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THE CORRESPONDENCE PRINCIPLE AND ITS IMPACT ON INDIAN PHILOSOPHY*

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The thesis which I wish to present in this lecture is the following. A great number of discussions in early Indian philosophical literature betray a common presupposition, which I will call the correspondence principle. The discussions concerned belong primarily to the first half of the first millennium of the common era, even though there are also later manifestations of the principle. It seems that the principle occupied the minds of practically all Indian philosophers during a certain period of time, and that subsequently it only survived in some schools.

What is the correspondence principle? I propose the following, approximate description: "the words of a statement correspond, one by one, to the things that constitute the situation described by that statement". This principle is unproblematic in the case of many, perhaps most, statements. Take "John reads a book"; this statement describes a situation where there is John, a book, and the activity of reading. A similar analysis is possible in the case of many other statements.

Sometimes, however, the situation is more complicated. Consider the following example. The statement "John writes a book" does not describe a situation where there is John, his book, and the activity of writing. For the book is not yet there. If it were, it wouldn't need to be written. Similar problems arise in connection with statements like: "He makes a pot", or: "the pot comes into existence". In these last two examples the pot is not yet there while it is being made, or while it comes into existence.

It will be clear that the correspondence principle leads to complications in the case of statements concerning the production of things, as well as in certain other situations. Did the ancient Indians really accept this principle, even in these problematic instances? Did they really hold on to the parallelism between the words of [2] a sentence and the things constituting the situation described? In order to show that they indeed did so, I will cite, by way of example, a passage from Śaṅkara's *Brahmasūtra Bhāṣya*, in which he argues for the so-called *satkāryavāda*, the position according to which the effect pre-exists in the cause. This passage confirms explicitly that it is

* This is the somewhat modified text of a lecture given at the University of Kyoto on April 26, 1996. The final text has profited from critical remarks made by several scholars in the audience. Some overlap with a few other recent publications of mine could not, unfortunately, be avoided.

indeed the presumed parallelism between words and things that leads to problems. The *satkāryavāda* is presented as a solution to these problems:¹

If the effect did not exist prior to its coming into being, the coming into being would be without agent and empty. For coming into being is an activity, and must therefore have an agent, like [such activities] as going etc. It would be contradictory to say that something is an activity, but has no agent. It could be thought that the coming into being of a jar, [though] mentioned, would not have the jar as agent, but rather something else. In the same way one could imagine that also the coming into being of the components of the jar (*kapāla*) etc., [though] mentioned, would have something else as agent. If that were true, one would say "the potter and other causes come into being" instead of "the jar comes into being". In the world however, when one says "the jar comes into being" no one understands that also the potter etc. come into being; for [these] are understood to have already come into being.

This passage clearly states that the fact that we say "the jar comes into being" implies that the jar must be part of the situation described by that statement, and must consequently be there prior to its coming into being.

Śaṅkara was not the only one, and by far not the first, to accept the correspondence principle, even though few are as explicit as he is in expressing their agreement with it. It would seem that in the time preceding Śaṅkara no thinker, whatever the school he belonged to, rejected it. A so far incomplete search has brought to light passages to that effect in different schools of Buddhism, in Jainism, and in all the Brahmanical schools: Sāṃkhya, Nyāya, Vaiśeṣika, Pūrva-Mīmāṃsā, the grammarian Bharṭṛhari, and of course Vedānta. The correspondence principle, I believe, allows us to understand these passages, to grasp what problems they are dealing with. What I propose to do in this lecture is discuss a few examples from some of these schools, and then to dedicate some reflections to the historical background of the acceptance of the correspondence principle.

Before we turn to other examples, note that the passage from Śaṅkara's Brahmasūtra Bhāṣya which we just examined does not just draw attention to the problems resulting from the correspondence principle; it also offers a solution to these problems. The solution here offered is the so-called *satkāryavāda*, the doctrine according [3] to which an effect exists already before it comes into existence. We will see that all texts that discuss the problems connected with the correspondence principle

¹ Śaṅkara ad Brahmasūtra 2.1.18: *prāg utpatteś ca kāryasyāsattve utpattir akartṛkā nirātmikā ca syāt/ utpattiś ca nāma kriyā, sā sakartṛkaiva bhavitum arhati gatyādivat/ kriyā ca nāma syād akartṛkā ceti vipratīśidhyeta/ ghatasya cotpattir ucyamānā na ghaṭakartṛkā, kiṃ tarhy anyakartṛkā iti kalpyā syāt/ tathā kapālādīnām apy utpattir ucyamānānyakartṛkaiva kalpyeta/ tathā ca satī ghaṭa utpadyate ity ukte kulālādīni kāraṇāni utpadyante ity uktaṃ syāt/ na ca loke ghaṭotpattir ity ukte kulālādīnām apy utpadyamānatā pratīyate/ utpannatāpratīteḥ/*

also offer a solution to them. Some other schools besides Advaita Vedānta choose the *satkāryavāda* as solution, others offer different solutions.

As a first example of the correspondence principle in action, let us discuss some verses belonging to another text that is considered to belong to the Advaita Vedānta tradition, but which offers a solution that is slightly different from the one presented by Śaṅkara. This text is the Āgamaśāstra, also known by the names Gauḍapādīya-Kārikā and Māṇḍūkya-Kārikā. The name Gauḍapādīya-Kārikā is explained by the fact that this text is usually attributed to a certain Gauḍapāda, supposedly the teacher of the teacher of Śaṅkara. This attribution is far from certain, and is under serious attack these days.² We will not deal with it here. For our purposes it is sufficient to cite the following three verses:³

Debating with each other, certain doctors accept that something existent comes into being; others, who are [equally] learned, [that] something non-existent [comes into being].

Nothing that exists [already] comes into being, and what does not exist does not come into being either; disagreeing in this way [with the preceding doctors], the upholders of non-duality declare non-production.

We agree with the non-production declared by them; we do not disagree with them ...

