THE CONCEPT OF NECESSITY IN DHARMAKĪRTI'S
THEORY OF INFERENCE

Pradeep P. Gokhale,
Central University of
Tibetan Studies,
Sarnath

[0.1] Introduction:

Dharmakīrti’s theory of inference primarily occurs as a part of his epistemology, i.e. his theory of pramāṇas. But his epistemology is inalienably linked with his ontology i.e. his theory of prameyas. In fact it has been argued that unlike in other systems of Indian philosophy where epistemology precedes ontology, Dharmakīrti constructs his epistemology on the basis of his ontology. Since the objects are of two kinds, viz. particulars and universals, the means through which they are cognized are also of two kinds, viz. perception and inference. But on what basis can we say that there are only two kinds of object? If on the basis of the same two means to knowledge, then the argument is circular. If on the basis of some third means to knowledge, then the doctrine that there are only two pramāṇas has to be abandoned. We will not discuss this issue here. But the point which is more relevant for our purpose is that Dharmakīrti’s theory of inference is not only epistemologically relevant, it is ontologically relevant as well. There are also rhetorical considerations related to inference when it is a question of using inference as a way of convincing others (as in parārthānumāna) or winning over the opponents in debate. Along with all these considerations there is a formal logical consideration which is evident in Dharmakīrti’s account of inference and which influences all other considerations. Now the point relevant for the present paper is that Dharmakīrti while discussing these various aspects of anumāna, tries to underline the notion of necessity in different ways.

Here, when I am using the term ‘necessity’, I am not restricting its scope either to logical necessity or even to analytic necessity but I am including in its purview other two forms of ‘necessity’, viz. synthetic necessity and pragmatic necessity. I will discuss in this paper how Dharmakīrti seems to acknowledge analytic
truths when he talks about the relation of identity (i.e., partial identity) between probans and probandum. Now one can also make a distinction between analytic truths and logical truths such that all logical truths are analytic but the converse is not true. How Dharmakīrti maintains this distinction is an interesting issue, which also I shall deal with. I will also discuss in this paper the way in which Dharmakīrti accepts the notions of synthetic and pragmatic necessity. The whole discussion arises in the context of Dharmakīrti’s theory of *anumāna*. How do these various types of necessity play their role in Dharmakīrti’s theory of *anumāna-pramāṇa* is the general theme of this paper.

In the concluding section of the paper I will compare Dharmakīrti’s approach to necessity with the approach of Naiyāyikas.

[1.1] The *Pramāṇa-prameya* framework of Dharmakīrti:

The knowledge of reality we have is either direct or indirect. The direct knowledge is called *pratyaksa* which is the passive reception of the real object as it is. It is passive in the sense that it does not construct or distort its object mentally. The real object given in *pratyaksa* is called *svalaksana*, the unique particular. The direct knowledge has its inbuilt indubitability or certainty as it does not impose any idea or mental construction on the object but receives the object as it is given. Moreover, it is supposed to be different from an illusion or hallucination. But when we try to know an object indirectly, we do not have the kind of inbuilt certainty which we have in direct knowledge. Still Dharmakīrti believes that *anumāna-pramāṇa* i.e. indirect knowledge can have certainty or indubitability within certain limitations. Now what are these limitations? The basic limitation seems to be this. Through *anumāna* we cannot grasp the unique particular, but only the ’universal character’ of the particular. For instance when we infer there to be fire on the hill on the basis of smoke that we perceive there, we are not grasping the particular fire that is there. We only know through *anumāna* that there is ’some fire’, something characterised by fireness. This universally characterised fire is categorised as *sāmānyalaksana*. As a matter of fact, however, there is no ‘universal fire’ in the world. The reality consists of particulars which do not in fact share anything with anything else. The universals are unreal. However, we do construct them mentally and attribute them to particulars in order to
talk about them or know them inferentially. The indirect knowledge of a probandum based on the knowledge of probans has certainty and infallibility within these limits.

[1.2] ‘Necessity’ in the two stages of inference: svārthānumāna and parārthānumāna:

We come across the notion of necessity at two stages of anumāna. The first stage is that when we know the probandum for ourselves on the basis of the probans. At this stage we should have certainty about the triple character of the probans. The triple character in its final analysis boils down to the double character according to which (1) The probans should be present in the property-bearer where the probandum is being inferred and (2) The probans should be necessarily related to the probandum such that the probans cannot exist without the probandum. Out of these two the second characteristic of probans involves the notion of svabhāva-pratibandha i.e. the natural and necessary relation between probans and probandum. This necessary relation may be causal or an identity relation according to Dharmakīrti which in modern terminology could be described as synthetic and analytic relation respectively. Then we come to the second stage of anumāna where we are presenting an argument in order to convince the other person that the probandum must be there in the property-bearer. This argument is called pararthanumana, i.e. the inference for others. At this stage Dharmakīrti is concerned with the notion of logical necessity because according to him parārthānumāna, in order to be called pramāṇa should not only contain true premises, but those and only those premises which necessarily lead to the intended conclusion.

The question of logical necessity does not arise with respect to svārthānumāna, because it is a result of a process which is cognitive in nature, but not necessarily argumentative in its form. Parārthānumāna, on the other hand, is a verbal expression having the form of an argument. The distinction between svārthānumāna and parārthānumāna is not the one between ‘arguing to oneself’ and ‘arguing to others’, but between an indirect cognition occurring to one and ‘a verbal expression (having the form of an argument) causing an indirect cognition in others’.

As a result the question of logically necessary relation between premises
and conclusion can be legitimately raised with respect to parārthānumāna, but not with respect to svārthānumāna. However, the questions of analytic and synthetic necessity with regard to the relation between probans and probandum can be legitimately raised in the context of svārthānumāna.

With this background let us try to consider closely the three kinds of necessity dealt with by Dharmakīrti. I begin with logical necessity.

