

THE CONCEPT OF ARTHĀPATTI

The concept of *arthāpatti* has been employed as a criterion of knowledge or *pramāṇa* in both Pūrva-Mīmāṃsā¹ and the Uttara-Mīmāṃsā (e. g., the Advaita Vedānta²) traditions of Hindu logic and methodology. In the history, two major views have been projected : *One*, *arthāpatti* is a *pramāṇa*, either primitively³ or derivatively.⁴ The Mīmāṃsakas held the former position, while the Naiyāyikas maintained the latter. *Two*, *arthāpatti* is a logical concept such that one can exhibit its formal structure and apply all the relevant criteria of logical evaluation to it. Th. Stcherbatsky,⁵ D. M. Datta,⁶ and S. S. Barlingay⁷ are some of the noted philosophers who have maintained this view. I have shown in this paper that both these views lack solid foundation, and misconstrue the concept. On my account, *arthāpatti* is neither an epistemological nor a logical concept but it consists of interpretation and/or explanation largely of the Vedas which have been regarded by the Mīmāṃsakas as setting limits to human rationality with respect to the knowledge of *dharma* and *mokṣa*. The procedure I have adopted is as follows : I begin with analysis of seven typical examples of *arthāpatti*, make certain observations by way of the results of my analysis and then conclude my paper with a discussion on the major views about *arthāpatti* mentioned above.

I proceed by reflecting upon a few examples of *arthāpatti*. This will enable me to clarify its meaning and to outline its structure. Consider Example A.

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*Example A*⁸ :

a) Caitra is not in the house.

(a) is a true statement. Given a context, however, it may lead one to query 'where is he then? Is he dead or alive?' The query is answered by asserting

b) He is alive : but

c) he has gone out.

Any other questions after (b) and (c) are asserted need not be asked. Asking them may be meddling with the personal or private affairs of Caitra's life. Traditionally, (b) and (c) are said to constitute *arthāpatti*.⁹ for they, taken together, set at rest the query generated by the isolated assertion of (a). (a) is given; but (b) and (c) are constructed by considering the context in which (a) is shown to be a true statement. It can be argued validly that linguistically, the expression "being not in" is synonymous with the expression "being out" such that (c) in fact does not say anything different from what is said by (a). The statement (c) is a patently stylistic variant of (a); for "being not in" has the same meaning as "being out". If this is so, then *arthāpatti* cannot be said to constitute knowledge or a criterion of knowledge, that is, a *pramāṇa* in both of its senses, namely *arthasya āpatti, kalpanā*¹⁰ and *arthasya āpatti, kalpanā, yasmāt*.¹¹ This argument is sufficient to show that both *Pūrva* and *Uttara Mīmāṃsakas* who have their foundations in the Vedas and who accept *arthāpatti* as a *pramāṇa*, in either of the two senses of "*pramāṇa*," do not have a sound justification for their claim that *arthāpatti* is a *pramāṇa*.¹²

Perhaps, I am mistaken. A different construal of the relation between (a), (b) and (c) is possible. It is possible to say that the two statements (b) and (c) constitute the backdrop or the context against which (a) is interpreted as true; for being alive

which is asserted by (b) is a necessary presupposition of the truth of (a) and of (c). This construal makes (b) and (c) an interpretation of (a) and thus *arthāpatti* a kind of interpretation relative to a given context. I would therefore substitute the word "interpretation" and/or "explanation" for *arthāpatti* whenever there is a need to do this; for, after all what *arthāpatti* does is to explain¹³ the apparent, though trivial unclarity of (a) which is a true statement. However, the use of the word "interpretation" in an attempt to analyse the concept of *arthāpatti* is illuminating when we keep in mind that a large part of the life of both the *Pūrvā* and *Uttara Mīmāṃsikas* was spent in interpreting, or arguing for the consistency and/or meaningfulness of the *Veda-vākyas*, and often in showing that a given linguistic expression was syntactically complete and meaningful in the context in which it occurred.

Consider Example B.

*Example B*¹¹ :

- a) Devadatta is growing fat.
- b) He does not eat food during the day.

The conjunction of (a) and (b), both of which are true statements, is apparently inconsistent; its inconsistency is removed by (c)

- c) He must be eating food during the night, other things being equal.

which explains that (a) and (b) taken together are not inconsistent after all. Here the expression "not eating during the day" is not synonymous with the expression "eating during the night." This feature of Example B differentiates it from Example A. The statement (c), however, is part of the context in which the conjunction of (a) and (b) is explained. What we have done is we have made explicit the context in (c) and thus removed the apparent inconsistency of (a) and (b). The statement (c) is

said to constitute *arthāpatti*, - in my sense, an explanation or that which explains.¹⁵ Example B exhibits another interesting feature of *arthāpatti*, namely, that in it, the context in which a certain statement is asserted to be true has an important bearing on the question of the truth-value and/or acceptability of the statement; for it is only when (c), which is a part of the presupposed context, is made explicit that the conjunction of (a) and (b) is explained and becomes acceptable. In this example as in Example B, *arthāpatti* is no more than an interpretation and/or explanation of (a) and (b) against the backdrop of the context in which they are asserted to be true.