These verses present the same problem as did Śaṅkara, but the solution they offer is different. Where Śaṅkara maintained that something existent comes into being, [4] 'Gauḍapāda' rejects the very notion that anything comes into being at all, and contrasts his solution explicitly with the one presented by Śaṅkara.

It has often been observed that some of Gauḍapāda's arguments are close to those of the Buddhist thinker Nāgārjuna. We will therefore now turn to the latter's Mūlamadhyamakakārikā. Consider first MMK 7.17, which reads:⁴

If any unproduced entity is found anywhere it could be produced. Since that entity does not exist, what is produced?

Note that this is precisely the problem raised by Śaṅkara and Gauḍapāda in the passages considered earlier, and exemplified in the statement "the jar comes into being". Śaṅkara

² See, e.g., Vetter, 1978; Wood, 1990, with Bronkhorst, 1992a; and most recently King, 1995: 15-49; 1995a.

³ GK 4.3-5c: *bhūtasya jātim icchanti vādīnaḥ kecid eva hi/ abhūtasyāpare dhīrā vivadantaḥ parasparam// bhūtaṃ na jāyate kiñcid abhūtaṃ naiva jāyate/ vivadanto 'dvayā hy evam ajātiṃ khyāpayanti te// khyāpyamānām ajātiṃ tair anumodāmahe vayam/ vivadāmo na taiḥ sārḍham ...//*

⁴ MadhK(deJ) 7.17: *yadi kaścīd anuṭpanno bhāvaḥ saṃvidyate kvacit/ utpadyeta sa kiṃ tasmin bhāve utpadyate 'sati//*. This translation follows Oetke (1992 [p. 203; cp. p. 210 f.]), who discusses and rejects the possibility of a logical error in this verse.

concluded from it that the jar exists before it comes into being, Gauḍapāda that no production takes place. Nāgārjuna seems to reach the same conclusion as Gauḍapāda.

Claus Oetke has analyzed a number of passages from the Mūlamadhyamakakārikā in what I consider four important articles.⁵ As a result of this analysis he attributes to Nāgārjuna the following theorem: "For all x and for all y: If x is the condition of y / If x is the condition of the existence of y, then y must be something that exists during the existence of x (or: that does not exist exclusively later than x)."

It can easily be seen that this theorem helps to explain many arguments in Nāgārjuna's work. Consider the first two verses of chapter 19 of the MMK:⁶

If present and future existed depending on the past, (then) present and future would be in the past. If present and future would not be there [in the past], how would present and future be depending on that?

Obviously the past is the condition of the present and the future. According to Oetke's theorem, the present and the future must then exist during the past. This is indeed the conclusion which Nāgārjuna draws in the present stanza. Nāgārjuna's argument here can therefore be satisfactorily explained with the help of Oetke's theorem.

But it can equally well be explained with the help of the correspondence principle. The verse concerns the true statement: "Present and future depend on the past", in Sanskrit: *pratyutpanno 'nāgataś ca atītam apekṣya (staḥ)*.⁷ The correspondence principle requires that present, future and past are there in the situation described. In other words, present and future are in the past, present and past in the future, and future and past in the present.

This example shows that Oetke's theorem and the correspondence principle are equally satisfactory in elucidating Nāgārjuna's arguments in some cases. In some other cases Oetke's theorem is not applicable, whereas the correspondence principle can still be used. An example is the verse which we discussed earlier, and which concerns some such statement as "the jar comes into being". We have seen that the correspondence principle explains the problem at hand; Oetke's theorem, on the other hand, is not applicable, because this statement does not refer to two different elements that depend one upon the other. A closer inspection reveals that Oetke's theorem is a special case of the correspondence principle: all the cases that can be explained with Oetke's theorem, can also be explained with the correspondence principle, but not vice versa.

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⁵ Oetke, 1988a; 1989; 1990; 1991.

⁶ MadhK(deJ) 19.1-2: *pratyutpanno 'nāgataś ca yady atītam apekṣya hi/pratyutpanno 'nāgataś ca kāle 'tīte bhaviṣyataḥ// pratyutpanno 'nāgataś ca na stas tatra punar yadi/pratyutpanno 'nāgataś ca syātām katham apekṣya tam//tr.* Oetke.

⁷ Note the independent use of the absolutive in MadhK(deJ) 19.1ab.

To conclude our discussion of Nāgārjuna, one final example. MMK 1.6 reads:⁸

Neither of a non-existent nor of an existent thing is a cause possible. Of what non-existent (thing) is there a cause, and of an existent (thing) what is the use of a cause?

Seen from the point of view of the correspondence principle, there is no difficulty in understanding the verse. The statement "a is the cause of b" or "the effect depends on the cause", along with our principle, justifies the conclusion that effect and cause must be part of the situation described by it. This means that the cause has an existent effect. Our experience, on the other hand, teaches that the effect does not always coexist with its cause.

This last example from Nāgārjuna's Mūlamadhyamakakārikā takes us back to the *satkāryavāda*. We have seen that Śāṅkara offers this doctrine to solve the problems evoked by the correspondence principle. Did other schools do the same?

The end of Sāṃkhya Kārikā 9 offers the following justification of the *satkāryavāda*: *kāraṇabhāvāc ca sat kāryam*. This phrase is ambiguous. It can mean "and because [the cause] is a cause, the effect exists" or "and because [the effect] is [identical with] the cause, the effect exists".⁹ The former of these two interpretations reminds us of the verse of Nāgārjuna which we just considered. There we learned that effect and cause depend upon each other, and must therefore coexist. Stated differently: where there is a cause, there must be an effect; or: because the cause is a cause, the effect exists. The second interpretation is different, and has no direct link with the type of arguments we find in Nāgārjuna's work. Which of these two interpretations is correct, i.e., original?

A glance at the commentaries shows that all but one of them have chosen the second interpretation. The possible exception is the Yuktidīpikā, which explains:¹⁰ *ihāsati kārye kāraṇabhāvo nāsti*. This is of course still ambiguous, because we can translate "if the effect does not exist, [the cause] is not a cause" or "if the effect does not exist, [it (i.e., the effect)] is not a cause". Technically both interpretations are possible, but I fail to see what could be the point of the second one. The first interpretation, on the other hand, fits in well with the argument of Nāgārjuna just considered: since cause and effect depend upon each other, they must co-occur. As a result, there is no cause without effect. Otherwise put, the cause is no cause, when there is no effect present.