[2.1] Logical necessity vis-à-vis analytic necessity:

Before we deal with Dharmakīrti’s account of logical necessity, some clarity about the distinction between logical necessity and analytic necessity would be in order. One way of making the distinction between them is, to use Gilbert Ryle’s terminology, to say that a truth involving logical necessity is the statement true solely in virtue of the meanings of the topic-neutral terms, whereas the truth involving analytic necessity is a statement true mainly in virtue of the meanings of topic-specific terms. In Dharmakīrti’s terminology this distinction can be understood in a different way. What we may call analytic truth, Dharmakīrti describes it as the truth based on identity (tādāmya) between two essential aspects, svabhāvas, of a thing. What we may call logical truth, Dharmakīrti describes it as truth which follows by the force of meaning. To simplify the matter let us consider two statements (1) ‘Whatever is human is animate’ (2) ‘Whatever is human is human’. Here the first statement would be called an analytic truth and the second a logical one. In order to know the first statement to be true we have to know the meanings of the topic-specific terms ‘human’ and ‘animate’. But what does it mean? Knowing the meaning of the word ‘human’ is to know what it is to be a human. To know the meaning of the word ‘animate’ is to know what it is to be an animate thing. In other words we have to know the svabhāvas (self-natures, essences) of human and animate things. By knowing these svabhāvas we can also know that a thing cannot have human - svabhāva without having animate-svabhāva. However, knowing the svabhāva of a human is not required in order to know the second statement to be true viz. whatever is human is human. The truth of this second statement follows by the force of the meanings of the words ‘whatever’ and ‘is’ and by the repeated use of the word ‘human’. A logical truth in this sense is based on the force of meanings of the words.
While ascertaining logical truths we are not concerned with the essential nature (svabhāva) of any specific thing or group of things. However, this is not to imply that while ascertaining logical truths we are not concerned with the natures of things at all. We could be concerned with them in a very very general way. But we will take up this point a little later.

[2.2] Dharmakīrti’s examples of logical necessity:

Dharmakīrti exhibits his awareness of logical necessity in the context of inference (parārthānumāna) with both its aspects: What is logically necessary for the validity of inference has to be treated as mandatory and what is not so necessary should not be treated as mandatory. Let us see how it happens.

(a) When Dharmakīrti discusses two formulations of the invariable concomitance between probans and probandum, viz. positive concomitance (anvaya) and negative concomitance (vyatireka), he says that any one of the two follows from the other. This is a necessary truth according to him. If we state the positive concomitance such as "Wherever there is smoke there is fire" then the negative concomitance such as "Wherever there is no fire there is no smoke" to use Dharmakīrti’s language, follows by the force of meaning. Similarly if we state the negative concomitance then the positive concomitance follows by the force of meaning.7

(b) The other context of logical necessity is the relation between premises and conclusion. Dharmakīrti accepts the model of argument consisting of two premises - one being the statement of the probans being a property of the property-bearer (paksadharmatā) and the other being the statement of invariable concomitance (vyāpti). Given these two premises the conclusion follows necessarily - again Dharmakīrti says, by virtue of meaning.8 Dharmakīrti goes to the extent to say that if premises have been stated then the conclusion need not be stated at all; rather it is redundant to state it because it necessarily follows from the premises.

(c) Dharmakīrti also observes that the order of the premises is logically irrelevant to the truth of the conclusion. Whether you state paksadharmatā first and then vyāpti or the other way about, both the arrangements of the premises being
logically equivalent with each other, lead to the same conclusion.\(^9\)

(d) He has a similar approach to instantiation (drṣṭānta) as a part of inference. When vyāpti is stated, instantiation is not necessary, because it is not logically necessary to entail the conclusion.\(^10\)

All these instances go in demonstrating how Dharmakīrti had a strong sense of logical necessity in his treatment of parārthānumāṇa.

[2.3] Dharmakīrti on the laws of thought:

I have presented above my understanding of Dharmakīrti’s conception of logical necessity as it operates in his theory of parārthānumāṇa. At a more general level the concept of logical necessity operates in the area of what are called the laws of thought. These laws not only govern arguments, but also thoughts, judgements and statements, whether they are materially true or false. The laws of identity, non-contradiction, excluded middle and double negation are some of the main examples of these laws. That Dharmakīrti was aware of these laws can be seen from some of the statements he makes in Pramāṇavārtika and Hetubindu, about the nature of things. He, for instance, says -

1. Everything is what it is by its very nature
2. Everything, by its very nature, is different from what it is not, that is, from all other things whether similar ones or dissimilar ones.
3. And there is no third alternative\(^11\).

The above statements clearly indicate Dharmakīrti’s awareness of the laws of identity, double negation, non-contradiction and excluded middle. But all these laws are stated by Dharmakīrti to be applicable to things in the world as we understand them and not to statements or judgements. By using Carnap’s idiom one can say that Dharmakīrti has expressed the laws of thought in material mode of speech and that these laws should be translated in formal mode of speech, in order to avoid conceptual confusions. In that case they will look like the following,

(1) Every true statement is true.
(2) Every true statement negates its negation which is a false statement.
(3) There is no third alternative [ This third alternative can be imagined in two ways:
There are statements which are both true and false and there are statements, which are neither true nor false. But instead of following Carnap’s way I will rather follow Wittgenstein’s way as he carves out in Tractatus. I suggest that this latter way is more thorough and also more suitable for understanding Dharmakīrti’s approach to logic and ontology. Wittgenstein held that language is governed by the rules of logic, but language depicts reality as we think it to be and hence reality too is governed by logic. So Wittgenstein says, “Logic pervades the world. Limits of the world are the limits of logic.” This was a basic insight of Wittgenstein in Tractatus and I venture to claim that Dharmakīrti too had a similar insight. Everything in the world according to Dharmakīrti has its own nature, its unique svabhāva. This svabhāva determines what the thing is and also excludes the thing from all other things. This also indicates that there is no third possibility and in this way the laws of thought are governed by the fact that everything has its own svabhāva.

