were led to apply the *saptabhangi* or for that matter *sahasrabhangi* structure of reasoning to the factual statements and empirical generalization which are matters of observation and inference. To my mind, it indeed is fair on the part of the Jaina logicians, at least some of them whom I have mentioned above, to confine

the application of the *saptabhangi* thesis to things in the meta-physical realm rather than to things in the empirical world. Simi-larly, the areas of operation of the *pramānās* and the *nayas* will have to be kept apart, or else, as I have shown in one of my earlier papers on Jaina logic[5] there will be no criterion for differentiating a *naya vākya* from a *pramāna vākya*, except on the basis of the completeness/incompleteness of description, namely a *naya vākya* is an incomplete while a *pramāna vākya* is a complete description of what there is. Even so, this criterion turns out to be inadequate when what interests us most as logicians is knowledge and *prāmānya* of what is described rather than mere description of what there is. Besides, what is described may be a religious or a metaphysical fact, or it may be something which is a matter of empirical obser-vation. Certainly, the question of *prāmānya* in the former case will be decidable in a way very different from the way in which the quesion of *prāmānya* in the latter case is decidable. So the descriptional criterion for differentiating *naya vākya* from a *pramānā vākya* won't do. This consequence indeed follows when the job which *nayas* are designed to do is confused with the job which the *pramānas* are assigned to do.

(5) Now if the thesis I am proposing here is accepted as plausible, namely that the Jaina theory of *pramāna*, *naya*, and *saptabhangi* or *syadvāda* have different areas of operation, it is easy to see that there is all the greater probability that the structure of reasoning in the case of the one is different from the structure of reasoning in the case of the other. And, I am inclined to think that this really is the case. The *nayavāda* has to do with the Jaina niti vis-a-vis the other non-Jaina religious and meta-physical traditions; the *saptabangi* or *syādvāda* has to do with the *Āgamas* or the Scriptures; and the *pramānas* (with the obvious exception of the *āgama pramāna* and also in so far as they do not pronounce judgement on matters of metaphysical realm,) concern themselves with the criteria for the *prāmānya* of what may be called knowledge in the sense of true beliefs about the world of observable facts.

(6) The *pramāna* theory of the Jainas, as I have indicated above, is different from their *naya* theory and also it is different from the *syādvāda* theory. Where does this difference consist in? A part of the answer I have already given, viz., that these three different theories are designed to do different jobs and that they

have functionally distinct areas of operation. Another part of
the answer is that the Jaina theory of *pramānas* deals with the ques-
tions of justification of our beliefs about the world and also that
it seeks to provide criteria for classifying and evaluating the evidence
that we do cite in support of our beliefs. For example, the Jaina
logician requires that a *hetu* (a reason or evidence) must be cited
for the thesis, for instance, that the *Rohini* star will rise, and provi-
des the reason in the observable evidence that the *Krttiko* have
risen (*upalabdhi hetu*)[6]. For another instance, 'There is no jar here;
why? because it is unobservable (*anupalabdhi hetu*).[7] Or, 'The
man had a mother', for 'He had a father' (*sahacara hetu*).[8]

(7) The Jainas used the *anumāna pramāna* for things which
are *paroksa* and not *pratyaksa*, things which are not known to us
in our direct observational confrontation with them. However,
the way they developed their theory of *anumāna pramāna*, it did
no longer remain a theory exclusively of infernce from the known
to the hitherto unknown, but included in its fold the theory of
explanation and of prediction also. From the observation of
the rise of the *Krttikas* they could make the prediction that the
Rohini star will rise. Similarly, having observed that there is a
shadow here, they sought its explanation in the fact, given the
context, that there is an umbrella here. It does not matter for
our purposes here how primitive were the models the Indians of the
age used: This only indicates the rural setting in which they lived.
The reasoning pattern that the Jainas used included in general
these five steps : (1) assertion of the proposition to be justified or
paksa prayoga or *pratijnā*, (2) citing the reason or evidence, or
hetu prayoga, (3) employing a *vyāpti vākya* together with an instan-
tiative *drstānta* or a paradigm case, (4) applying the generalisation
to the particular case in question (*upanaya*); and finally (5) drawing
the inference (*nigamana*).[9] Their *vyāpti vākyas* or generalisations
always carried the existential interpretation and also they could
properly be described as empirical generalisations, though of course
they were not always of the cause-effect type. For, sometimes they
were based on observable connections like 'If a man had a father,
then he had a mother also'; sometimes on the analysis of the meaning
of terms like 'If there is no certainty here, then there is uncertainty
here'; and sometimes on the analysis of certain observable but
essential properties of things like 'If there is heat here, then there
is no sensation of cold here'.[10]