Consider another example¹⁶

Example C:

- (a) This is silver.
- (b) This is not silver.

The conjunction of (a) and (b) turns out to be patently inconsistent unless there is an interpretation of (a) or of (b) or of (a) and (b) together to explain this obvious inconsistency. The statements (a) and (b) are inconsistent; for the predicate "being silver" cannot be both affirmed and denied of one and the same subject simultaneously. Both (a) and (b) cannot be true together, nor can they be false together; one of them either (a) or (b) must be true and the other false. The Mīmāṃsaka sees clearly the point of an inconsistent statement, namely, that it frustrates the standard purpose of speech which is to communicate knowledge¹⁷; and this state of affairs is not acceptable to him. He, therefore, interprets the "is" of (a) as "appears" and constructs (c)

- (c) This appears silver.

Now substitute (c) wherever (a) occurs and the resultant conjunction (c) and (b) is consistent; for "This appears silver"

which is (c) is perfectly consistent with "This is not silver" which is (b). Notice that the expression "is silver" is not synonymous with the expression "appears silver"; they perform two different linguistic and logical functions. Linguistically, they communicate different information; logically, "This is silver" can be said to be true or false depending upon how the states of affairs are; whereas "This appears silver" can only be true and never false.¹⁸ Notice also that the distinction between "is" and "appears" is not part of the quotidian context of our ordinary language. The distinction between "appearance" and "reality", "is" and "appears" is part of the Mīmāṃsakas', e.g. some of the Advaita Vedāntins', conceptual framework which they operate to show that *jagat* is *mithyā*; *brahman* alone is *sat* and *jīva* is not different from *brahman*.¹⁹ Example B differs from Example C in respect of its context. In Example B it is the quotidian context of our ordinary language that is presupposed and made explicit: the statement (c) which makes the context explicit and thus removes the apparent inconsistency between (a) and (b) by explaining it constitutes *arthāpatti*. In Example C it is the theoretical context which is brought in to interpret (a) as (c): here the resultant pair which is constituted of (c) and (b) is *arthāpatti*. In all the three examples however, what we are doing in the name of *arthāpatti* is interpreting, and/or explaining a given set of statements by placing them in their relevant context; in no wise are we making inferences and/or deducing implications from a given set of true or false statements. If I am right in this thinking, then, I am afraid, several well-known theories of *arthāpatti* developed and accepted during the past several centuries stand rejected as mistaken construals of *arthāpatti*. Worst of all, the Mīmāṃsakas' own thesis that *arthāpatti* is a *pramāṇa* turns out to be substantively vacuous. I will show this as we go along. Let me, in the meanwhile, consider a couple of more examples of *arthāpatti*.

Consider Example D.²⁰

Example D :

(a) He who knows the self crosses sorrow.

Standing alone the sentence (a) sounds more like a poetic statement; taken literally, it is puzzling; and hence not acceptable as such. It is not the case that we do not understand the language of (a) : but it needs explaining i.e. *arthāpatti* as to how an individual by knowing the self is free from sorrow. The Vedānta Mīmāṃsaka interprets (a) utilising his theory about the reality and/or appearance of human bondage (*bandha*). It is a basic constitutive principle of his theory that

(b) All human bondage is *mithya*.²¹

The principle (b) provides the theoretical context in which (a) is to be interpreted and understood. Now the statements (a) and (b) when taken together are no longer puzzling to the Vedānta Mīmāṃsakas (I agree with my friends that this whole business of the *Mithyātva* of human bondage sounds puzzling to us; but to the Vedānta Mīmāṃsaka it isn't. He believes firmly that all the Vedic statements are true no matter what. Where he finds them—one or many taken in conjunction with other statements—inconsistent in any sense whatever, he seeks to understand them by *arthāpatti* i.e., interpreting and/or reconstructing them in order to explain their sense and/or to show their truth.) In Example D, the principle (b) interprets and explains (a), and thus it constitutes *arthāpatti*. Given that (b) is acceptable the sentence (a) would then read as (c)

(c) He who knows the self knows that sorrow is not real and thus he is not affected by it

The preceding two examples bring to light an important feature of *arthāpatti*, namely that in the course of interpreting a given set of sentences and/or statements as in Examples C and

D, the proposed interpretation and/or explanation may turn out to be quite a different thing from what is said in the statement. This feature becomes the most eloquent in the case of (a) in Example C : The locution "This is silver" is quite different from the *arthāpatti* – resultant locution, namely "This appears silver". Similarly, when the statement (a) in Example D is transformed into (c) as a consequence of interpretation – I mean *arthāpatti* – it ceases to have any identifiable characteristics of itself. This feature of *arthāpatti*, perhaps, accounts for the fact that given different theoretical frameworks, one and the same Vedic statement becomes vulnerable to different interpretations which are frequently found at variance with one another. For instance, observe the phenomenon of mushroom growth of philosophical theories all claiming allegiance to the venerable Vedas but among themselves at variance with one another.²

The following three examples come from the Pūrva Mīmāṃsā tradition in Hindu methodology.