I am aware that the comparison between Dharmakīrti and early Wittgenstein like any other comparison cannot be stretched too far. For instance simple indivisible objects of Wittgenstein and unique particulars i.e. svalakṣaṇas of Dharmakīrti are not the same. Wittgenstein is concerned with the world, as it is intelligible through language. He divides world into states of affairs, which are further analyzed as the configurations of objects. The objects by their very nature are nameable and their configurations are describable by elementary propositions. There is one–one–correspondence between elements of the world and elements of language according to Wittgenstein. Dharmakīrti on the other hand was talking about two worlds of objects; one was the world of describable, universal objects (sāmānyalakṣaṇas); the other was the world of particulars which could be apprehended by pre-linguistic experience (svalakṣaṇas). What Wittgenstein calls ‘object’ are not svalakṣaṇas for Dharmakīrti, but they are primitive types of sāmānyalakṣaṇas.

It should be noted here in passing that just as Dharmakīrti’s svalakṣaṇas should not be identified with Wittgenstein’s objects, they should not be identified with Kant’s things in themselves either. This latter kind of identification was due to Stcherbatsky and it has misled many scholars of Buddhism. Kant’s things in
themselves are not knowable but only conceivable or thinkable. Dharmakīrti’s *svalakṣaṇas* are directly cognizable and not just thinkable.

On this background we can appreciate how Dharmakīrti’s notion of *svabhāva* is operative at two levels. The first level could be called the level of pre-linguistic experience; the second level could be called the level of conceptual, linguistic understanding. At the level of pre-linguistic experience, as we have seen, we have *svalakṣaṇas*, i.e., the unique particulars. These particulars are unique in the sense that they do not share anything with anything else or with each other. They are excluded from similar as well as dissimilar objects. They are *sajātiya-vijātiya-vyāvṛtta*. At this level we cannot call these objects as tables or chairs or as blue or green. Because calling an object table is assimilating it with other table-like objects and distinguishing it from non-tables. At this stage we can say at the most about such an object that it is what it is. But by saying this we are actually not saying anything at all. But again to use Wittgenstein’s idiom we are *showing* uniqueness of the object—in–itself without *saying* anything about it. In a way to say that only *svalakṣaṇas* are real is to say that ‘everything is what it is and is different form everything else’—which is a basic law of thought which *says* nothing, but which *shows* the form of the unique particular. In a way the term *svalakṣaṇa* is a limiting case of language—‘*svalakṣaṇas*’ is neither a proper noun nor a common noun - of anything. Yet when we talk about reality in terms of ‘*svalakṣaṇas*’, we are treating ‘*svalakṣaṇa*’ as a common noun. The laws of thought are available here at a very rudimentary level. *Svalakṣaṇas* do have *svabhāva*, but every *svalakṣaṇa* has an exclusive, isolated *svabhāva* of its own which we are not in a position to determine at this level16.

So at the level of pre-linguistic direct experience we rather get a chaotic picture of reality. Although what we eat, drink, touch, feel and stumble at, are *svalakṣaṇas*, we, as rational beings, are not satisfied with their *svalakṣaṇa*–nature howsoever real it may be. We want to identify these *svalakṣaṇas* as members of certain classes, as similar and dissimilar with others in order to make them meaningful and relevant parts of our life. So I don’t drink just some unique particular, but I drink, say, water which performs the function of quenching my thirst - I drink which is like something which I have been drinking every day and I will continue to drink in future. This is the level of understanding things, making sense of them through concepts, classes and
Now we don’t identify things just as svalakṣaṇas, but as tables and chairs, blue and green, as ‘ṣimṣapās’ and trees. Now too we talk of svabhāva, but this svabhāva is a universal type of svabhāva which is constructed by mind and attributed to things. Now the laws of thought are available in an articulate and determinate way. Instead of saying everything is what it is and is other than everything else, we now say that all trees are trees by their very nature and they are other than all non-trees. Now all trees appear to have a sharable svabhāva called tree-ness and the laws of thought based on the notion of svabhāva become operative at this level too. Now the story of understanding reality rationally and making it relevant to our life can be extended further to incorporate other relations such as analyticity and causality. But it is not necessary to extend the story at this stage. What is important at this stage is that the laws of thought according to Dharmakīrti are rooted in the svabhāva of things—whether we are talking about svabhāva as it is experienced directly and pre-linguistically or as it is understood conceptually and linguistically. Consequently when Dharmakīrti states and explains the laws of thought in terms of the notion of svabhāva, it has a deeper significance than merely being a matter of material mode of speech ultimately translatable in terms of formal mode. Elsewhere I have called this approach of Dharmakīrti his logical essentialism and have distinguished it from the metaphysical essentialism of Naiyāyikas and Vedāntins. The metaphysical essentialism leads to a kind of eternalism as we clearly see in Nyāya conception of eternal jatis and the Vedanta conception of eternal Brahman. But Dharmakīrti’s logical essentialism does not lead to any kind of eternalism. From the other side, Dharmakīrti’s logical essentialism is also an answer to Nih-svabhāvavāda or anti-essentialism of Nāgārjuna. Nāgārjuna held that any kind of essentialism necessarily leads to eternalism or nihilism. Dharmakīrti held that this may be true with metaphysical essentialism but not quite true with logical essentialism. Logical essentialism is the minimal form of essentialism, which is the very condition of the possibility of language and logic.