⁸ MadhK(deJ) 1.6: *naivāsato naiva sataḥ pratyayo 'rthasya yujyate/ asataḥ pratyayaḥ kasya sataś ca pratyayena kim//tr. Oetke.*

⁹ The first part could also be translated "on account of the existence of the cause". This does not however lead to an intelligible interpretation.

¹⁰ YD p. 54 l. 32.

This interpretation of the end of Sāṃkhyakārikā 9 is confirmed in another way, too. The *Śataka of Āryadeva is no doubt one of the earliest texts that testifies [6] to the existence of the *satkāryavāda* among the followers of Sāṃkhya. It has been preserved in Chinese translation. Giuseppe Tucci translates the words which this text puts in the mouth of the defender of Sāṃkhya in the following manner:¹¹

The effect pre-exists in the cause, on account of the existence of the cause.

In this form these words do not seem to communicate anything intelligible. But it is easy to see that Tucci's "on account of the existence of the cause" corresponds to Sanskrit *kāraṇabhāvāt* — exactly the expression which we also find in the Sāṃkhyakārikā. I believe that the Chinese translation agrees with this interpretation. The correct translation should therefore be:

The effect pre-exists in the cause, because it is a cause.

This statement is, of course, still ambiguous, because it does not say explicitly which of the two — the effect or the cause — is a cause. However, the commentator Vasu gives an explanation which, at last, removes the ambiguity. I offer once again Tucci's English translation:¹²

If the pot does not pre-exist in earth, then earth could not become the cause of the pot.

This remark by Vasu looks like a paraphrase of the explanation in the Yuktidīpikā which we considered above, and which reads:

if the effect does not exist, [the cause] is not a cause

or

if the effect does not exist, [it (i.e., the effect)] is not a cause

But whereas the Yuktidīpikā passage remained ambiguous, Vasu's passage specifies that it is the cause (in the example used: the earth) which cannot be (or become) a cause, if the effect (the pot) is not present.

¹¹ TI 1569, vol. 30, p. 177b l. 26; tr. Tucci, 1981: 61.

¹² TI 1569, vol. 30, p. 177b l. 26-27; tr. Tucci, 1981: 61.

It is not possible here to discuss the complicated question of the relationship between the Yuktidīpikā and Vasu's commentary on Āryadeva's *Śataka. Nor do I wish to impose an interpretation on the Yuktidīpikā borrowed from Vasu's commentary. It seems however clear that in the earliest documents justifying the *satkāryavāda* in connection with the Sāṃkhya philosophy, a Nāgārjuna-like argument was used. This implies, I would propose, that this argument, and the correspondence principle on which it was based, played a role in the justification, and perhaps even in the introduction of the *satkāryavāda* in Sāṃkhya.

The beginning of Sāṃkhyakārikā 9 gives the first argument in favor of the *satkāryavāda*. Together with the final words of the verse we get: *asadakaraṇāt ... satkāryam*. This means: "The effect exists, because one does not make what does not exist". This argument can be illustrated with the help of the statement "He [7] makes a mat". One can only make a mat if there is a mat. This, of course, only makes sense if the word 'mat' is considered to refer to something present. This, in its turn, is precisely what the correspondence principle claims.

The use of the *satkāryavāda* for solving the problems evoked by the correspondence principle is clear. Yet not all thinkers were willing to accept this position. At the same time, they did not wish to abandon the correspondence principle either. This is clear from the alternative solutions which they proposed for these problems. They had to find something in the situation described by the sentence "the jar comes into being" / "he makes a jar", to which the word 'jar' could refer. Note that the correspondence principle led, in these cases, to reflections on the denotation of words. Various solutions were proposed, which we cannot all discuss at this occasion. Many thinkers came to choose the universal as the object denoted by words (or at any rate nouns), sometimes along with other things, such as the individual. The universal 'jar-ness' being existent and eternal according to a number of Indian philosophies, it is already there when the jar comes into being, or is made. We find this solution in a variety of texts, among them the Nyāya Sūtra and Bhāṣya, where the problem of how to account for a sentence such as "he makes a mat" is explicitly mentioned in the context which introduces the universal as one of the denotations of the word (along with the individual, *vyakti*, and the form, *ākṛti*). Schools like Nyāya did not have to accept the *satkāryavāda*, and chose rather the opposite position, the *asatkāryavāda*.

How did Vaiśeṣika deal with the difficulties connected with the correspondence principle? After what I have said so far, its position is almost predictable. Vaiśeṣika does not accept that the jar is already there before it comes into being. Its ontology, on the other hand, does allow for universals. One would therefore expect a solution of the kind that the word 'jar' denotes — perhaps along with other things — the universal.

The word 'jar' in "he makes a jar" will in this way have something to refer to, and the problem would be solved.

It is true that from a certain date onward Vaiśeṣika authors opt for this solution. The Padārthadharmasaṅgraha, or Praśastapādabhāṣya, does not however touch this problem, and nor does the Vaiśeṣika Sūtra. Since we have practically no other texts for the early period, one might be tempted to conclude that Vaiśeṣika authors have chosen this solution right from the time they became aware of the problem of origination. This expectation is however belied by some passages describing Vaiśeṣika points of view preserved in the works of non-Vaiśeṣika authors, which inform us about the period before the Padārthadharmasaṅgraha.

Consider to begin with a passage from the Vibhāṣāprabhāvṛtti, a commentary on the Abhidharmadīpa, a text of the Buddhist Sarvāstivāda school. It attributes [8] the following position to the Vaiśeṣikas:¹³

The Vaiśeṣika thinks [as follows]: The substance 'jar', which is not present in the potsherds [out of which it will be constituted], and the substance 'cloth', which is not present in the threads [out of which it will be constituted], come into being as a result of the contact between the potsherds and that of the threads [respectively]. And through secondary thought (*gauṇyā kalpanayā*) one speaks of the existence of the agent of coming into being, [existence] which has as object a state [of the jar] which is opposite [to the present].