Consider Example E.

Example E³

(a) He who desires heaven is to perform sacrifice called *ḥyotiṣṭoma*.

The sentence (a) is well-syntaxed; its meaning also is quite clear; but the trouble with this Vedic prescription (*vidhi-vākya*) is this : It says that if I performed the sacrifice I shall go to heaven. I perform the sacrifice, but I do not go to heaven. This means that I do something but I do not get its results immediately. So, either (a) is not true or it needs interpretation and/or explanation. That a *vidhi-vākya* is not true is not acceptable to the Mīmāṃsaka; so he adopts the second alternative. Performing the sacrifice produces immediately the causal condition called *apūrvā*, which in time becomes effective to take me to heaven after my death. In other words, performing the sacrifice

is the same as booking my passage to heaven after my death. In this example *arthāpatti* consists in the interpretation of (a) in terms of *apūrva*: it involves no inference, no deduction, and no implication of any kind whatever.

Consider Example F.²⁴

Example F :

(a) He is to perform the sacrifice called *viśvajit*.

The sentence (a) does not specify 'who is to perform the sacrifice?' but it is interpreted by taking into account the Vedic context in which it occurs. On this basis, the expression "He" in (a) is restricted in its application to one who desires heaven. In this case, *arthāpatti* consists in clarifying i.e., explaining the use of "He" as standing for "One who desires heaven": and the resultant sentence is (b)

(b) He who desires heaven should perform the sacrifice called *viśvajit*.

There appears to be no logical or even epistemological connection between (a) and (b). What the Mīmāṃsaka does is to reformulate (a) as (b) on the basis of the context in which (a) occurs such that any ambiguity and/or unclarity of (a) is removed in its formulation as (b).

Consider Example G.²⁴

Example G :

In this example, the syntax is clarified by placing it in the context in which it may occur :

(a) The door, the door

Looking at the context in which (a) occurs, its syntax is clarified and completed by reformulating it as :

(b) Close the door.

The syntax of (a) thus becomes clear in (b). One could have given (a) a different interpretation as in (c) :

(c) Open the door
and *arthāpatti* consists in doing what we did in (b) or in (c), though in both cases the context of the occurrence is taken into account to justify a given interpretation of (a).

The above analysis of *arthāpatti* in Examples A to G leads me to the following observations :

- 1) *Arthāpatti* is employed where there is some apparent inconsistency, logical or factual, unclarity or incompleteness in a given set of linguistic expressions.
- 2) The aim is to remove the inconsistency or unclarity and to show that the given expression has a good syntax, is meaningful, true, and acceptable.
- 3) We achieve this aim by *arthāpatti*, i. e., by interpreting and/or understanding the given expression relative to its context.
- 4) *Arthāpatti* presupposes that the language we are concerned with is the natural, context-dependent, ordinary language which often carries into it apparent inconsistencies, and linguistic unclarity which require explanation and/or interpretation. It is immaterial to my thesis whether the language in question is the language of the human mortals as *laukika* Sanskrit is, or it is the language of the gods as the Vedic Sanskrit is claimed to be.²⁵
- 5) In a given case of *arthāpatti*, it is possible that the expression being interpreted may turn out to be at variance with the expression claimed to be interpreting it. This variance may be in point of syntax, meaning, truth-value or it may just be a question of acceptability of a given interpretation.

- 6) As our analysis of the given examples shows, it is difficult, if not impossible, to envisage the existence of formal, logical relations in the case of *arthāpatti*. This feature suggests that seeking out inference structures, and implicational or entailment patterns in the case of *arthāpatti* is a wild goose chase.
- 7) *Arthāpatti* being interpretation and/or explanation only may not be said to be a criterion of knowledge, i.e., a *pramāṇa* in the sense in which *pratyakṣa* is. It does not matter whether that knowledge is commonsense, scientific, or it concerns *dharma* and/or *niḥśreyas*.²⁶
- 8) The preceding analysis of *arthāpatti* examples and my observations are applicable in general to all the varieties of *arthāpatti* available in the literature cited in this paper.