[3.1] Dharmakīrti’s conception of analytic necessity:

So far we have discussed how the concept of logical necessity operates in Dharmakīrti’s theory of inference and also in his discussion of the basic laws of
thought. We have also seen that Dharmakīrti distinguishes analytic necessity from logical necessity. Dharmakīrti also distinguishes analytic necessity from synthetic necessity. This latter distinction emerges in the context of Dharmakīrti’s theory of inference in the following way. As I have pointed out earlier, the inferential knowledge should be based on an invariable relation (avinābhāva) between probans and probandum. The invariable relation amounts to the fact that the probans does not exist without the probandum. This is not supposed to be a contingent fact, a matter of coincidence or luck, but a matter of necessity. Now this necessary relation is possible in two ways. Either probans and probandum are two aspects of one and the same thing such that one of them (viz. the probans aspect) cannot exist without the other (viz. the probandum aspect) or probans and probandum are two numerically different objects linked to each other by a necessary relation. The former gives rise to an analytic vyāpti-statement and latter to a synthetic vyāpti-statement. Now let us consider the former case i.e. the case of analytic necessity more closely. In western tradition we are told that analytic statements are true in virtue of the meanings of terms; they are linguistic in nature; they are uninformative because the predicates in them are contained in their subjects. These are some of the general descriptions of analytic truths. According to these descriptions analytic truths include logical truths. Here, however, we are concerned with those analytic truths, which are distinct from logical truths. Hence we can describe them as the statements true mainly by virtue of topic specific terms. For instance the statements such as "All brothers are male", "Every human is an animal", "Every śimśapā is a tree" are analytic truths, but not logical truths.

Dharmakīrti would explain these examples differently, again in material mode of speech rather than formal mode, because according to him the so-called analytic truths are rooted in the svabhāvas of things as we understand them. So any brother by his very nature is a male; a brother cannot have his brother–svabhāva without having another svabhāva namely that of a male. Here there is tādāmya, partial identity between two svabhāvas where a thing cannot have one svabhāva without having the other svabhāva. This tādāmya which is rooted in our understanding of the nature of things is capable of being expressed in terms of class-subclass relation. One more thing should be noted here clearly. Though we are talking
here about *svabhāvas* of things, these *svabhāvas* are *sāmānyalakṣaṇas* and not *svalakṣaṇas*, they occur at the level of understanding, i.e. judgemental cognition of things and not at the level of pre-judgemental direct awareness. Here the relation among the ‘*svabhāvas*’ is largely logico-linguistic though it is ontological in an indirect way. Dharmakīrti does not construe these relations as purely ontological. For example he does not transform classes into eternal essences or *jātis*. On the contrary, instead of reducing essentialism to eternalist ontology, Dharmakīrti employs this very technique of *tādātmya* to show that things are non-eternal. Dharmakīrti observes that when we start thinking about *svalakṣaṇas*, we attribute some universal features to them. We can even attribute the most general universal features such as realness or existence. For example we can say that all the *svalakṣaṇas* are real, that they are *sat*. But what is meant by *sat* here? *Svalakṣaṇas* are not passive or idle entities. They are very much active or functional. In fact they are real in the sense of being *arthakriyākāri*. (having causal efficacy). So a thing cannot have realness as its *svabhāva* unless the thing is active and functional. But activity or functionality as *svabhāva* does not make sense without another *svabhāva*, namely change or impermanence. In this way if things are real by their very nature, then it necessarily follows that they are impermanent. “Every thing that exists is functional” and “Everything that is functional is impermanent” can be treated as analytically true statements in Dharmakīrti’s framework.¹⁸

[4.1] Dharmakīrti on synthetic necessity:

Now let us consider the other kind of necessity, namely synthetic necessity. Here we can continue Dharmakīrti’s story of understanding the world and making it relevant to our life. When we understand the world and make it meaningful for our life, we not only understand it in terms of class-membership relation and class-sub-class relation, but also in terms of inter-class relations. We start understanding the world in terms of relations not only between members of the same class or sub-class, but between members belonging to two or more distinct classes. Such inter-class relations could be contingent- those of simultaneity or succession, similarity or dissimilarity and soon. But they need not always be contingent but they could be necessary in nature. For instance the class of smoke-particulars and the class of fire particulars do not hold a class-sub-class relation. Neither smoke-class is the subclass
of fire-class nor vice-versa. Even then there is a sort of necessary relation between the two. On the basis of this relation, it is possible for us to infer a member of fire-class on the basis of a member of smoke-class.

One may point out here that though smoke-class is not a subclass of fire-class, if you consider the class of things possessing smokes and the class of things possessing fire, then we can claim that former is the subclass of the latter and hence the class-subclass relation holds here too. I humbly suggest that it is difficult to make such a strong claim in Dharmakīrti’s framework. Firstly the substratum-superstratum relation (adharā-adheya relation) and the relation of having the same substratum (sāmānādhi-karanya) are not basic to Dharmakīrti’s theory of vyapṭi. Secondly, insofar as we are talking about the cause-effect relation, we cannot talk strictly about the common substratum of cause and effect, because they cannot exist simultaneously.

Dharmakīrti in fact is responding to an important question here. Suppose, there are two objects which do not have identity relation (tādātmya) between them, but they are two different objects and yet there is a necessary relation between them, then what kind of relation would it be? Obviously it would not be the relation of analytic necessity but that of synthetic necessity. But this is not enough. Dharmakīrti opines about such a relation that the relation of synthetic necessity cannot be explained properly without treating it as that of casual necessity. Dharmakīrti seems to be having the following kind of reasoning behind this. If ‘A’ and ‘B’ are two different objects and we are in a position to infer the existence of ‘B’ with certainty on the basis of ‘A’, then, we should be in a position to make following sorts of statements about ‘A’ and ‘B’:

‘A’ cannot possibly exist without ‘B’;
Existence of ‘A’ has been necessitated by ‘B’;
‘A’ is there because of ‘B’

All this boils down to saying that ‘A’ must be caused by ‘B’. On these lines any binding connection between two different things or events turns out to be a causal connection. To say that there is a synthetic necessity, which has nothing to do with causality, is meaningless according to Dharmakīrti.

This of course raises some issues. For instance, under causal inference
Dharmakīrti includes inference of cause from effect, mainly because he understands cause as a necessary condition rather than sufficient condition. But elsewhere Dharmakīrti also has the notion of cause as the sufficient condition. It is possible to infer effect from cause when the latter is understood as sufficient condition. Why cannot Dharmakīrti allow inference of effect from cause under causal inference then? This, I suggest, is a gap in Dharmakīrti’s account of inference based on cause-effect relation. The gap could have remained there because the dominant conception of cause in Indian tradition has been that of a necessary condition rather than a sufficient condition (or the necessary and sufficient condition). One thing, however, seems to be clear. There seems to be no doubt about the importance of the basic insight of Dharmakīrti that all synthetic necessity is causal. This insight gives Dharmakīrti a crucial position in the controversy over vyāpti.