Mysterious as this passage may be, it states quite clearly that the jar exists prior to its coming into being, thanks to a secondary thought. No further details are provided.

If this passage has whetted our appetite, a discussion in the Dvādaśāranayacakra of Mallavādin and in its commentary the Nyāyāgamānusārīṇī of Siṃhasūri will give us further material to think about. We learn here that in Vaiśeṣika things that have come into being are called 'existing' because of a connection with the universal 'existence' (*sattāsambandha*). This connection with the universal 'existence' takes place at the moment of, or immediately after, their completion; it is the reason of the denomination and of the idea of the things concerned.¹⁴

Here the following question arises: Are objects completely non-existent before this connection with the universal 'existence' takes place? According to Mallavādin, the Vaiśeṣikas give a negative answer to this question. Things do exist in a certain way

¹³ Abhidh-d ad kārikā 310, p. 274 l. 5-7: *vaiśeṣiko manyate: kapāleṣv avidyamānaṃ ghaṭadravyaṃ tantuṣu cāvidyamānaṃ paṭadravyaṃ kapālatantusamyogād utpadyate/ gauṇyā ca kalpanayā viprakṛtāvasthāviṣayā janīkarṭṛsattā vyapadiśyata iti/*. The word *viprakṛta* is obscure. The editor, Padmanabh S. Jaini, suggests an emendation into *viprakṛṣṭa* 'distant', but this does not improve much. Apte's dictionary gives *viprakṛta*, among other meanings, the sens 'opposed' which seems to fit more or less both here and two lines further down where the word is used a second time.

¹⁴ DNC vol. 2, p. 459 l. 8-9: ... *sattāsambandho 'bhidhānapratyayahetuḥ*. Cp. *ibid.* p. 512 l. 2 (*niṣṭhāsambandhayor ckakālatvāt*) and the two interpretations of this vākya discussed there.

before they come into being. True, they have no connection with the universal 'existence' at that moment, but they have some kind of essence (*astitva*, *svabhāva*, *svabhāvasattā*), which allows them to come into being. This means that even without connection with the universal 'existence', a substance (or, for that matter, a quality or a movement) has an identity. The Vaiśeṣika, according to Mallavādin, goes to the extent of reinterpreting the expression *asat*, which normally means 'non-existent'. The Vaiśeṣika takes it as a *bahuvrīhi* compound, and interprets it to mean "that which does not have 'existence'". The expression *asatkāryavāda*, seen this way, does not say that the effect is not there before it comes into being; it only says that it has no connection with the universal 'existence' as yet.¹⁵

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The main discussion takes place in the seventh chapter (lit. spoke, *ara*) of the *Dvādaśāranayacakra*. The *asatkāryavāda* of Vaiśeṣika is attacked right from the very first line:¹⁶ "If the effect is not present [in its causes], it would not come into being, for there would be no agent of the operation [of coming into being] at hand, just as [in the case of] a sky-flower. Or [alternatively,] also a sky-flower would come into being, because there would be no agent of the operation [of coming into being] at hand, just as [in the case of] an effect."

This is, of course, the familiar problem which is based on the correspondence principle. The Vaiśeṣika recognizes the problem, and maintains that the effect does not exist before it comes into being. However, there are two kinds of existence. The effect has no connection with the universal 'existence' (*sattā*) before it comes into being; but it is there, in a certain way — it has *astitva*. This is why the Vaiśeṣika answers:¹⁷ "Unlike the sky-flower, the effect, having come into being through its own *astitva* becomes, even without the relationship of inherence with [the universal 'existence'], a support [for that universal]."

The opponent of the Vaiśeṣika then raises the question whether the universal 'existence' (*sattā*) makes existent that which exists, or that which does not exist, or that which exists and does not exist.¹⁸ It is here that the Vaiśeṣika observes that one can deny that substances etc. have a connection with the universal 'existence', but not their

¹⁵ DNC vol. 2, p. 462 l. 3-5: *nanu asat ity atra nañā uttarapadābhidheyānivāraṇārthatvāt satpratiśedhārthatvāt katham asya sātmatvatvam? na, anekāntāt, aputrabrāhmaṇavad aguṇagūṇavat/ yathā nāsya putro 'stīty apuro brāhmaṇaḥ nāsya guṇo 'stīty agūṇo guṇaḥ tathehāpi nāsya sad ity asat/; cp. Siṃhasūri, DNC p. 460 l. 10-11.*

¹⁶ DNC vol. 2, p. 455 l. 1-2: *yady asat kāryam notpadyeta asannihitabhavitṛkatvāt khapuṣpavat/ khapuṣpam api votpadyeta asannihitabhavitṛkatvāt kāryavat/*

¹⁷ DNC vol. 2, p. 456 l. 1-2: *... āśrayisamavāyād ṛte 'pi kāryam svenaivāstitvenotpannam āśrayo bhavati khapuṣpavaidharmyeṇa ...*

¹⁸ DNC vol. 2, p. 459 l. 1-2: *iha prāk sattāsambandhāt satām vā asatām vā sadasatām vā dravyādīnām satkarī sattā? Similar criticism in the Madhyamakahṛdayakārikā and Tarkajvāla of Bhāvaviveka; see Tachikawa, 1994: 898.*

existence through their own form; the universal 'existence' does not, therefore, make non-existent things existent.¹⁹

I will not bother you with all the passages in this long discussion that concern the state of a thing before it is connected with the universal 'existence'. I must however cite the following sentence, which Mallavādin ascribes to the Vaiśeṣika:²⁰ "And the [object which is *asat*] is not[, for that matter,] without identity, like a hare's horn. Even without connection with *sattā*, it is in our system (*iha*) like in another one, where *pradhāna* etc. have an identity." Elsewhere in the discussion the Vaiśeṣika recalls that *sāmānya*, *viśeṣa* and *samavāya* — all Vaiśeṣika categories — exist without having connection with *sattā*. But the comparison with the *pradhāna* of Sāṃkhya — for there can be no doubt that a comparison with the Sāṃkhya system of [10] philosophy is made here — is remarkable. For Sāṃkhya adheres to the *satkāryavāda*, and is therefore in many ways the exact opposite of Vaiśeṣika with its *asatkāryavāda*. The comparison shows that the Vaiśeṣikas to whose writings Mallavādin had access came dangerously close to the position of the Sāṃkhyas where they tried to solve the problem of origination.