A lot has been written on *arthāpatti* as a *pramāṇa*. It is not possible for me to discuss each and every position held in the history of Indian logic and methodology. I choose for consider only three here : (1) The Nyāya-Mīmāṃsaka controversy whether *arthāpatti* is an independent *pramāṇa* or not.²⁷ (2) The type of analyses of *arthāpatti* as are available in the works like *The Six Ways of Knowing* of D. M. Datta.⁸ (3) S. S. Barlingay's thesis that *arthāpatti* is "semantic implication,"²⁹

(1) The Nyāya-Mīmāṃsaka controversy about *arthāpatti* runs as follows : The Naiyāyikas in general regard *arthāpatti* as a form³⁰ of *anumāna*, in particular, *kevala-vyatireki anumāna*³¹, the aim of which is to differentiate one substance (*dravya*) from another by pointing out its unique characteristic. For example, earth is different from other substances in virtue of its distinctive feature, viz., odour.³² For this reason, the Naiyāyikas do not accept *arthāpatti* as an independent criterion of knowledge.³³ The Mīmāṃsakas, on the other hand, hold in general the thesis

that *arthāpatti* is an independent *pramāṇa*³⁴ and that it is not a form of *anumāna*.³⁵ Their plea is that *kevala-vyatireki* really is not *anumāna* at all, so it couldn't be a form of *anumāna*;³⁶ that the Naiyāyikas are mistaken in treating it as *anumāna*;³⁷ and that *arthāpatti* as an independent *pramāṇa* takes good care of all that the Naiyāyikas wish to achieve by *kevala-vyatirek*.³⁸ The argument in the controversy is very involved; but it centers around the possibility of *vyāpti* i.e., a law-like generalisation : the Naiyāyikas claiming that in any given case a relevant *vyāpti* is possible,³⁹ while the Mīmāṃsakas denying this in the case of *arthāpatti*⁴⁰ and at the same time rejecting the thesis that *kevala-vyatireki* could possibly be called a form of *vyāpti*.⁴¹ The trouble with this controversy is that in both the Nyāya and the Mīmāṃsaka traditions the two terms "vyāpti" and "anumāna" are being used in so many different senses that one feels lost in the jungle of words and their shifting meanings. In the Nyāya literature in general "vyāpti" is used sometimes as an empirical generalisation as in the case of *anvaya-vyatireki*;⁴² sometimes as an axiomatic truth as in the case of *kevalānvayī*;⁴³ and sometimes as a statement of definition as in the case of *kevala-vyatireki*.⁴⁴ Both the Naiyāyikas and the Mīmāṃsakas however, employ *vyāpti* often in the sense of an analytic truth derived mainly from the linguistic resources.⁴⁵ Similarly there is the worst conceptual confusion in the use of the word "anumāna". In the literature on logic and methodology which is available in Sanskrit the word "anumāna" is employed sometimes as inference of different varieties,⁴⁶ sometimes as explanation,⁴⁷ and sometimes as prediction.⁴⁸ Two remarks, however, are in order. One, the Naiyāyikas and the Mīmāṃsakas have radical differences in philosophical enterprise and in the resultant philosophical theories. Both employ the same words like "anumāna", "vyāpti" and "pratyakṣa"⁴⁹ but when they define and illustrate them they give them radically different content.

Both however maintain that *vyāpti* i.e., a law-like generalization or an analytic truth is a necessary condition of inference. Two, irrespective of the fact whether they regard *arthāpatti* as a form of *anumāna* or an independent criterion of knowledge i.e., a *pramāṇa*, both the Naiyāyikas and the Mīmāṃsakas grant the presupposition that *arthāpatti* does give us knowledge, either independently or derivatively.

As regards the *first* remark, the Naiyāyikas have tried⁵⁰ their best to formulate *vyāptis* in case of the examples cited above but with no satisfactory results. In Examples A and B, for instance, they would formulate *vyāptis* as follows :

- (A) He who being alive is not in his house must be out at some other place, e.g. myself.⁵¹
- (B) He who being fat, does not eat during the day must be eating food during the night, e.g., Yajnadatta.⁵²

Supposing that (a) and (b) *vyāptis* are acceptable,⁵³ how about other examples? Are *vyāptis* possible in their case? The answer is 'No'; for the simple reason that they are not the type of examples which admit of a *vyāpti*; or to which the concept of *vyāpti* is relevant. This is shown fairly enough in my analysis of examples above. Further, in case of *anumāna*— at least that type of *anumāna* which is neither explanation nor prediction, but which moves from a given set of inferendum to an inference—the inferendum is known to be true; or else the question of inference does not arise. In *arthāpatti* this necessary condition of inference fails to be satisfied; for by definition, *arthāpatti* is employed only where the subject involves some apparent inconsistency or it gives rise to the questions of its syntax, meaningfulness, truth-value, or acceptability. It follows that *arthāpatti* cannot be said to be a form of inference i. e. *anumāna*.