Here, we have on the one hand, Naiyāyikas and the like who do not want to restrict vyāpti to tādātmya and tadutpatti but to cover all sorts of regularities under it, so that the notion of vyāpti in its essence gets dissociated from the notion of necessity itself. On the other hand we have Cārvākas and the skeptics who deny vyāpti simply because we cannot find causal necessity or any other kind of necessity contained in synthetic regularities. Dharmakīrti stands between these two positions and tries to make room for necessity within the domain of synthetic regularities.

[5.1] Dharmakīrti on pragmatic necessity:

Apart from the notions of logical, analytic and synthetic necessity, Dharmakīrti’s deliberations on inference suggest another notion of necessity, namely pragmatic necessity. This notion is implied by the notion of pragmatic contradiction, of which it is a negation. Dharmakīrti borrows the notion of pragmatic contradiction from Diṅnāga who introduces it as a fallacy of thesis (pākṣābhāsa) called svavacanaviruddha. In the case of this fallacy the thesis is opposed to its own utterance. A fallacious thesis of this kind could be a self-contradiction in its logical/analytical sense (“My mother is a barren woman”) but it can be just a pragmatic contradiction (Diṅnāga’s example quoted by Uddyotakara—“Words are meaningless”). By pragmatic contradiction I mean the statement which contradicts with some of the presuppositions of the very act of uttering that statement.
‘Words are meaningless’ is a pragmatic contradiction because when one utters the sentence (for saying something), one presupposes that the words which one uses are meaningful. The content of the statement contradicts with this presupposition. Dharmakīrti’s example is slightly more complex. It says, “Inference is not a means to knowledge”. (“anumānamapramāṇam”21) When one is asserting it as a true cognition implied by facts, one is presupposing that inference is a means to knowledge. But the content of the thesis contradicts with this presupposition.

There is a subtle but important difference between a logical contradiction and a pragmatic contradiction. If the presuppositions of the act of making a statement are made explicit by the speaker, then the pragmatic contradiction may transform into a logical one. For example if one says “I am saying this by using meaningful words that words have no meaning” or “I am trying to prove by inference that inference is not a means to proof”, then one is contradicting logically. But the beauty of pragmatic contradiction lies in the presuppositions remaining hidden. Sometimes the contradictory status of the alleged pragmatic contradiction may be doubtful if the exact nature of the presupposition and the content of the statement are not clear22.

By negation of pragmatic contradictions we get pragmatic necessities, which are roughly what G. E. Moore called common sense beliefs. In this sense Diṇnāga and Dharmakīrti, as they insist on svavacanaviruddha as a fallacy of thesis, can be called defenders of common sense, who would like to explain and not explain away the common sense beliefs. But this is a different issue. Moreover, the notions of pragmatic necessity and pragmatic contradiction are not central to Dharmakīrti’s theory of inference.

[6.1.0] Naiyāyikas and Dharmakīrti: Their approaches to necessity:

The significance of Dharmakīrti’s conception of necessity in the context of his theory of inference can become clear if we compare Dharmakīrti’s theory with the Nyāya theory.

Historically Nyaya theory of inference has to be divided into two stages - pre-Dharmakīrti and post-Dharmakīrti. (Navya-nyāya could be regarded as the third stage, but here we are not regarding it as a separate stage). In pre-Dharmakīrti stage the notion of universal vyāpti was not introduced and the nature of inference accepted
was that of an analogical reasoning. In the post-Dharmakīrti stage Naiyāyikas incorporated the notion of universal vyāpti and accepted a deductive structure of the ‘inference for others’. Here I am mainly concerned with the Nyāya theory of inference of post-Dharmakīrti period, because it is the more current version of Nyāya theory and is more closely comparable with Dharmkīrti’s theory.

Again this comparison can be made at different levels. We can compare their attitudes to ‘laws of thought’ such as Identity and Non-contradiction. We can compare their attitudes to what can be called pragmatic contradiction. At the level of svārthānumāna we can compare their approaches to vyāpti vis-à-vis the notions of synthetic and analytic necessity. At the level of parārthānumāna we can compare their approaches to the relation between premises and conclusion vis-à-vis the notion of logical necessity.

B. K. Matilal in one of his articles has discussed the notion of necessity in the context of Indian logic. Similarly J. N. Mohanty in one of his papers tries to defend Nyāya logic in comparison with the western formal logic. These articles can be the points of reference for our discussion.

[6.1.1] Laws of Thought and Pragmatic Contradiction:

Matilal has pointed out how Udayana in Nyāyakusumāñjali exhibits his awareness of the laws of thought such as Excluded middle and Non-contradiction. He also refers to Udayana’s conception of svavacanavirodha. I only want to qualify his claim by saying that the term svavacanavirodha and also the terms such as vyāghāta are generally used by Udayana in the sense of pragmatic contradiction and not logical contradiction. But now the main question is about the notion of necessity in the context of svārthānumāna and parārthānumāna.