A very important question remains to be discussed. If the Vaiśeṣikas maintained that things exist in a certain way before they come into being, can one determine the beginning of this "half-existence"? Are they there from beginningless time, as the Sāṃkhyas believed? To my knowledge Mallavādin and Siṃhasūri's discussions offer no answer to this question. We may find the answer in another early text, the *Yuktidīpikā*, which comments upon the Sāṃkhyakārikā. Around kārikā 9 this text contains a discussion with a Vaiśeṣika on the *satkāryavāda*. Where it presents the argument that one cannot make something that is not there — an argument with which we are familiar — it puts the following words in the mouth of the Vaiśeṣika:²¹ "But the effect is made by the agent etc. in the intermediate time. Which is this intermediate time? The answer is (follows a verse): They call 'intermediate time' the time during which the causes have started to do the work, until the production of the effect."

I conclude, be it with much caution, that the "preexistence" of something that is going to come into being is not without beginning. This passage from the *Yuktidīpikā*

¹⁹ DNC vol. 2, p. 460 l. 1-2: ... *dravyādīnām sattāsambandhaḥ pratiśidhyate na tu svarūpasadbhāva iti sattā naivāsatām satkarī*.

²⁰ DNC vol. 2, p. 462 l. 6-7: *na ca tad api nirātmakam śaśaviśāṇavat, sattāsambandhād ṛte 'pi yathā parapakṣe pradhānādīnām sātmatvaṃ tathēpi syāt*.

²¹ YD p. 52 l. 16-21: *āha, nanu ca madhyame kāle kartrādibhiḥ kāryam kriyate/ kaḥ punar asau madhyamaḥ kāla iti? āha:*

ārambhāya prasrtā yasmin kāle bhavanti kartārah/

kāryasyāniśpādāt tam madhyamam kālam icchanti// iti

yadā hetavaḥ pravṛtārambhā bhavanty uddīśya kāryam na ca tāvan naimittikasyātmalābhaḥ samvartate sa madhyamaḥ kālah/ tasmin kriyate kārakaiḥ kāryam iti/ Cp. Motegi, 1994: 815 sq.; Motegi draws attention to the fact that the reading *kāryasyāniśpādāt* in the verse is an emendation which deviates from the manuscripts.

suggests rather that this "preexistence" starts when the different factors that contribute to produce the effect, i.e., to make the jar, start fulfilling their various functions. The intermediate time is neither without beginning, nor momentary.

At this point a short discussion of the early literary history of Vaiśeṣika is required. Which were the Vaiśeṣika texts in which the positions outlined above found expression?

The oldest clearly understandable and unitary Vaiśeṣika text which we possess is the Padārthadharmasaṅgraha of Praśastapāda, mentioned earlier. This text may belong to the sixth century of the common era. Besides the Padārthadharmasaṅgraha we have a short text that has only survived in Chinese translation, and which may have been called Daśapadārthī; it is too short to derive much information from [11] it. And then there is, of course, the Vaiśeṣika Sūtra. The Vaiśeṣika Sūtra is the oldest Vaiśeṣika text we possess, and I am tempted to think that it is the earliest Vaiśeṣika text that ever existed. It, or rather its earliest version, must date back to the early centuries of the common era, for Vaiśeṣika is already referred to in the Buddhist Vibhāṣā.²² Unfortunately the Vaiśeṣika Sūtra which is known to us is not identical with its earliest version. Five versions have been preserved,²³ all of which share features that belong to a time well after the beginning of the system. Sūtras have been added and removed, and even the order of the sūtras appears to have occasionally been changed so as to allow of a different interpretation.²⁴

It is not clear until what date modifications were still introduced into the Vaiśeṣika Sūtra. Certain is that a long time separates the earliest version of this text from the Padārthadharmasaṅgraha. And it is also becoming more and more clear that during this period much happened to the system. The sūtra that enumerates qualities, for example, has just seventeen of them. The Padārthadharmasaṅgraha, on the other hand, enumerates twenty-four qualities. Among the added qualities we find sound, and there is indeed evidence that early Vaiśeṣika looked upon sound, not as a quality, but as a substance, a form of wind. Another example concerns the creator god: the Vaiśeṣika Sūtra contains no trace of a creator god, in the Padārthadharmasaṅgraha he has assumed his position. We even have the evidence from the Yuktidīpikā and from Śāṅkara to the extent that early Vaiśeṣika did not accept a creator god, whereas later thinkers of the school did.²⁵

²² Ui, 1917: 38 f.

²³ Three versions were known, accompanied by the commentaries of Candrānanda, Bhaṭṭa Vādindra and Śāṅkara Mīśra respectively; two more have been brought to light in Harunaga Isaacson's recent doctoral dissertation (1995).

²⁴ See Bronkhorst, 1993a: 80 f.; 1995.

²⁵ See Bronkhorst, 1993a (on sound); 1996 (on God).