As regards the second remark, I maintain that *arthāpatti* cannot be said to be a criterion of knowledge in the same sense in which *pratyakṣa* is. In the examples analyzed above *arthāpatti* is used to complete the syntax and to interpret and explain a given set of linguistic expressions so that their meaningfulness, truth, and acceptability are made plain within a specified contextual framework. In it, the explanandum – the expression to be interpreted and/or explained is already assumed to be true: the explanation only clarifies it. In this sense *arthāpatti* does not constitute a *pramāṇa* or a criterion of knowledge as the Mīmāṃsakas think it is.

The Mīmāṃsakas sometimes differentiate *arthāpatti* from *anumāna* on the ground that in each one of them a different *vyavasāya* or procedure is involved.⁵¹ In the case of *anumāna*, it is ‘*anuminomi*’ i. e., ‘I infer’; but in the case of *arthāpatti*, it is ‘*anena idam kalpayāmi*’ i. e., ‘because of this I interpret it thus’; for, it is not otherwise intelligible in the absence of interpretation, construction or explanation (‘*idam anena vinā nūpannam*’).⁵² I agree that these are two distinct procedures of going about one’s business in one and the same or different epistemological situations; but from this it does not follow that if one is *pramāṇa*, the other too must be. In a given epistemic situation, the two procedures may be carried out at different levels of analysis. For instance, we may accept, on the support of the Vedic authority, the principle namely: If a given statement *S* is a *Veda-vākya* then *S* is true, i. e., a *pramāṇa*. Having accepted the truth of *S*, we may have questions about the understanding, interpretation, or explanation of *S*. This second inquiry is at a different level; and it will follow different criteria. These criteria will be applicable only on condition that *S* is true; they won’t function as criteria of knowledge or of truth or of acceptability of *S*, other things being equal. To my mind, *arthāpatti*

operates at the second level of inquiry and not at the first level. It follows that both the Naiyāyikas and the Mīmāṃsakas are mistaken in assuming that *arthāpatti* in this or that form constitutes knowledge in the same way as *pratyakṣa* does.

(2) Dhīrendra Mohan Datta suggests two interesting analogues of *arthāpatti*, one in terms of the concept of hypothesis,⁵⁶ and the other in terms of Kant's model of 'transcendental proof'.⁵⁷ I had entertained the idea of both of these analogues when I embarked upon writing this paper; but on subsequent consideration I gave them up; for the logical features of these two analogues are not shared by *arthāpatti*. Consider an hypothesis *H* which is entertained to explain some specific phenomenon. I shall call *H* an explanatory hypothesis. Suppose also that *H* is confirmed and acceptable. To understand the logic of explanation⁵⁸ let us divide an *explanation* into its two major components: the *explanandum* and the *explanans*. By the former, we mean "the sentence describing the phenomenon to be explained (not that phenomenon itself)⁵⁹"; by the latter, "the class of those sentences which are adduced to account for the phenomenon." Again, the *explanans* is constituted of sentences C_1, C_2, \dots, C_k which describe the initial conditions; and also those sentences which are either laws or law-like generalization or explanatory hypotheses H_1, H_2, \dots, H_r .⁶⁰ The form of this type of explanation may be shown as follows:⁶¹

Explanans	a) Statement of initial conditions b) Statement of relevant law-like generalizations or explanatory hypotheses.
Explanandum	c) Statement describing the phenomenon to be explained.

For the explanation to be sound or adequate both logically and empirically, we require (i) that (a) and (b) which constitute *explanans* must be empirically true and also (ii) that the

explanandum must logically follow from the explanans. In the case of *arthāpatti* neither of the two conditions (i) and (ii) is satisfied. Besides, structure of explanation requires that the explanans are true and known to be true and also there is no doubt or methodological difficulty about them. In the case of *arthāpatti*, however, the essential structure of explanation is wanting. Also, the motivation for *arthāpatti* i.e., interpretation presupposes a certain felt difficulty, like inconsistency for example, in what is given.⁶² Furthermore, there are questions about the legitimacy of *vyāptis* like (A) and (B) stated above.⁶³ For these reasons, I dismiss the suggestion that the idea of *arthāpatti* could be identified or even shown to be similar to the idea of an explanatory hypothesis.

Datta's second suggestion that "Kant's 'transcendental proof' can be regarded as an instance of *arthāpatti*"⁶⁴ is a bold claim based upon little understanding of both the concepts of 'transcendental proof' and of *arthāpatti*. I have already discussed fairly enough about the logical and methodological behaviour of the concept of *arthāpatti*. As regards the 'transcendental proof' I would rather use the expression "transcendental argument". This choice will keep the discussion away from the issue whether or not there is 'proof' in philosophy. In Kant, "transcendental" means 'concerning the necessary conditions of the possibility of knowledge.'⁶⁵ An argument from the necessary conditions of the possibility of knowledge is thus called 'transcendental argument'. An example not actually Kant's of an argument in the transcendental style is as follows :

Thesis : There are physical things. (T)

Reasoning : If there were no physical things,

natural science won't have been possible. (R)

(The cotext C in which R moves, or which R presupposes is that natural science is possible; for we do in fact have natural science.)

