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DEVELOPMENT OF LOGIC IN INDIA: SIGNIFICANCE OF 'THE DUOLOGUE BETWEEN PĀYĀSI AND KASSAPA' (*"LONG DISCOURSES"*)

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RESUMO *'O duólogo do rei/governador Pāyāsi' ("Discursos Longos") há muito tempo é reconhecido como uma fonte da corrente protomaterialista da época do Buda. O que é necessário ressaltar é o significado desse texto como um indicador do desenvolvimento da lógica na Índia. Percepção (observação e experimento que empregam o método dúplice do acordo e da diferença), aceita como método de investigação experimental, e raciocínio por analogia, que no máximo pode conduzir a uma conclusão provável – apenas esses dois são os meios utilizados para dirimir a disputa que diz respeito à existência do outro-mundo. A versão jaina do mesmo duólogo-*cum-*parábola, mesmo com variações que concernem ao nome e à identidade do monge que se opõe ao rei/governador, contém o mesmo contraste, a dizer, percepção* contra *raciocínio por analogia. Não há muita dúvida de que a parábola original foi concebida com o intuito de afirmar a existência do outro-mundo. Entretanto, na* Kaṭha Upaniṣad *(século sexto a.C.), um texto bramânico mais antigo, em vez do argumento por analogia, o testemunho verbal (*śabda*) foi invocado para resolver o mesmo ponto. Naciketas é tomado pela dúvida sobre a existência da pessoa depois da sua morte. A autoridade de Yama, o Plutão da mitologia indiana, é invocada para convencê-lo que o outro-mundo existe. Portanto, as três parábolas juntas exibem três meios de conhecimento em função: testemunho verbal e argumento por analogia opostos à percepção.*

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Palavras-chave *Argumento por analogia (raciocínio analógico), experimento, observação, outro-mundo (*paraloka*), testemunho verbal (*śabda*).*

ABSTRACT *'The Duologue of King/Governor Pāyāsi' ("Long Discourses") has long been recognised as a source for the proto-materialism current at the time of the Buddha. What needs to be stressed is the significance of the text as a pointer to the development of Logic in India. Perception (observation and experiment employing the joint method of agreement and difference), which is an accepted method of experimental enquiry, and reasoning from analogy, which can lead at best to a probable conclusion – these two are the only means employed to settle the dispute concerning the existence of the other-world. The Jain version of the same duologue-*cum*-parable, though varying in minor details regarding the name and identity of the monk refuting the king/governor, contains the same contrast, namely, perception* versus *analogical reasoning. There can be little doubt that the original parable was conceived with a view to asserting the existence of the other-world. In the* Kaṭha Upaniṣad *(sixth century BCE), an earlier Brahmanical text, however, instead of argument by analogy, verbal testimony (*śabda*) was invoked to settle the same point. Naciketas is assailed by doubt about the existence of a person after his or her death. The authority of Yama, the Pluto of Indian mythology, is invoked to convince him that the other-world does exist. Thus, the three parables taken together exhibit three means of knowledge in operation: verbal testimony and argument by analogy pitted against perception.*

Keywords *Argument by analogy (analogical reasoning), experiment, observation, the other-world (*paraloka*), verbal testimony (*śabda*).*

In the sixth/fifth century BCE, India was inundated by several new doctrines and strange ideas, unheard-of before. They were proposed and, in turn, challenged by opposite ideas, each one claiming to refute the doctrines of others. We hear of no fewer than sixty-two itinerant philosophers, belonging to different strata of life, moving from one place to another throughout the length and breadth of North India. They are accompanied by a sizeable number of disciples. Six names are often mentioned in Buddhist (Pali and Sanskrit) and Jain (Prakrit and Sanskrit) works. Of them Erich Frauwallner has taken Purana Kassapa (Pūraṇa Kāśyapa in Sanskrit), Ajita Kesakambala (Keśakambalin in