(8) One important feature of the Jaina logic is its emphasis on the *prāmānya* of the *vyāpti vākyas* on which, together with the knowledge of the initial conditions, depended the *prāmānya* of *anumāna*. The Jaina logician observes that the generality of a generalisation is not merely a conjunction of several observable instances, such that the knowledge of a *vyāpti vākya* is not a matter of observation or *pratyaksa*. Nor is it a matter of inference or *anumāna* for *anumāna* itself is parasitic on a *vyāpti vākya*. The Naiyayikas thought that *tarka* was an effective instrument of the *prāmānya* of a *vyāpti vākya*. But this the Jaina logician denies. For, he argues, *tarka* as the Naiyayikas conceived it could not even take off without the necessary logical support of a *vyāpti vākya*, how then could it be regarded as an instrument of the *prāmānya* of a *vyāpti vākya itself* ?[11] It just could not be. To solve the problem of the *prāmānya* of a *vyāpti vākya*, like Bertrand Russell[12] in the West who accepted the principle of induction as a logical principle, the Jaina logician looked upon *tarka* as an independent *pramāna*, the sole function of which is to give us *vyāptis* which are to constitute the basis of *anumāna pramāna*.[13] Th. way I have analysed the Jaina theory of *pramāna*, the theory clearly is seen to be an instrument of knowledge — knowledge of things which are either *pratyaksa* a matter of observation or *paroksa* a matter of inference. It is this characteristic which to my mind sets the Jaina theory of *pramāna* apart from the Jaina theory of *naya*. The *Nayavāda* or the theory of *naya*, in no sense, is an instrument or a part of the instrument of knowledge.

(9) These are not all the important features of the Jaina theory of *pramāna*. I have drawn attention to only some of them which I personally think to be important enough to set the Jaina concept of logic apart, for example, from the Nyāya and the Buddhist concepts of logic.[14] Furthermore the Jaina logician distinguished the concept of *pramāna* (the word comes from *ma dhatu* which means 'to measure') from the concept of *naya* (the word comes from *ni* dhatu which means 'to lead'). I am inclined to think that the concept of *naya* is not a concept of logic. It is used by the Jain thinker to describe the philosopical positions of the other thinkers who held theories which were either opposed to or at least different from his. The role that he assigns to this concept is clearly illustrated by his assertion *nayabhasasvajaina-matanamantarbhavah*.[15] The acceptance of *nayavāda* on the part

of the Jaina logician is, I have indicated in the last sentence, is the acceptance of a certain attitude to what the other non-Jaina thinkers had to say about the structure of and the furniture in their respective metaphysical worlds. The concept of *naya*, to be sure, was never applied to such empirically ascertainable cases like 'Fire burns', or 'A high level of colestrol in the human body is one of the causal conditions of cardiological diseases'. However, one can talk of the criterion of the distinction between a *naya vākya* and a *pramāna vākya*. This I have done elsewhere.[16]

(10) Professor Barlingay in his celebrated book on Indian logic[16] observes :

The most important feature of the Jaina logic is its introduction of *saptabhangi naya*, and formulation of the logic of possibilities or *syādvāda*.[17]

He adds :

I feel that these two doctrines are independent and are valuable to logic. It must have been due to some confusion amongst the later Jaina logicians that these two separate theories were identified as one.[18]