In this argument, R supports T as any presupposed necessary condition does; given T we argue for it in R . R is not a truth-functional 'if-then-' conditional such that if the if-clause is true and the then-clause false, the conditional would be false. In fact, R is a contrafactual conditional of the form 'If X were the case, then Y would have been the case,'⁶⁶ a conditional in the subjunctive mood in which what is said in the if-clause is contrary to facts. Further, R does not imply T ; for the reason that being a contrafactual conditional R couldn't be said to be a statement which is true or false. A statement S_1 is said to imply another statement S_2 if and only if it is impossible for S_1 to be true and S_2 false; or S_1 implies S_2 if and only if the conditional formed of S_1 and S_2 is valid, that is, logically necessary. However, reasoning in this transcendental argument is fully acceptable; the thesis is well argued for; and the support impeccable. Now if we look at *arthāpatti* in the light of the transcendental type of arguments, none of the conditions of the latter obtain in the case of *arthāpatti*. The formal structure of a transcendental argument is quite at variance with the *arthāpatti* structure. In a transcendental argument we move logically from one given statement, T for example, to a statement of the necessary conditions of the possibility of T . This type of reasoning enables us to understand and analyze the underlying structure of thought. But not so with *arthāpatti*. In *arthāpatti* we do indeed take into account the relevant context; but our main job is interpretative and explanatory in the same sense in which we seek to understand the linguistic behaviour of a given expression by placing it in the context in which it occurs. The core of a transcendental type of argument, namely,

reasoning for the truth and/or acceptability of T from the necessary conditions of the possibility of T is altogether missing in *arthāpatti*. If I am right in this thinking, it follows then that Datta's claim that "transcendental proof' can be regarded as an instance of *arthāpatti*"⁶⁷ is simply senseless.

(3) In his classical work *A Modern Introduction to India Logic*,⁶⁸ Barlingay proposes an analysis of *arthāpatti* which is at once both original and interesting. He writes: "Despite the Nyāya argument, it can be asserted that *arthāpatti* is a case where two basic truthfunctions, implication and disjunction, are combined for drawing an inference".⁶⁹ He agrees that "*arthāpatti*" is not entirely formal. The implication that the *arthāpatti* gives is based on the meaning".⁷⁰ For this reason, he proposes that "*arthāpatti*" should be regarded as semantic implication".⁷¹ He adds: "However, I think that in a sense *arthāpatti* too can be reduced to a formal structure" as follows:⁷²

$$(p. (p \supset (q \vee r). \sim q) \supset r$$

where 'p' abbreviates "Devadatta is fat"; 'q', "He must be eating by day time", and 'r' "He is eating by night time". Barlingay quite plainly construes *arthāpatti* as inference of the deductive type in which if the premisses are true and the argument valid, the conclusion must be true. I have shown above that *arthāpatti* is not an inference at all; it follows that it cannot be deductive or any other type of inference. Again, Barlingay regards *arthāpatti* as "semantic implication" — I hope, in the same style as "John is a father of Jane" implies by virtue of the meaning of the linguistic expression "being a father of" that "Jane is a child of John".⁷³ I am afraid, Barlingay bungles here. For one thing, it is not clear what prompts him to regard *arthāpatti* both as inference and as semantic implication. The terms "inference" and "implication" are highly technical; ... 2

and I wonder if the pre-analytical notion of *arthāpatti* can be characterized as inference or implication, particularly when the ordinary criteria of inference and of implication fail to apply to it. Further, won't it land us in utter confusion if ignoring the logical differences between inference and implication we jump to the conclusion that *arthāpatti* is both implication and inference also? In inference we assert the premisses true and if the premisses imply the conclusion we assert the conclusion true also. The concept of inference thus is more complex than the concept of implication : for if the inference in question is of the deductive type it includes implication also. And Barlingay certainly means by "inference" the deductive type of inference.^{74*}

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NOTES

- * I am deeply indebted to Dr. Rekha Jhanji for her valuable comments and criticism on an earlier draft of this paper. However, I alone am responsible for any mistakes in it.
1. Ganganatha Jha, *Pūrva-Mīmāṃsā in its Sources* (Varanasi : The Banaras Hindu University, 1942, 1964 (Second edition) ; pp. 139-142 ; Narayana Bhatta, *Mīmāṃsā : An Elementary Treatise on the Mīmāṃsā*, Edited with an English translation by C. Kunhan Raja and S. S. Suryanarayana Sastri (Madras : The Adyar Library and Research Centre, 1933, 1975 (Second edition) ; pp. 120-133.
 2. *Vedānta-paribhāṣā* of Dharmaraja Adhvarin, Edited with an English translation by S. S. Suryanarayana Sastri (Madras : The Adyar Library and Research Centre, 1942, 1971) ; pp. 89-95.
 3. *Ibid.*
 4. *Mañikāṇa : A Navyu-nyāya Manual*, Edited with an English translation by E. R. Sreekrishna Sarma (Madras : The Adyar Library and Research Centre, 1960, 1977) ; pp. 44-45.