[6.1.2] Svārthānumāna and Parārthānumāna

First of all we have to note that the relation between svārthānumāna and parārthānumāna is not conceived in Nyāya in the same way in which it is conceived in Budhist logic. Naiyāyikas accept isomorphism between the two (except for pratijñā; there is no step corresponding to pratijñā in svārthānumāna); and as the cognitive states in the process of svārthānumāna form a causal chain, so do the stages in parārthānumāna. Just as parāmarśa causes anumiti in svārthānumāna, upanaya (rather, the cognition of upanaya) causes nigamana (i. e., the cognition of nigamana)
in *parārthānumāna*. Since here we have only causal necessity and not logical necessity, the scholars like Matilal and Mohanti have to face the problem of interpreting the causal necessity as something analogous to logical necessity.\(^\text{28}\)

**[6.1.3] The question of logical necessity in *parārthānumāna*:**

The issue is further complicated by their observation that Indian theory of inference lacks the notion of logical necessity because it lacks the notion of a proposition. In Indian theorizations of inference we talk of the connections among cognitions and not among propositions. This view seems to be biased by the alleged centrality of Nyāya to Indian logic. It is true that Naiyāyikas do not have the concept of propositions or cognitive contents of sentences apart from their referential objects nor do they talk about meaning relations amongst sentences. The same model, however, cannot be applied to Dharmaṇīrti. Dharmakīrti talks about meanings of sentences in the form of *sāmānyalakṣaṇas* or *vikalpas* and we have also seen that he talks about the necessary relations amongst meanings in the form of *arthāpatti*. Although on Dharmakīrti’s analysis, propositions are mental constructs and not eternal entities - non-spatial and non-temporal – like those of Gotlob Frege, whether propositions can be given such an independent ontological status is a separate debatable issue.

I believe that there is no need to make an issue of the fact that Indian tradition has no concept of proposition as western logical tradition has. Are there propositions over and above sentences? This is a philosophical-logical issue and there are logician philosophers of the west (such as Quine) who present their logical theorisation by using the language of sentences rather that propositions. By introducing the notion of a proposition (or ‘thought’) as a non-spatial non-temporal entity Frege has avoided psychologism, but has invited what can be called ontologism, which could be equally debatable. I am suggesting that core logical issues can be presented and discussed without accepting propositions in Fregian way. One has to talk, however, about meanings of sentences and their binding interrelations of some sort. The important questions here would be: having said “A” ("A" being a sentence or set of sentences with an interpretation) do we have to accept (say-) “B” by force of meaning? Are we permitted to accept “B”? etc. I am suggesting that Dharmakīrti seems to accept such
binding relations among meanings of sentences in some way, which Naiyāyikas probably do not.

That is why with regard to the stage of parārthānūmanā we find that Naiyāyikas retained their adherence to five-step argument (pañcāvayavī vākya)29. ‘Whether all the five steps are necessary from logical point of view’ was never the issue on the Nyāya agenda. The kind of justification Naiyāyikas gave for the necessity of five steps was mostly pragmatic or psychological and I don’t know whether it was satisfactory even as pragmatic or psychological justification. They even insisted on the particular order of the steps as prescribed by Akṣapāda-Gautama and regarded violence of that order as a point of defeat called aprāptakāla. A question arises: what might be the reason behind the Nyāya adherence to the traditional form of five–step argument even at the cost of logical rigour? It is difficult to answer. Apparently one of the reasons for this seems to be that Naiyāyikas generally did not deviate, at least peripherally, from Nyāya-sūtras of Akṣapāda. I say ‘peripherally’ because sometimes they retained the verbal skeleton of Nyāya-sūtras but poured new flesh and blood in it. For instance the five-fold scheme of āhetvābhāsas was retained by later Naiyāyikas with new content. It seems that Naiyāyikas did not find any easy way of interpreting the five-step argument differently and they remained satisfied with its pragmatic–cum-psychological justification.

[6.1.4] Anvaya-vyāpti and vyatireka-vyāpti

Naiyāyikas also refused to accept the Buddhist view that anvaya-vyāpti and vyatireka-vyāpti imply each other. But here the reason seems to be more philosophical. Because of their referential theory of meaning, a sentence in which words lacked reference was rendered not only false but also meaningless. For instance the statement of anvaya-vyāpti viz. ‘whatever is knowable is nameable’ was acceptable to Naiyāyikas. But its corresponding vyatireka-vyāpti which could be expressed as “whatever is not nameable is not knowable” was meaningless according to them, because nothing in the world according to them is either non-nameable or non-knowable. If at all vyatireka-vyāpti statement in this case would have been accepted as true, it would have been accepted as vacuously true. But no vacuously true statement was acceptable to Naiyāyikas. Consequently in Nyāya scheme there
were some \textit{vyāpti}-statements which were only positive without their negative counterpart; some were only negative without their positive counterpart and the remaining were both positive as well as negative. So the mutual derivability of \textit{anvaya-vyāpti} and \textit{vyatireka-vyāpti} could not be accepted as a general rule by Naiyāyikas. We find that a lot of energy of the later Naiyāyikas was spent (wasted?) in formulating the definition of \textit{vyāpti} which could adequately accommodate \textit{kevalānvayi vyāpti} along with the other two types of \textit{vyāpti}.

On the other hand acceptability of vacuously true statements was not a problem for Buddhists. In the inference that sound is impermanent because it is real, the \textit{anvaya-vyāpti} statement ran: ‘whatever is real is impermanent.’ This \textit{vyāpti}-statement had instances such as pot and cloth, but its corresponding \textit{vyatireka-vyāpti} statement which ran ‘whatever is permanent is unreal’ had no real instance according to Buddhists. Even then the \textit{vyatireka-vyāpti} statement was acceptable as a vacuously true statement. The \textit{vyatireka-vyāpti} statement did not imply or presuppose according to Buddhists that there are some permanent things in the world and that all of them are unreal. The statement simply meant for them that if at all anything would be permanent, it cannot be real. It is a universally general statement without an existential import. In fact any formal logician has to make room for vacuously true statements in his logical system – otherwise the concept of formal validity, which is compatible with material falsehood of premises and conclusion, will come to danger. I want to suggest here that the Buddhist’s acceptance of vacuously true \textit{vyāpti} statements is in true spirit of a formal logician having deep concern for formal validity and logical necessity. Naiyāyikas on the other hand could not develop the concern for logical necessity for the reasons suggested above.