Most of these changes were not introduced into the system by Praśastapāda. The idea of a creator god may be an exception; here there is some reason to assume that Praśastapāda himself may have played a crucial role. Most of the other developments must have found their earliest expression in a number of texts that have existed during the long time that separates the original Vaiśeṣika Sūtra from the Padārthadharmasaṅgraha. Of most of these texts even the names will probably forever remain unknown to us. About a few of them, however, we have some little information. One is a commentary (Ṭīkā) written by Praśastamati, who must be the same as Praśastapāda, the author of the Padārthadharmasaṅgraha. The other is the text on which he wrote a commentary, and which appears to have been well-known in its time. By collecting the various testimonies in the texts of other schools, I have come to think that this text was called Kaṭandī, and that its author was known by [12] the name Rāvaṇa. The Kaṭandī was itself a commentary, on the Vaiśeṣika Sūtra, and it was written in the so-called vārttika-style, which explains that we sometimes find references to vākyas and bhāṣyas; the vārttika-style is characterized by the presence of short nominal vākyas followed by somewhat more elaborate explanations called bhāṣyas.²⁶

This Kaṭandī (or whatever may have been its name) appears to have been an authoritative text for quite some time. It is indeed the text to which Mallavādin constantly refers while describing and criticizing the Vaiśeṣika position. It seems likely that also the other texts we have referred to — the Buddhist Vibhāṣāprabhāvṛtti and the Sāṃkhya Yuktidīpikā — based their information concerning Vaiśeṣika on this text. However this may be, it seems likely that the problem of origination did not play much of a role, if any, during the time of composition of the original Vaiśeṣika Sūtra, and that it came up at a later time, perhaps for the first time in the Kaṭandī, or already before this text.

I have already pointed out that later Vaiśeṣika came to adopt a solution to the problem of origination that was quite different from the one offered (if I am right) in the Kaṭandī. Later Vaiśeṣikas joined the Naiyāyikas in thinking that the fact that words refer to universals solved that problem. Once this solution accepted, the complicated distinction between two forms of existence, and the attempt to use it in order to answer the question how something can come into being, became superfluous, and the weaknesses of the earlier solution, such as its vagueness (when exactly does the pre-existence of a jar begin?), could not but contribute to its decline. The earlier solution was not just refuted, worse, it was forgotten, and no one talked about it any more. I do not exclude that this change of position of the Vaiśeṣika thinkers is responsible for the fact that the Kaṭandī and its commentary by Praśastapāda, once the main works of the

²⁶ Bronkhorst, 1990; 1992b; 1993.

school, soon stopped to be handed down. Praśastapāda's Padārthadharmasaṅgraha, on the other hand, does not touch the question of origination; is this the reason that it continued to be handed down in a fairly large number of manuscript copies until today? It is hard to prove these suspicions, but I would like to suggest that the loss of philosophical texts may in certain cases have been occasioned by the fact that points of view changed. It may be significant that among the later authors on Vaiśeṣika, only one, Vyomaśiva, retains some traces of the earlier discussion by defining the effect (*kārya*) as *svakāraṇasattāsaṃbandha*. All others define this term differently, as was pointed out by Masanobu Nozawa in a recent article (1993).

After the discussion of various Brahmanical schools, let us now consider one [13] more Buddhist text, the Abhidharmakośabhāṣya of Vasubandhu. Here the problems connected with the correspondence principle show up in a discussion of the expression *pratītyasamutpāda*. This well-known expression consists of the noun *samutpāda* "production, coming into being" preceded by the absolutive *pratītya*, which Vasubandhu takes to mean "having reached" (*prāpya*). A critic points out that the combination *pratītyasamutpāda* makes no sense: the absolutive refers to something preceding, but how can something come into being after having done something else before ('reaching' in this case)? We recognize here a problem which is close to the one dealt with in various ways by the authors we have considered so far: does something exist before it comes into being? Vasubandhu's reply is therefore of particular interest:²⁷ "The distinction by the grammarian (*śābdika*; Yaśomitra uses *vaiyākaraṇa*) between the agent and the activity — [saying that] the agent is expressed by 'he becomes' and the activity by 'becoming' — does not obtain: we do not see here an activity 'becoming' different from the thing that becomes. Therefore there is no deception in the conventional use of language."

Vasubandhu avoids the difficulties resulting from the correspondence principle by presenting the Abhidharmic analysis of reality, which does not accept the distinction between agent and activity. Strictly speaking Vasubandhu goes here against the correspondence principle, which stipulates that different words should correspond to different "things". Yet Vasubandhu appears to be concerned to proclaim his adherence to this principle. This, at any rate, one is tempted to conclude from his final sentence:

²⁷ Abhidh-k-bh(P) p. 138 l. 4 f.: *na yukta eṣa padārthaḥ/ kiṃ kāraṇam/ ekasya hi kartur dvayoḥ kriyayoḥ pūrvakālayaṃ kriyāyaṃ ktvāvidhir bhavati/ tad yathā snātvā bhūṅkta iti/ na cāsau pūrvam utpādāt kaścīd asti yaḥ pūrvam pratītyottarakālam utpadyate/ na cāpy akartṛkāsti kriyete/.../ naiṣa doṣaḥ/ idaṃ tāvad ayaṃ praśavyaḥ śābdikaḥ/ kimavastho dharmāḥ utpadyate vartamāna utāho 'nāgata iti/ kiṃ cātaḥ/ yadi vartamāna utpadyate/ kathaṃ vartamāno yadi notpannaḥ/ utpannasya vā punar utpattāv anavasthāprasaṅgaḥ/ athānāgata utpadyate katham asataḥ kartṛtvam sidhyati (the edition has *siddhaty*) akartṛkā vā kriyete/.../ **aniṣpannam cedam yad uta śābdikīyam kartṛkriyāvvyavasthānam bhavatīty eṣa kartā bhūtir ity eṣā kriyā/ na cātra bhavitur arthāt bhūtim anyāṃ kriyāṃ paśyāmaḥ/ tasmād acchalam vyavahāreṣu/.***

tasmād acchalaṃ vyavahāreṣu "Therefore there is no deception in the conventional use of language".

A full discussion of all the authors who deal with the problems connected with the correspondence principle, and of all the solutions that have been proposed, is not possible here. I rather suggest that we now turn to the question as to where this principle came from.

The earliest author discussed in what precedes is Nāgārjuna, the founder of the Buddhist school of thought called Madhyamaka. Is it possible that the discussions in other schools of the problems connected with the correspondence principle are ultimately due to Nāgārjuna's influence? Is it conceivable that other scholars — [14] Buddhist, Brahmanical and Jaina — read the Mūlamadhyamakakārikā (and perhaps other works rightly or wrongly attributed to Nāgārjuna) and tried to come to grips with some of the problems there raised, without explicitly admitting their indebtedness to Nāgārjuna?