Sanskrit), and Kakuda Kaccāyana (Kātyāyana in Sanskrit) as representatives of the 'oldest materialist doctrine' (Frauwallner, 1971, pp. 219-221). But, even before mentioning the doctrines of these three, Frauwallner projects King Pāyāsi (Paesi in Prakrit) as 'the first materialist'(Frauwallner, 1971, p. 216). It is not clear whether he regards Paesi as younger or elder than these itinerant preachers. However, he proposes Paesi to be 'an old Indian Materialist on the King's throne,' and adds in the very next sentence: 'And Paesi was certainly not the only one of his kind' (Frauwallner, 1971, pp. 218-19). Frauwallner treats Purana, Ajita, and Kakuda as materialists because 'the three are unanimous in the fact that they deny continuance after death and the moral consequences arising therefrom, and are, in this sense, genuine materialistic doctrines'(Frauwallner, 1971, pp. 220-21). It is difficult to agree with this view. The text of the 'Discourse on the Fruits of Being a Monk' ('Sāmāññ a-phala-sutta') in the "Long Discourses" (*Dīghanikāya*) reveals that among the three only Ajita has the claim to be a materialist (to be more exact, a proto-materialist), and the other two, Purana and Kakuda, are basically immaterialists.

However, it will be improper to identify even Ajita or any one of the itinerant gurus as a full-fledged materialist, for the expositions of their respective doctrines made by all the six preachers are too brief to be considered an adequate description of their worldviews. Frauwallner himself notes: 'But however interesting and characteristic such accounts are, they can rarely claim a place of the same kind in a history of Indian philosophy. Materialism gains for it an importance from the moment *only when it emerged in the form of a regular doctrine* and took up arms against the remaining philosophical schools' (Frauwallner, 1971, p. 221).

The genesis of materialism in India can be traced in, besides the Upaniṣads, some tales found in both Buddhist and Jain works. One such tale, the duologue between King/Governor Pāyāsi and a Buddhist or a Jain monk, has often been cited as an instance of materialism.[1] The tale, found both in Buddhist and

1 See Frauwallner (1971, p. 216). Apparently Frauwallner (and those who follow him in this regard) took it to be a real-life account. It is a glaring example of mistaking fiction for fact. There is no evidence of the existence of a king or governor called Pāyāsi, who had conducted some experiments to find out the nature of the soul. Moreover, the narrative highlights only one aspect of materialist thought, namely, denial of the existence of any immortal soul, and hence of the doctrine of karma and its consequence, rebirth. The most significant aspect of any philosophical system in India is epistemology, more particularly the instrument/s of cognition (*pramāṇa*) a system admits. Nothing is stated directly regarding this vital issue in any of the canonical works contained in *The Three Baskets* (*Tipitaka*), although the duologue of Pāyāsi *implies* that only ocular proof or perception (*pratyakṣa*) is what Pāyāsi was prepared to accept. Therefore, it will not be justified to treat the Pāyāsi legend as a true exposition of the materialist *doctrine* as a whole. Frauwallner (1971, p. 221) – quoted below – too admits this.

Jain sources,[2] however, merely testifies to the prevalence of a non-conformist attitude that denied the idea of the immortal soul surviving after the death of the body in which it previously resided. That is all that is to be found in the Pāyāsi duologue. The legend was presumably composed with a definite view of discrediting those heretics who refused to believe in the existence of the other-world (*paraloka*), and hence in the immortality of the soul. This task of converting or defeating such a non-believer is accomplished by a Buddhist monk in the Pali Pāyāsi duologue, and by a Jain monk in the two Prakrit versions of the same legend. A duologue between the king and a Buddhist or a Jain monk is a well-known and oft-used narrative device encountered in many later works.[3]

Pāyāsi is represented as a non-believer in the existence of the other-world, rebirth, and reward and recrimination of one's deeds after death, the three axioms of the Buddha's philosophy as recorded in the canonical *Discourses.* His assertion, 'Neither is there any other-world, nor are there beings reborn otherwise than from parents, nor is there fruit of deeds, well done or ill done' (*natthi paro loko, natthi sattā opapātikā, natthi sukatadukkaṭānaṃ kammānaṃ phalaṃ vipāko*),[4] is quoted and re-quoted in other Buddhist canonical texts, although his name is not mentioned.[5] A distinction is made between the affirmativist doctrine (*atthikavāda*) and the negativist doctrine (*natthikavāda*) on the basis of the existence and non-existence of the other-world.[6]

It forms the essence of Ajita Kesakambala's doctrine of annihilation (*ucchedavāda*), the first known formulation of the proto-materialist doctrine in India.[7] Ajita's exposition of his 'worldview' is more elaborate than Pāyāsi's, but the essence of their teachings is similar, if not the same, in all respects.