\section*{6.1.5 Necessity in \textit{vyāpti}}

There is another issue about the role of ‘necessity’ in the nature of \textit{vyāpti} itself. Here we notice that Naiyāyikas neither assert that \textit{vyāpti} relation should be a necessary relation nor that the negation of \textit{vyāpti} should be nothing but impossibility. They regard observation of probans with probandum and the non-observation of probans without probandum as the determiners of \textit{vyāpti}. Though they insist on the non-availability of a counter-example (\textit{vyabhicāra}) and that of the obstructing
condition (upādhi) as the conditions of the truth of the statement of vyāpti, they do not insist on their impossibility. In this way Naiyāyikas allow many inferences as pramāṇa which are not based on a necessary relation. Is there then no scope for a necessary relation in Nyāya at all? That is not so. In their general epistemological and ontological theory Naiyāyikas do make room for analytic necessity (when, for instance, they talk about definitional equivalences or the hierarchy of universals) and also for casual necessity (when they define cause as a necessary pre-condition which cannot be proved otherwise). But they do not treat their necessity as the essential feature of vyāpti. Hence the essence of vyāpti boils down to empirical or contingent regularity.

[6.1.6] Two logics within Indian logic:

Both Matilal and Mohanti have treated Nyāya theory of inference as the representative of Indian logic. Hence they have treated the charges against Nyāya logic as those against Indian logic and their defense of Nyāya logic as defense of Indian logic as a whole. In this process the status and role of Buddhist logic becomes peripheral. Mohanty in his defense of Indian logic makes an interesting distinction between what he calls logic-1 and logic-2. By logic-1 he understands western formal logic in which there is opposition to psychologism, and the notions such as formal validity and logical necessity are core concepts. By logic–2 he understands Indian logic, which is essentially Nyāya logic for him, in which inference is a psychological process leading to material rather than formal truth, where necessity is causal rather than logical. Mohanty attempts to bring the two logics closer to each other in such a way that what he calls logic–2 will appear as logical in some trans-cultural sense (Mohanty, op. cit., p.106). Unfortunately Mohanty fails to see that there is a dichotomy analogous to Mohanty’s Logic–1 and Logic–2 within Indian Logic itself; out of which Buddhist logic (which flourished from Dharmakīrti) would represent what Mohanty calls Logic–1.

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**Primary Sources (With Abbreviations)**

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5. VN: Gokhale, Pradeep (Tr.): Vādanyāya of Dharmakīrti, Indian Books Centre, Delhi, 1993.

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10. Wittgenstein, Ludwig: Tractatus Logico-Philosophicus, D.F. Pears

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End-Notes:

[Acknowledgement : Some major parts of this paper were presented by the author as (i) Prof. P.V. Bapat memorial lecture in Bhandarkar Oriental Institute, Pune (2002) [subsequently published as “Three Necessities in Dharmakīrti’s Theory of Inference” in Purisuttamanussati-Pavacana-Sangaho (P. V. Bapat Memorial Lectures), (Ed.) Kalpakam Sankarnarayan, Somaiyya Publications, Mumbai, 2006] and (ii) a paper in the conference on ‘Logic and Its Relationship with other Disciplines’ held at IIT, Mumbai (January 2005).]

1 Sharma A. D. (2001)

2 Dharmakīrti discusses this theme in VN.

3 This view is comparable with that of the British empiricist philosopher Berkley that there are no abstract general ideas.

4 Following Dinnāga’s account of inference Dharmakīrti too organizes his theory of inference around the notion of the triple character of probans, But while explaining the triple character, especially the last two characteristics of probans, Dharmakīrti insists that they should be based on necessary relation between probans and probandum. In this way the last two characteristics boil down to a single characteristic viz. the universal and necessary relation of vyāpti. Hence the notice of necessary relation becomes central to Dharmakīrti’s theory and the doctrine of triple character becomes peripheral.

5 Prof. Rajendra Prasad argues at length against Dharmakīrti’s division between svārthānumāna and parārthānumāna. (Prasad, Rajendra (2002), pp. 27-36) Two comments may be in order here: (1) Prof. Prasad’s argument rests at least partly on his wrong reading of Dharmakīrti. Dharmakīrti distinguishes between svārthānumāna and parārthānumāna by calling the former jnānātmaka and the latter sabdātmaka. Prasad translates jnānātmaka as knowledge-giving (Ibid, p. 28) and then points out that since both the kinds of inference are knowledge-giving, there is no radical distinction between them. In fact jnānātmaka does not mean knowledge-giving, but that which is of the nature of knowledge. According to Dharmakīrti svārthānumāna is of the nature of knowledge whereas parārthānumāna is of the nature of linguistic expression (sabdātmaka). Hence the difference between the two is categorical.

(2) Prof. Prasad does not succeed in showing that svārthānumāna and parārthānumāna have the same formal structure.

6 Ryle, Gilbert (1954)

7. “vacanametat sāmarthyādubhayamāksipati”, Hetubindu of Dharmakīrti, p.92 (as included in Gokhale P.P. (Tr.), 1997) Dharmakīrti uses the term arthāpatti for semantic implication in
Pramāṇavārtika (Shastri, Dvarikadas (Ed.), 1968), Pārārthānumāna pariccheda, verse 220.

8. ‘Śamarthhyād eva bhavati’ NB, 3.35, 3.36 (as included in Shastri, Shrinivas (Ed.), 1975)

9. “atrāpi na kaścit kramaniyamaḥ iṣṭārthasiddherubhayatrāviśeṣāt”, Vādanyāya, I.3

10. “na prthag drṣṭānto nāma sādhanāvayavah kaścit”, NB, 3.121

The third alternative can be imagined in two ways: (a) Some of the things are both-what they are and what they are not. (b) Some of the things are neither what they are, nor what they are not. Dharmakīrti’s denial of the third alternative implies the denial of both the ways. (a) is the breach of the law of non-contradiction whereas (b) is that of the law of excluded middle. For the discussion of the laws of thought in Hetubindu, see HB 4.11-12

12 Wittgenstein (1961) regarded philosophical propositions as pseudo-propositions. According to him the logical form of propositions cannot be talked about, it can only be shown through the pseudo-propositions which do not say anything. Rudolf Carnap (1937) criticized this view and tried to show by making the distinction between formal mode and material mode of speech, that we can make philosophical statements in formal mode of speech and say something meaningful and true about the logical syntax of language. By undertaking an exercise of translating statements in material mode in to those in formal mode of speech, he tried to show that we can successfully avoid direct or indirect reference to objects. His exercise, to my understanding, is misleading. Consider for instance his translation of “Yesterday’s lecture treated of Babylon” as “In yesterday’s lecture the word ‘Babylon’ occurred”. The translation is misleading because the original sentence does not imply just that the word ‘Babylon’ occurred but that it was used for designating an object. Hence the logic of language cannot be isolated from reference to objects.