The fact that practically none of the early texts explicitly mentions Nāgārjuna or his works, virtually excludes the possibility of a certain and definite answer to these questions. The possibility of a strong, or even determining, influence from Nāgārjuna cannot however be discarded. The influence of Nāgārjuna on subsequent thought has recently been questioned,²⁸ but such doubt seems to me wholly unjustified in view of the discussions which we have just considered.

However, it is not certain that this preoccupation with the consequences of the correspondence principle was only due to Nāgārjuna. The three versions of the Vibhāṣā contain a passage — translated into French by Louis de la Vallée Poussin — which clearly deals with the same problem.²⁹ And it is not difficult to guess how the authors of

²⁸ Cp. Hayes, 1994: 299: "Nāgārjuna's writings had relatively little effect on the course of subsequent Indian Buddhist philosophy". And again: "Aside from a few commentators on Nāgārjuna's works, who identified themselves as Mādhyamikas, Indian Buddhist intellectual life continued almost as if Nāgārjuna had never existed." In a note (p. 372 n. 2) Hayes refers to an article by Richard Robinson (1972: 325), in which its author "drew attention to the fact that the philosophical systems at which Nāgārjuna's arguments were apparently directed 'have not considered themselves refuted'". Note that Hayes limits himself to subsequent Indian Buddhist philosophy.

²⁹ La Vallée Poussin, 1937: 15-16 (TI 1545 ch. 76, vol. 27, p. 394b l. 19-27 (the version translated by LVP); TI 1546 ch. 40, vol. 28, p. 295a l. 6-11; TI 1547 ch. 7, vol. 28, p. 465c l. 11-17): "Lorsque naissent les conditionnés futurs, naissent-ils étant déjà nés, naissent-ils n'étant pas encore nés? Les deux hypothèses font difficulté. Comment? Dans la première hypothèse pourquoi ne continuent-ils pas à revenir? Dans la seconde, comment nierez-vous que les *saṃskāras* existent (ou commencent d'exister) après inexistence (*abhūtvā bhāvaḥ, abhūtvā bhavanam*)?"

Voici la réponse. — On peut dire (*astī paryāyaḥ*): Parce qu'il y a causes et conditions, étant déjà nés, ils naissent. C'est-à-dire: tous les dharmas possèdent déjà leur nature propre, car chaque futur réside dans son caractère essentiel (*svabhāvalakṣaṇa*). Possédant déjà une nature propre, ils sont dits déjà nés: ce n'est pas que leur nature propre soit née des causes et conditions. Étant [ensuite] produits par le concours des causes et des conditions, ils sont dits naître.

Parce qu'il y a causes et conditions, n'étant pas encore nés, ils naissent. C'est-à-dire: les dharmas futurs sont dits non-nés, car c'est par le fait des causes et conditions qu'ils obtiennent actuellement de naître.

these Sarvāstivāda texts solve it: things (the texts speak of course of dharmas) can come into being because they exist already before they come into being. The existence of future dharmas is a central, and ancient, tenet of the Sarvāstivādins. It allows them to deal with the problematic consequences of the correspondence principle.

[15]

Incidentally, just two years ago the American scholar Richard P. Hayes (1994: 372 n. 2) claimed: "Despite his (i.e., Nāgārjuna's, JB) apparent attempts to discredit some of the most fundamental concepts of abhidharma, abhidharma continued to flourish for centuries, without any appreciable attempt on the part of ābhidharmikas to defend their methods of analysis against Nāgārjuna's criticisms." It seems to me that Hayes is mistaken. We have already looked at one passage where the Sautrāntika Vasubandhu deals with one difficulty of the type exploited by Nāgārjuna. And the Sarvāstivādin Ābhidharmikas, for their part, were immune to at least some, perhaps the most important, of Nāgārjuna's attempts to discredit them. Since for them the pot (more precisely, the dharma) exists before it comes into being, Nāgārjuna's question "Of what non-existent (thing) is there a cause, and of an existent (thing) what is the use of a cause?" has for them lost its sting.

Whoever may have been the first author ever to deal with the problems resulting from the correspondence principle, it seems to me likely that he was a Buddhist. In order to explain why I think so, I have to recall some rather well-known facts about the development of Buddhist thought, and the increasingly important role of language in it.

Buddhism is, first of all, a religion which teaches a path leading to the cessation of suffering and rebirth. Nothing in the early texts suggests that reflection on the relationship between language and reality was part of that path. For the origins of these ideas, we have to look at the special way the Buddhist message came to be handed down, and modified in the process. In their efforts to preserve the teachings of the Buddha, the early Buddhists were not content to memorize only his own words. They also enumerated the elements contained in his teaching, and this led to the creation of lists of so-called dharmas, elaborately discussed in the canonical Abhidharma-Piṭakas and subsequent literature. This activity, whose only intention may have been to preserve the teaching of the Buddha, nevertheless resulted in theoretical developments, which one could globally refer to as the dharma-theory. For reasons that cannot be

(Only TI 1545 p. 394b l. 27 - p. 394c l. 5:) Lorsque naissent les conditionnés futurs, naissent-ils existant déjà ou n'existant pas? Les deux hypothèses font difficulté. Dans la première, à quoi bon naître, puisque leur être (*svarūpa*) existe déjà? Dans la seconde, on dira que les dharmas, après inexistence, existent: la doctrine du Sarvāstivāda tombe.

Voici la réponse. — On peut dire que les dharmas naissent existant déjà.

Vous écarterez la deuxième objection, mais comment résoudre la première?