2 Although the names and hence the characters in the narratives in the 'The Discourse of King/Governor Pāyāsi' ('Pāyāsi(rājaññā)-suttanta') in *The Long Discourses* (*Dīghanikāya*) and the two Jain secular works, *Dialogue of King Prasenajit* (*Rāyapasenaijja*) and Haribhadra's *Story of Samarāditya* (*Samarāiccakahā*), vary widely, yet the original story (now lost) from which all the three seem to have been derived must have been the same. Tucci (1971, p. 389) rightly observes: "The analogies which the *Pāyāsisuttanta* shows to have with the Jaina *Rāyapaseṇiya* and some passages of *Samarāiccakahā* cannot be explained as mutual borrowings but, rather, as various derivations from real doctrines followed in ancient times.

3 We may think of such works as Āryaśūra's *The Garland of Birth Stories* (*Jātakamālā*), Somadeva's long poem dealing with various religious and philosophical issues from the Jain point of view (*Yaśastilaka-campū*), and the Jain scholar Hemacandra's *Lives of Sixty-Three Eminent Persons* (*Triṣaṣṭi-Śalākā-Puruṣa-Carita*). The same device is found even earlier in Saṅghadāsagaṇi (sixth/seventh century CE)'s *The Wanderings of Vasudeva* (*Vasudevahiṃḍī*). For further details see Bhattacharya (2009, pp. 102-09).

4 *Dīghanikāya* 2:10.1.2 p.23.6.

5 See, for instance, 'Apaṇṇakasuttaṃ' 10.1.3,4, (*Majjimanikāya*, Part 2, pp. 78-79); 'Sandakasuttaṃ' 26.1.3.12-23, (*Majjimanikāya,* p. 213).

6 'Sandakasuttaṃ', *Majjimanikāya*, p. 213) cf. also *sace kho natthi paro loko evam ayaṃ, sace kho atthi paro loko evam ayaṃ.* 'Apaṇṇakasuttaṃ', (*Majjimanikāya*, 2.10.1.4, 14-15, pp.79-80).

7 Ajita explained his 'worldview' to king Ajātasattu as follows:
"O King, there is no (consequence to) alms-giving, sacrifice or oblation. A good or bad action produces no result. This world does not exist, nor does the other world. There is no mother, no father. There is no rebirth

Pāyāsi states his conclusion on the basis of his own *observations* and *experiments*, whereas the Buddhist monk offers a series of analogues, and we are told that by means of *the argument by analogy* he succeeds in converting the king to a faithful believer in after-life, rebirth, and the consequence of one's deeds.

Here we have not only the conflict between a non-believer and a believer (not however on the existence of god or gods, but on that of the other-world) but also one of the earliest instances of the *inductive method* in settling a dispute: actual observation and experiment on the one side, and use of analogy on the other. Not in this duologue alone, but in all the dialogues found in other works, the contraposition of sense perception and argument by analogy is a notable feature in the early history of Indian logic.

Dasgupta (1975, pp. 32-33) observes that the Cārvākas – presumably meaning materialists of all sorts before and after the eighth century BCE – admitted perception alone as the valid source of knowledge; the Buddhist and the Vaiśeṣika admitted two, perception and inference; Sāṃkhya added *śabda* (verbal testimony) as the third source; and Nyāya the fourth, *upamāna* (comparison). This kind of statement found in earlier sources (see *ibidem*) is but the enumeration of the means of knowledge admitted by different systems of philosophy arranged in ascending order, not in a chronological order attested by evidence. However, besides comparison, there are no fewer than twenty-four different analogues in the Nyāya tradition (for a brief summary of these see Vidyabhusana, 1988, pp. 67 *et seq.*) which *qua* argument are not valid, and hence regarded as 'futile rejoinder' (*jāti*) in the Nyāya tradition.[8] The point to be remembered is that, long before such analogues were identified, named and included in books of Logic, these were already current in practice. Any simile