To my mind, Barlingay is right when he refuses to identify *nayavāda* with *syādvāda*, though it is of course true that some Jaina logicians (hopefully) mistakenly have envisaged the *saptabhangi yojana* in both *nayavāda* and *syādvāda*.[19]   I myself have differentiated the two by saying that *soptabhangi* or *syādvāda* has been the case of the Scriptures or the *Āgamas* which assert that the metaphysical reality is *anekāntika* while *nayavāda* has been harnessed to serve different ends altogether.[20] The question; which I think; is of the last importance; is, how are we to understand *syādvāda* ? In the recent past, so much indeed has been said about it that one feels lost in the jungle of opinions having far-reaching consequences. Barlingay calls *syādvāda* the logic of possibilities[21] and regards '*syādasti*' as an example of a modal proposition.[22]   Some look upon it from an angle that it has appeared to them that a calculus of probabilities could be developed on the lines of *syādvāda*.[23] Others have characterised *syādvāda* as the seven-valued logic of the Jaina philosophy.[24] Ramchandra Pandeya[25] thinks— but he arrives at this result in a ay different from mine and independently—that '*syādasti*' and the other *syād* sentences really are no assertions at all, such that the truth values—true and false—could not

be assigned to them. An old scholar of the Jaina philosophy Satkari Mookerji[26] treats *syāt* as a corrective proviso. And, the greatest historian of Indian logic, Satish Chandra Vidyabhusana does not hesitate to characterize *syādvāda* or *saptabhangi naya* as the doctrine of sevenfold paralogisms[27] ! The seven sentences which constitute the *syādvāda* are well-known in the Jaina literature and I give them as follow :[28]

One :   A thing is existent from a certain point of view.

Two :   A thing is non-existent from another point of view.

Three : It is both existent and non-existent *in turn* from a third point of view.

Four : It is indescribable[29] (that it is both exist and does not exist simultaneously)

Five : It is existent and indescribable from a fifth point of view.

Six :   It is non-existent and indescribable from a sixth point of view .

Seven : It is both existent and non-existent and indescribable from the seventh point of view.

These seven *syāt* sentences are far from being clear. The question whether the Jainas regarded 'existence' as a predicate is debatable; and as I am writing this paper, I have not as yet come across any mentionable discussion on this issue. I myself would not discuss it in this paper. Let this be the subject for another independent paper. However, there are few other difficulties which I would like to put on record. The *first* is about interpretation of the prefix 'syāt' to each one of these seven *syāt* sentences. Philosophers have constructed different theories about *syādvāda* on the strength of one or the other interpretation of this word.[30]

I myself have regarded *syāt* as functioning for the purpose of eliminating the element of *ekāntikatā* from any Jaina description of what there is or how it is. This tack takes into account the pragmatics of *syādvāda*. It takes into account the role the Jaina thinkers assign to the *syāt* sentences for the interpretation of their scriptures or the *Āgamus*. Notice, however, that the critics of *syādvdaā* like Śankarāc'arya[31] saw this; and they were quick to point out that by prefixing the word 'syāt' to his statements the Jaina thinker failed to commit himself to any logical position. For this reason, indeed, they saw no point arguing with him.

I. P. Q...4

The *second* difficulty which continues to haunt me is the question 'What is the analysis of the word *'avaktavyam'* (frequently rendered in English as 'indescribable' or 'inexpressible') in the fourth, fifth, sixth, and the seventh *syāt* sentences ? The Dictionary usage apart, the word may mean any of the following :

    (a) I *am not* able to describe what there is or how it is.

    (b) It is *logically impossible* to describe what there is & c.

    (c) We *ought not* to describe what there is & c.

    (d) We can never be sure of the *adequacy* of our description of what there is & c.

It seems to me that the Jaina thinkers never used *avaktavyam* in either (a) or (b) of the above four senses. The (c) and (d) are connected: (d) could be cited as a reason for (c). I am inclined to think that (d) is a fairly reasonable interpretation of *avaktavyam* in the *syāt* sentences wherever the word *avaktavyam* occurs. Nevertheless, by this innocently looking device of using *'syāt'* as a prefix to all that he seems to claim to assert, the Jaina thinker does something which is disarmingly nonviolent but remains logically awefully embarrassing. I do not propose to develop in this paper my theory about the theory of *saptabhaṅgi naya* or *syādvāda*. I only wish to do two things here : *One* is to ask the question, 'Can *syādvāda* form a part of the Jaina concept of logic ?' and *two* : to comment on Matilal's defense of *syādvāda*. My answer to the first question is in the negative. For *one* thing, the Jaina metaphysical theory called *anekāṅtavāda* and *syādvāda* go hand in hand. The function of *syādvāda* is to eliminate the element of *ekāntikatā* form the Jaina view of metaphysical reality.