5. Th. Stcherbatsky, *Buddhist Logic* Volumes 1 & 2 (New York : Dover Publications, 1962; First published by the Academy of Sciences of the U. S. S. R., Leningrad, circa 1930). Stcherbatsky calls *arthāpatti* " the method of Necessary Implication " . (Vol. 2, p. 116).
6. D. M. Datta: *The Six Ways of Knowing* (Calcutta : University of Calcutta, 1960 (second revised edition); first published in 1932 in Great Britain); pp. 235-246.
7. S. S. Barlingay, *A Modern Introduction to Indian Logic* (New Delhi : National Publishing House, 1965; 1976 (second edition)); pp. 19-21.
8. *Mānameyodaya*, *op. cit.*, pp. 120-133. Example A is very artificial and it fails to bring out the point of *arthāpatti*. Ordinarily, if you are told that John is not in, you do not start asking whether he is dead or alive or insist on an answer to the question ' Where is he ? '. It is possible, however, to think of a context in which this sort of example appeared to make sense, as for instance in the situation of a civil war when everybody is running for his life and you go and knock at John's door to find out what's what.
9. *Vedānta-paribhāṣā*, *op. cit.*, p. 89.
10. *Ibid.* (Translation : " *āpatti*, i. e., postulation of something (*artha*) "), p. 90.
11. *Ibid.* (Translation : " That because of which there is *āpatti*, i. e., postulation, of something (*artha*) "), p. 90).
12. *Ibid.*, p. 90.
13. As in (8) and (9) above.
14. *Tarka-saṅgraha* of Annambhatta. Edited by Y. V. Athalye and M. R. Bodas (Poona : Bhandarkar Oriental Research Institute, 1963 (second edition); first published in 1897); pp. 55, 349-350
15. *Vedānta-paribhāṣā*, *op. cit.*, p. 90.
16. *Ibid.*, p. 91
17. P. F. Strawson, *Introduction to Logical Theory* (London : Methuen & Co. Ltd., 1952); pp. 2-12.
18. G. E. Moore, *Some Main Problems of Philosophy*. (London 1953).
19. *Vedānta-paribhāṣā*, *op. cit.* Translation : ' This world is other than real and the unreal; *Brahman* is real; and the individual is not different from *Brahman* '.
20. *Ibid.*, p. 91.
21. *Ibid.*, p. 91. The statement (b) can be represented as (b) Man appears bound but really he is free, (b) and (b) have the same meaning; but (b)

- clarifies the meaning of "mithyātva" occurring in (b). The word "mithyātva" means the idea of being apparent and not real.
22. One example is the controversy between the Pūrva-Mimāṃsakas and the Vedānta-Mimāṃsakas over the interpretation of the descriptive and prescriptive sentences of the Vedas. (See Śaṅkara's Commentary on the *Brahma-Sūtra-I. i. 4*) Another example is growth of the dualistic and non-dualistic Vedantic theories based upon different interpretations of the Vedas.
23. *Vedānta-paribhāṣā*, *op. cit.*, p. 93.
24. *Ibid*, p. 92
25. *Mānameyodaya*, *op. cit.* p. 131
26. The Naiyāyikas are concerned largely with knowledge of facts, while knowledge of *dharma* (moral and/or religious duty) and *mokṣa*, i. e. spiritual welfare are the chief concerns of the Pūrva-Mimāṃsakas' and the Vedānta Mimāṃsakas' respectively. cf. *atha' to dharmā jijñāsa* of the *Jaimini's Sūtras* and *atha' to brahmā jijñāsa* of the *Brahma Sūtras*.
- 27.. *Mānameyodaya*, *op. cit.*, pp. 120-133; *Vedānta-paribhāṣā*, *op. cit.*, pp. 89-95; *Maṅikāṇa*, *op. cit.*, pp. 44-45; *Tarka-Saṅgraha* of Annambhatta, *op. cit.*, pp. 235-246; S. C. Chatterjee, *The Nyaya Theory of Knowledge* (Calcutta : University of Calcutta, 1939) ; pp. 361-367.
28. Datta, *op. cit.*
29. Barlingay, *op. cit.*
30. *Maṅikāṇa*, *op. cit.* *Vedānta-paribhāṣā*, *op. cit.* "Anumāna" is ordinarily translated as inference. It means sometimes explanation and sometimes prediction also. See (47) below.
31. *Maṅikāṇa*, *op. cit.*, pp. 42-43; *Tarka-saṅgraha* of Annambhatta, *op. cit.*, pp. 40-43, 257, 287-285. "Kevala vyatireki" means 'exclusively differentiative'. This type of *nyāya* has, for example, the following structure :
1. Earth differs from other things (*pratiñā*)
 2. because it has odour (*hetu*)
 3. that which does not so differ has no odour as water (*udāharaṇa*)
 4. this is not like it (*upanaya*)
 5. hence it is not so. (*nigamana*)