of beings after death. In this world, there are no samanas [*Śramaṇas*] or brāhmaṇas established in the Noble Path and accomplished in good practice, who, through direct knowledge (*i.e.*, *magga* insight) acquired by their own efforts, can expound on this world and the other world. This being is but a compound of the four great primary elements; after death, the earth-element (or element of extension) returns and goes back to the body of the earth, the water-element (or element of cohesion) returns and goes back to the body of water, the fire-element (or element of thermal energy) returns and goes back to the body of fire, and the air-element (or element of motion) returns and goes back to the body of air, while the mental faculties pass on into space. The four pall-bearers and the bier (constituting the fifth) carry the corpse. The remains of the dead can be seen up to the cemetery where bare bones lie graying like the colour of the pigeons. All alms-giving ends in ashes. Fools prescribe alms-giving; and some assert that there is such a thing as merit in alms-giving; but their words are empty, false and nonsensical. Both the fool and the wise are annihilated and destroyed after death and dissolution of their bodies. Nothing exists after death". ('Discourse on the Fruits of Being a Monk', 'Sāmañña-phala-sutta', 2.4.21-23, *Dīghanikāya*, 1: p. 48-49; *Ten Suttas from Dīgha Nikāya*, 1987, p.83, translation modified). Cf. Pāyāsi's words quoted above.

8 *Nyāyasūtra* Va 1-3 in Ruben (1928, pp. 129-31); 5.1.1-3 in Gangopadhyaya (1982, pp. 375-78).

or metaphor carries within it the rudiments of logic, in so far as comparison is meant to establish a point in recognizing a particular aspect, common to the object of comparison (*upameya*) and the otherwise dissimilar object that has been brought from outside (*upamāna*) on the basis of a common point of resemblance (*sādhāraṇa dharma*). A parable is but an extended simile, didactic and elucidative in nature. Such parables are abundantly found in the whole of Vedic literature as also in the sacred books of the Buddhists and the Jains (Gonda, 1949, pp.4-92). As Gonda observes:

> I have made a simile for you that you may understand what I mean, by means of a simile many a wise man understands the meaning of the argumentation are sayings of the Buddha…. [V]ery often *these Buddhist similes are broadly elaborated and made into real parables, told in a lively and illustrative way and more than once couched in the form of dialogue*. (Gonda, 1949, p. 90, emphasis added)

The 'Pāyāsi suttanta' is the most appropriate instance of such a parable 'couched in the form of dialogue'. It is not the account of an actual argument that took place between a king/governor and a Buddhist Master, but only an imaginary tale with a view to driving home an article of faith of Buddhism, namely, the existence of the other-world.

In this parable Pāyāsi is posited as a heartless and unscrupulous ruler, capable of performing diabolical experiments in order to locate the so-called soul. One of the experiments he undertook was to weigh a felon and then have him strangled with a bow string and weigh him again. The purpose was to see whether there was any difference in the weight of the body. Jayatilleke (1980, p. 105) and echoing his words Franco and Preisendanz (1998, p. 179) refer to such experiments as 'gruesome', as if such an experiment was ever actually performed. In a recent article Franco (2011, p. 634) has refrained from using any such qualifier. Refusal to discriminate between a fictitious narrative and an actual event, or rather considering every fictive account to be an unimpeachable fact, is a common blunder that both the wise and the naïve often fall prey to. Jayatilleke, anticipated by Jacobi (1970, p. 770), himself says that "the teachings ascribed to [Yājñavalkya] in different places in the Upaniṣads do not seem to be of a piece, consistent with each other.…The probable explanation for this is that several incompatible doctrines were put in the

mouth of an outstanding teacher [viz., Yājñavalkya]" (Jayatilleke, 1980, p. 40).[9] Why then an exception is to be made in case of Pāyāsi is not clear. The intention of the authors of this parable in Pali and Prakrit was to portray Pāyāsi in a bad light, which is why he is made to appear as a ruthless ruler, his motto being *fiat experimentum,* 'Let the experiment be made' (in Bacon's words), totally a-moral and unscrupulous.