For *another* thing, any two *syāt vākyas* are logically consistent if at all they can be said to be true or false. To my mind, there is absolutely no circumstance under which they can be said to be false at all. If true, they must always be true. But then, they are not tautologies either; nor can they be shown to be analytically true in any sense of the term 'analytically true'.

Nor does the question of *pramānya* arise in their case. Then what justification is there to call them statements at all ? I think that one is right in denying the *syāt vākyas* the status of assertions. Those who think they can develop the calculus of probabilities on the basis of *syādvāda* mistakenly treat *syād vākyas* as if these were empirical assertions. If it is accepted that they are not assertions

at all, it is much the far more difficult to accept that they are empirical assertions whose probabilities could be calculated. Nor do I think that the *saptabhangi naya vāda* offers us any grounds whatever to suggest that what we are dealing with in the Jaina philosophy is a sort of multivalued logic which can be systematized with some ingenuity. How can a set of sentences if they are treated as statements at all each one of which if true is always true has only one truth value true not logically but paralogically only, how can such a set of sentences be used to develop a system of multivalued logic? This seems to me to be sheerly impossible. These considerations make me think that whatever else the Jaina concept of logic be, the *saptabhangi* naya *or syādvāda*, from a strictly logical point of view, cannot be said to form a part of it.

I will examine now Matilal's defense of *syādvāda*.[32] Notice that Matilal discusses *syādvāda* in isolation from the other two theories of the Jainas—the theory of *pramāna* or *pramānavāda*, and the theory of *naya* or *nayavāda*. He mentions the second but leaves out untouched the first. I disagree with him here. In order to understand what the Jaina thinker is doing in his *syādvāda* it is methodologically instructive to connect contextually *syādvādā* to the other two theories and to consider the function these different theories are designed to perform in their respective fields. Matilal does not do this; however, he connects *syādvādā* to the Jaina metaphysical thesis of *anekāntatā* by saying that the Jaina thinker used *syādvāda* as a 'method'[33] to support the *anekāntavāda*. He might have liked to call it the method of nonviolence; and I would certainly have agreed with him. But then, he would not have gone about discovering the logical virtues of *syāt* sentences, and defending *syādvāda* on purely logical grounds. And, this is precisely what in fact he does.

Matilal identifies three different usages of the particle 'syāt'. (1) In the ordinary Sanskrit '*syāt*' means 'perhaps' or 'may be'. But, the Jainas used it in a special sense to indicate the *anekānta* nature of a proposition.[34] (2) Etymologically, 'syāt' is derived from the root as + potential optative third form, singular. In this usage, the word expresses *sambhāvanā* or probability. Matilal remarks: 'the Jaina *syāt* is even different from this use of *syāt* in the sense of probability'[35] and adds emphatically: 'The *Anekānta* doctrine to be sure is neither a doctrine of doubt, or even uncertainty, nor a doctrine of probability. Thus, " syāt " means, in the

Jaina use, conditional YES. It is like saying, " in a certain sense yes.[36] (3) 'Syāt' has a concessive use also as in the sentence " *syāt etat* " which means "let it be so (but) ..[37] " By using the particle 'syāt', the Jaina thinker concedes the opponent's thesis in order to blunt the sharpness of his attack and disagreement, and at the same time, it is calculated to persuade the opponent to use another point of view or carefully consider the other side of the case.[38] (4) Finally in the Jaina literature on *syādvāda*, the particle 'syāt' is treated as synonymous with '*kathamcit*' ('in some respect', or 'from a certain standpoint') and '*kadācit*' ('somehow', or 'sometimes'). Grammatically, the function of the particle (*nipata*) in a sentence is to modify the acceptance or rejection of the proposition or predication expressed by the sentence.[39] On these considerations o the semantical behaviour of the particle 'syāt' Matilal supports hi. two-fold thesis: (a) that a *syāt* sentence expresses a proposition which could be true or false, and (b) that the proposition expressed by the use of *syāt* sentence is a conditional assertion of the form 'If *p*' then A is *B*..[40] The (b) part of this thesis is not very clear. It is not clear at least to me. The form (i) 'If *p*' then, *A* is *B*' is conceptually quite different from (ii) 'a conditional YES', or from (iii) 'in a certain sense, yes'—To a conditional statement of the form (i), one can assign truth-values truth or falsity; but an utterence having the force of (ii) or of (iii), if at all it is used to make an assertion in Frege's sense is always true.[41] And, as I have said above, there is no good reason to characterize such a thing as statement or assertion. Though Matilal does not differentiate the form (i) frcm the forms (ii) or (iii) of a *syāt* sentence, he chooses the form (i) as that of a statement which could be true or false. It is alright if one is interested in doing logic to go about one's business in this way; but one is in utter confusion when one seeks to analyze *a syāt* sentence in terms of a conditional statement. For, a *syāt*, sentence does not have the virtues or disvirtues of a conditional statement; for it does not have the virtues and disvirtures of a statement at all. It is sought to express something which does not admit of a logical or even a factual appraisal. For, truth and falsity, consistency and inconsistency are not the properties which characterise a *syāt* sentence.