In this type of *nyāya*, it is impossible to find a confirming instance (*sapakṣa dr̥ṣṭānta*) of something which has both odour and also differs from other things. Notice also that *pṛthivi* is characterised (*defined*) as that which has odour : such that you do not go about showing the truth of the statement of definition by *anumāna* : you only accept or

reject this definition by using the criteria of adequacy of definition designed for a specific purpose. Besides, we have the question whether we know the *dravyas* (substances) by *anumāna* or by definition; and what sense does “ knowing by definition ” make ? The Naiyayikas seem to be pretty muddled in their methodology here.

32. *Ibid.*
33. *Mañikāṇa, op. cit.*, pp. 44–45, 120; Datta, *op. cit.*; Chatterjee, *op. cit.*
34. *Mānameyodya, op. cit.*; *Vedānta-paribhāṣā, op. cit.*
35. *Ibid.*
36. *Ibid.*
37. *Ibid.*
38. *Vedānta-paribhāṣā, op. cit.*
39. As in (33) above.
40. As in (34) above.
41. *Ibid.*
42. *Mañikāṇa, op. cit.*; *Tarka-saṃgraha* of Annambhatta, *op. cit.*, pp. 40–43; 281–289. *anyaya-vyatireki vyāpti* is a generalisation like ‘ where there is smoke there is fire ’. It is possible in this type of *vyāpti* to give an empirically observable instance (*dr̥ṣṭānta*).
43. *Ibid. Kevala-anvayi vyāpti* – e. g., ‘ A pot is nameable because it is knowable like a piece of cloth ’. It is impossible to find a counterinstance (*vipakṣa dr̥ṣṭānta*) in this case; we cannot say e. g. if something is not nameable then it is not knowable either. This type of *vyāpti* states a constitutive principle of one’s conceptual framework. It is a sort of constitutional legislation. It is not even a matter of definition either; for no differentia is stated as it is done in the case of definition of “ earth ” for example. Knowability and nameability are not related as earth and odour one.
44. As in (31) above.
45. Strawson *op. cit.* pp. 205–210; W. V. Quine, ‘ Two Dogmas of Empiricism ’, in *From a Logical Point of View*. (Cambridge, Mass : Harvard University Press, 1953, 1961).
46. *Mañikāṇa, op. cit.*
47. *The Nyāya Sūtras of Gotama*; translated by S. C. Vidyabhusana (New Delhi : Oriental Books Reprint Corporation, 1975 (second edition); first published in 1913 by Panini Office, Allahabad); 1. 1. 5., p. 3. (Translation “ Inference is knowledge which is preceded by perception and is of three kinds, viz., *a priori* (e. g., one seeing clouds infers that there will be rain) *a posteriori* (e. g., one seeing a river swollen infer

reject this definition by using the criteria of adequacy of definition designed for a specific purpose. Besides, we have the question whether we know the *dravyas* (substances) by *anumāna* or by definition; and what sense does “ knowing by definition ” make ? The Naiyayikas seem to be pretty muddled in their methodology here.

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33. *Mañikāṇa, op. cit.*, pp. 44–45, 120; Datta, *op. cit.*; Chatterjee, *op. cit.*
34. *Mānameyodya, op. cit.*; *Vedānta-paribhāṣā, op. cit.*
35. *Ibid.*
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68. Barlingay, *op. cit.*, p. 245.
69. *Ibid.*, p. 20.
70. *Ibid.*, p. 21.
71. *Ibid.*, p. 21.
72. *Ibid.*, p. 21. The symbolic sentence is paraphrased into English as follows : ' If Devadatta is fat and if Davadatta is fat he must be eating by day time or by night time and he is not eating by day time then he is eating by night time '.
73. Strawson, *op. cit.*, pp. 205-210.
74. V. K. Bharadwaja. ' Logic of the Nyāya Anumāna ', in *Philosophy : Theory and Action : Essays in honour of Professor S. S. Barlingay.* (Poona 1983); pp. 61-69.

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