13 Tractatus, 5.61. The objects in the world according to Wittgenstein have logical forms which determine how the objects can enter into states of affairs and how they cannot. (2.0141). How the world exists is a contingent matter. (“All that happens and is the case is accidental”, (6.41)) But that the world exists, that there must be objects with their logical forms is not contingent. (Wittgenstein calls it ‘mystical’ in proportion 6.44). There is something necessary about the world. (“Objects constitute the unalterable form of the world”, (2.023)). Logic governs what can be said about the objects (i.e., what can there be in the world, what is logically possible) and what cannot be said (i.e. what cannot be there in the world; what is logically impossible).

14 “sarve bhāvāḥ svabhāvena svasvabhāvavvyavasthitēḥ/
svabhāvaparabhāvāḥyaṁ yasmād vyāvṛtibhāginah/
 tasmādyaṁ yato’ṛthānāṁ vyāvṛtiṣṭannibandhanāḥ/
jātibhedāḥ prākālpyante tadviśeṣāvagāhinaḥ//
PV 3.40-41

[All the things, by their own nature, are established in their own nature, and hence are excluded from things of their own kind and of other kinds. Therefore different universals are constructed, which indicate the differences determined by those other things from which the things are excluded.]

15 There is another important difference between the philosophical positions of Wittgenstein and Dharmakīrti. Wittgenstein’s approach to causality is Humian rather than Kantian. His statement “From
the existence or non-existence of one state of affairs it is impossible to infer the existence or non-existence of another” (Wittgenstein, Op. Cit., 2.062) implies that there is no necessity other than analyticity. Kant and Dharmakīrti would have disagreed with it.

16 “Everything is what it is” has subject predicate form and is also a necessarily true statement. It can be regarded as an example of de re necessity. Unlike John Dunn (2004: 187) I would like to claim that Dharmakīrti does accept de re necessity in a minimal way mainly in the context of the laws of thought and also svabhāvānumāṇa. De dicto necessity becomes possible because de re necessity is accepted at least in a minimal sense.

17 I have elaborated this point in Gokhale (1996)

18 This may enable us, I suppose, to imagine a possible answer to Prasad’s criticism of Dharmakīrti’s formulation of inference based on svabhāvahetu (Prasad (2002) pp. 86-90). ‘Whatever is simsapā is a tree’ is a statement of invariable concomitance in Dharmakīrti’s formulation of an inference of that kind. Prasad claims that it is redundant to make such a statement because it is analytic. Perhaps Prof. Prasad is looking at such statements from a modern analyst’s point of view, but he is not trying to understand Dharmakīrti’s standpoint towards such statements. If such statements are understood in Dharmakīrtian way, as the statements throwing light on the self-nature of a thing as to how different aspects of the nature of a thing are internally related with each other - then the so-called analytic vyāpti-statement will not be redundant but quite informative. Prof. Prasad claims that tādātmya according to Dharmakīrti is the ‘partial identity between two concepts’(Prasad (2002) p. 88) whereas for Dharmakīrti it is the partial identity between two svabhāvas of a thing. Hence the partial identity is not purely logico-linguistic, but it also has an ontological dimension which Prasad seems to ignore. I am not saying that Prasad is completely wrong in his criticism because after all it is a part of a larger question about analytic truths, whether they can be informative, and whether they have an ontological dimension.

19 While discussing inference based on non-perception (anupalabdhi) Dharmakīrti accepts an inference in which absence of cause is inferred on the basis of the absence of its effect. Here cause is understood as the sufficient condition. He also accepts an inference in which absence of effect is inferred on the basis of the absence of its cause. There cause is understood as a necessary condition. But while discussing the inference based on cause-effect relation, he discusses only inference of a cause from its effect and not that of effect from its cause. This appears to be a discrepancy.

20 See Gokhale(1992), pp.47-48

21 NB, 3.52

22 For example we find that there was a controversy on the exact way in which ‘anumāṇa-pramāṇa’ is presupposed by the assertion that “anumāṇa is not pramāṇa”, between Dharmottara and Śāntabhadra. (cf. Nyāyabinduṭīkā, pp. 253-256, as under NB, 3.53)

23 I have tried to show this in Chapters II and III of Gokhale (1992)


25 Mohanty (1992)

Ibid, p.137. Matilal translates the term as ‘self-contradictory statement’. Actually it is not a self-contradictory statement in its logical sense. It is in fact contradictory to the (presuppositions of) the very act of its utterance.

Matilal claims that the Nyāya confusion in the connection between what is called a logical necessity and what is a causal necessity is understandable. [Matilal (2004), pp. 138]. Similarly Mohanty agrees that inferential process according to Nyāya is a psychological process. But he insists that this psychological process at the same time has a logical structure. There is reconciliation of logic and psychology in Nyāya inference. Mohanty also agrees that Naiyāyaikas talk about causal necessity rather than logical necessity in the context of inferential knowledge. But he insists that causal necessity need not be opposed to logical necessity. [Mohanty (1992) pp.]

We find that the meaning and role of the five-step argument undergoes a change when we pass from pre-Dharmakīrti to post-Dharmakīrti period. In Nyāya logic before Dharmakīrti, the third step in the five-step argument, viz. dṛṣṭānta did not contain universal vyāpti-statement and hence the five-step argument amounted to be an analogical argument rather than being a valid argument. After Dharmakīrti the universal vyāpti statement was included in the five-step argument, and parārthānumāna of Nyāya took a valid shape. For a detailed account see Gokhale (1992)