Consider now Matilal's analysis of the notion of *avaktavyam*. The word 'avaktavyam' in the ordinary Sanskrit is not everywhere synonymous with the word 'inexpressible' or 'indescribable'. What

other usages of 'avaktavyam' there are or there can b , some of them that I have cited above must be included in any set of the usages of the word. Matilal is undecided. He does not appear to have made up his mind on the question whether *avaktavyam* denotes a self-contradictory concept, which, by definition, cannot be used to describe any state of affairs His *first* argument in defense of *syādvāda* is based on a negative answer to this question; and his *second* argument on an affirmative answer to it. And he offers only two arguments.

The *first* argument is that 'by simple application of contradictory predicates to a thing in the same breath (simultaneously) the speaker does not land himself into a self-contradiction.[43] for th contradiction may be apparent only and not a genuine contradiction. The Jaina philosophers did not use 'avaktavyam' in the fourth, fifth, sixth, and the seventh *syāt* sentences to state a contradiction or to conjoin a contradiction to one or more of the other *syāt* sentences. Fine. Matilal characterizes the predicate *avaktavyam* as both unitary and primary, and symbolizes it by the neutral symbol 'O', the other two unitary and primary predicates being affirmation and negation, denoted by him by '+' and '--' signs. In his opinion, the internal structure of *avaktavyam*, essentially, is that of incompatible predicates applied to something in the same respect simultaneously.   The argument is self-descrepent: It takes *avaktavyam*, on the one hand, to be used for affirming of something a set of predicates which are incompatible in appearance only and, on the other hand, it treats the internal structure of *avaktavyam* essentially as that of an inconsistent predication.

The *second* argument is more devastating to the Jaina position which Matilal is so keen to defend. The argument is this : If, according to the Jaina philosopher reality is possessed of an infinite number of attributes or properties *anantadharmātmakam vastu*,[44] then it follows that any two incompatible predicates can also be truly affirmed of it. Aware as he is of the disquieting logical implications of affirming truly two incompatible predicates of one and the same thing in the same respect simultaneously, he adds that 'in such predication the purpose of description might fail, but the purpose of stating a truth will not fail.'[45] This last remark suggests that a *syāt* sentence frustrates the purpose of description by failing to describe any state of affairs. This happen because the internal structure of *avaktavyam*, essentially, is that of an inconsistent

predication. If this is so, then how can a *syāt* sentence possibly serve the purposes of stating a truth? It just cannot do.

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NOTES

1. *Yasovijaya Gani's *Jaina Tarka Bhasa*, Delhi, 1977 paras 61 & 62; p 91 ; *Agame saptabhangi.*

2. Ibid, p. 19, *Yatra tu ghato' sti ityadi lokavakye saptabhangisansparsa-sunyatu tatrarthaprapa atvamatrena lokapaksaya pramanya 'pi tattvato na pramanyamiti drastavyam.*

3. Ibid. p. 24-25: *Nayabhasesu ajainmatanamantarbhavah.* The Sanskrit word "naya" comes from *ni* dhatu (root) which means 'to lead' Vidya bhusana renders it in English as a 'method of description'. I think, this is the best translation consistent with the philosophical usage of the word in the Jaina traditions.