Comme il suit. — La nature propre (*svabhāva*) du dharma existe, mais non pas son activité. Rencontrant causes et conditions, le dharma engendre l'activité."

discussed here at present, the dharma-theory came to assume an ontological dimension. The dharmas came to be looked upon as the only really existing "elements of existence", which is, incidentally, the expression that is not infrequently used to translate the Buddhist term dharma into English. At this point Buddhism had become a philosophy — or at least it now included a philosophy — which possessed detailed lists of what there is. Things that do not figure in the lists of dharmas do not really exist, and this (along with other considerations) forced Buddhist thinkers to deny the reality of all composite objects, which includes most objects of ordinary experience. This, in its turn, evoked the question why everyone seems to be subject to the same delusion: everybody believes that there are houses [16] and chariots and the like in a world, which, in reality, does not contain any of these. The answer that the Buddhist thinkers proposed to this question is of particular interest to us in the present context. All these composite objects, which do not really exist, exist in name only; they are *prajñaptisat*.

I will not cite passages here in order to prove this by now rather well-known feature of Buddhist thought, the more not since I have done so in another publication that will come out soon.³⁰ I do wish to repeat, however, that reflections on the relationship between composite wholes and their parts, and on the role played by words in all this, are not marginal to Buddhist thought. Quite on the contrary, they are central to it, from an early date onward. There are reasons, which cannot be repeated here, to think that these elements were already present in Buddhist thought in North-West India in the second century before our era.³¹

It is clear, then, that most Buddhists in India came to look upon the phenomenal world as not really existing, and as being in an important way produced by the words of language. Objects in the phenomenal world owe their existence — or rather: the appearance of existence — to words.

It is against this background that the correspondence principle becomes understandable, and almost self-evident. If it is agreed that objects in the phenomenal world are somehow determined by words, is it not reasonable to go one step further and claim that the words of a statement determine the elements that constitute the situation described by that statement?

Note further that the general idea that things in the phenomenal world somehow correspond to the words of language did not remain without echo outside Buddhist thought. Vaiśeṣika, in particular, accepted much the same idea, with one important difference. The Buddhists looked upon the objects in the phenomenal world as not ultimately real; the Vaiśeṣikas believed that they were real. But both agreed that they

³⁰ Bronkhorst, 1996a; which makes abundant use of Williams, 1980; 1981.

³¹ Bronkhorst, 1996a, with reference to 1987: 71.

somehow corresponded to the words of language.³² We can now understand all the better why the Vaiśeṣikas took the correspondence principle so seriously, so much so that they, the *asatkāryavādins* par excellence, were pushed to a position extremely close to the rejected *satkāryavāda*.

Whatever the origin of the correspondence principle, I do believe that it allows us to understand a number of philosophical positions and arguments from roughly the first half of the first millennium of the common era. Arguments based on this principle are common during that period, but seem to slowly disappear after it. I hope that the few examples I have been able to discuss with you have convinced [17] you of the importance of the correspondence principle during the formative years of classical Indian philosophy.

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³² Bronkhorst, 1992.

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Abbreviations:

Abhidh-d	Abhidharmadīpa with Vibhāṣāprabhāvṛtti, ed. P. S. Jaini, Patna 1959 (TSWS 4)
Abhidh-k-bh(P)	Vasubandhu, Abhidharmakośabhāṣya, ed. P. Pradhan, rev. 2nd ed. Aruna Haldar, Patna 1975 (TSWS, 8)
ABORI	Annals of the Bhandarkar Oriental Research Institute, Poona
AS	Asiatische Studien, Études Asiatiques, Bern
DNC	Dvādaśāraṃ Nayacakram of Mallavādin, with the commentary Nyāyāgamānusārīnī of Siṃhasūri, 3 parts, ed. Muni Jambuvijaya, Bhavnagar: Sri Jain Atmanand Sabha (Śrī Ātmānanda Jaina Granthamālā no. 92, 94, 95), 1966, 1976, 1988.
GK	Āgamaśāstra of Gaudapāda, ed. Bhattacharya, 1943
JIP	Journal of Indian Philosophy, Dordrecht
MadhK(deJ)	Nāgārjuna, Mūlamadhyamakakārikāḥ, ed. J.W. de Jong, The Adyar Library and Research Centre, Madras 1977
MCB	Mélanges chinois et bouddhiques, Bruxelles
MMK	Mūlamadhyamakakārikā
StII	Studien zur Indologie und Iranistik

TI	Taishô Shinshû Daizôkyô or Taishô Issaikyô, 100 vols., Tôkyô 1924 ff.
TSWS	Tibetan Sanskrit Works Series, Patna
WZKS	Wiener Zeitschrift für die Kunde Südasiens, Wien
YD	Yuktidîpikâ, ed. Ram Chandra Pandeya, Delhi: Motilal Banarsidass, 1967

The correspondence principle not only played a pivotal role in the discovery of quantum mechanics but was also the cornerstone of Bohr's philosophical interpretation of quantum mechanics, being closely tied to his better known thesis of complementarity and to the Copenhagen interpretation. Although the importance of Bohr's correspondence principle is largely undisputed, there is far less agreement concerning how the correspondence principle should be defined. It is important to distinguish between Bohr's own understanding of this principle and what it came to mean for the larger About the Book World View and Theory in Indian Philosophy explores the complex and rarely investigated relation between world views upheld by Indian philosophers and philosophical theories they developed. As Aristotle argues, 'Since everything needs its opposite [to counterbalance it], so that it preserves its moderation and the mean (for it is in the mean, not in either of the extremes, that true essence and rationality lies), nature has developed the brain to counterbalance the region of the heart along-side the heat contained in it. ..' Brendan Gillon: The Correspondence Principle. 381. Stephen H. Phillips: Cannibalising Nyaya Epistemology. Did language have any traceable impact on the formation of world views, ideologies or philosophical theories? Instructors who adopt Tourism: Principles, Practices, Philosophies can download the Test Bank for free. Additional Wiley resources also can be uploaded into your LMS course at no charge. To view and access these resources and the Test Bank, visit www.wiley.com/college/goeldner, click on the "Visit the Companion Sites" link, then click on "Instructor Companion Site." Any attempt to define tourism and to describe its scope fully must consider the various groups that participate in and are affected by this industry. Their perspectives are vital to the development of a comprehensive definition. Four different perspectives of tourism can be identified: 1. The tourist.