4. Amrtacandra Suri's *Tattvarthasara*, Varansi, 1970 S1. 14; p. 5.

5. Bharadwaja, V. K., '*Pramāna* and *Naya* in Jaina Logic', *Philosophica*, Vol. 7 No. 2, June 1978; pp. 11.

6. Vidyabhusana, Satish Candra, *A History of Indian Logic*, Delhi, 1971; pp 190-91.

7. Ibid, pp. 190-91.

8. Ibid, pp. 190-91

9. Ibid, pp. 203

10. Ibid, pp. 190-91

11. Bhavasena's *Prama-prameya*, Sholapur, 1966; p 45 Mark the use of the word "*vyapti-balena*" in "*vyaptibalena parusyanistapadanam tarka*".

12. Russell, Beitrand, *The Problems of Philosophy*, London, 1912; p. 103.

13. Vadi Devasuri's *Pramana-naya tatttvalokalankara*, Bombay, 1967; p. 216.

14. The Naiyayikas continue to have their problems with the relation, for instance. between *tarka* and *vyāpti* having made the former an *upaya* of *vyapt.graha*. The Buddhist approach is more presuppositionalistic than any other either of the Naiyayikas or of the Jainas.

15. Yasovijaya Gani's *Jaina Tarka Bhasa*, op.c it., pp. 24-25.

16. Barlingay, S. S.. *A Modern Introduction to Indian Logic*, Delhi, 1965; Second edition 1976; p. 6.

17. Ibid, p. 6.

18. Ibid. p. 6.

19. Yasovijaya Gani's *Jaina Tarka Bhasa*; op. cit., *Nayesvapi Saptabhangiyo jana*; pp. 21-25.

20. As discussed above.

21. Barlingay, S. S., op. cit., p. 6.

22. Ibid, p. 62 Barlingay writes : "In the Jaina variety of Indian logic, another form of propositions is found. An instance of this is "*Svatasti*" — "Possibly, this is". Such propositions are modal". p. 62.

23. Professor D. S. Kothari's talk in the seminar on 'Jaina Philosophy and Modern Scientifc Thought held at the Department of Philosophy, Poona University, Poona from April 5 to 7, 1979.

24. Burch, G. B., 'Seven-Valued Logic in Jaina Philosophy', *International Philosophical Quarterly*, Vol. 4, 1964 pp. 68-92.

25. Pandeya, Ramachandra *Indian Studies in Philosophy*, Delhi, 1977: the Chapter VIII 'The Jaina Conception of Syadvada'; pp 114-123.

26. Mookerjee Satkari, *The Jaina Philosophy of Non-Absolutism*, Delhi 1978; p. 122.

27. Vidyabhusana, Satish Candra, op. cit., p. 211.

28. Mallesena's Syadvadamanjari, Bombay. 1933.

29. For an interesting discussion on the notion of *avaktavyam* see Satkari Mookerjee work, op. cit.

30. See, for instance, some of the references given in the preceding para.

31. Samkaracarya's *Brahmusutra-bhasya* II.2.33; pp. 559.62 of the Bombay 1938 edition.

32. Matilal, B. K., 'Saptabhangi' *in Self, Knowledge, and Freedom*, ed : J. N Mohanty and S. P. Banerjee, Calcutta : The World Press Private Limited, 1978 pp. 159 72.

33. Ibid p. 159. I am using the word 'suppoit' and not "prove"; Matilal himself employs the 'pillar' analogy due to Padmarajiah, (See Padarajiah's *Jaina Theories of Reality and Knowledge*, Bombay, 1953.

34. Ibid, p. 163

35. Ibid, p. 163

36. Ibid, p. 163

37. Ibid, p. 163

38. Ibid, p. 163

39. Ibid, p. 164

40. Ibid, p. 163

41. Frege, G., *Translations from the Philosophical Writings of* Gottlob Frege : P. Geach and M. Black; Oxford. 1952.

42. See also Apte's Sanskrit English Practical Dictionary.

43. Matilal, B. K. op. cit. 169.

44. Mallesena's work, op. cit.

45. Matilal, B. K., op. cit., p. 17).