The fact of the matter is that all these were mere 'thought experiments,' *Gedanken* experiments, as Albert Einstein used to call them, that is, experiments conceived in thought only, never carried out actually. The so-called 'gruesome experiments' of Pāyāsi were similarly imagined, or rather conjured up, by the author of the legend solely to denigrate the king/governor. It is also worth noting that neither the Buddhist monk Kassapa nor the Jain monk Kesi criticizes or censures Pāyāsi or Paesi for undertaking such cruel experiments, nor does either of them challenge the validity of their protocols. Kassapa himself suggests such 'thought experiments,' hypothetical situations and events (*Cārvāka/Lokāya*, 1990, sections 9-28, pp. 13-29). Not being able to offer the results of any counter-experiments (actual or mental) conducted by himself, Kassapa has to resort to analogical reasoning. He uses the word *upamā* (comparison, also meaning simile and parable) and claims that by 'by a simile some intelligent persons will recognize the meaning of what is said' (*Cārvāka/Lokāya*, 1990, p. 14 *et seq.*). The Buddha in the *Discourses* is also made to utter these very words (see Gonda, 1949, p. 90, quoted above). Now, all arguments by analogy can at best be probable, as any college textbook of logic would say. Of course, some arguments or inferences by analogy are rigorous, some non-rigorous, and some downright false (Germanova, 1989, pp. 205-08). The analogues in the two parables belong to the third category. Yet, they prove to be (to be exact, are told to be) more effective than empirical observations and experiments applying the joint method of agreement and difference; Pāyāsi decides to accept the analogical arguments and jettisons the results he had previously obtained by empirical investigation. He is made to declare that he was pleased with Master Kassapa's very first simile; he was in fact charmed by it. But just because he wished to hear more of the Master's ready wit, he continued to argue (*Cārvāka/Lokāya*, 1990, p. 29). Perception (*pratyakṣa*),

9 Jayatilleke (1980, p. 40). The way some eminent scholars (not to speak of the devotees) speak of the gods and seers and kings, in short, the *dramatis personae* in the sacred books of any religion, inevitably reminds me of what has been said of J. J. Bachofen (1815-87), author of *Das Mutterecht* (1851): "This new but absolutely correct interpretation of the *Oresteia* is one of the best and most beautiful passages in the whole book. But it shows at the same time that Bachofen himself believes in the Erinyes, Apollo and Athena at least as much as Aeschylus did in his day; he, in fact, believes that in the Heroic Age of Greece they performed the miracle of overthrowing mother right and replacing it by father right. Clearly such a conception – which regards religion as the decisive lever in world history – must finally end in sheer mysticism" (Engels, n. d., p. 15).

the Nyāya philosophers affirm unanimously, is the eldest of all instruments of cognition (*pramāṇa-jyeṣṭha*). In this parable, however, analogical reasoning is made to appear superior to perception.

More interesting is the way in which the controversy is conducted. Pāyāsi is made to adhere strictly to perceptible evidence, and the Buddhist monk sticks to argument by analogy. Since rebirth and karmic retribution are two pillars of both Jain and Buddhist faiths, their opposition to any form of proto-materialism is understandable.[10] What is striking is the resort to analogical reasoning which was *not* admitted as an instrument of cognition in later Buddhist logic. In spite of their subtle differences, the four main Buddhist philosophical schools (Yogācāra, Madhyamaka, Sautrāntika, and Vaibhāṣika) were unanimous in admitting only two instruments of cognition, namely, perception and inference, and nothing else (such as, comparison, verbal testimony, etc.). Yet in their rebuttal to the proto-materialist dependence on perception alone, the redactor/s of the Pāyāsi legend opted for argument by analogy, as exemplified in both the Pali and Prakrit versions. The common origin of the story manufactured to denounce the negativists is apparent in the use of analogues by the early redactor/s.

An earlier and parallel instance of fabricating a story with a view to disparaging the disbelievers in the other-world, that is, a parable, is first noticed in the Brahmanical tradition. The *Kaṭha Upaniṣad* (sixth century BCE) is the Brahmanical version of the Pāyāsi duologues. Admittedly there are several differences: the chief of which is that, instead of a Buddhist or a Jain monk, Yama, the Pluto of Indian mythology, and Naciketas, a young doubter (though not a denier) of the after-world, are made to face each other in this *Upaniṣad*. Second, there is no argument; Yama acts as the guru and Naciketas, the disciple. However, word (*śabda*) or verbal testimony takes the place of analogy in the *Kaṭha Upaniṣad:* Yama is projected as the authority (*āpta*) and it is *his* assurance alone that convinces Naciketas that the other-world does exist. Who but the Lord of the Land of the Dead could be a better authority to speak on what happens to a human after his/her death? Whatever doubt (*vicikitsā*) the young Brahmana boy had (*Eighteen Principal Upaniṣads*, 1958, *Kaṭha* 1.1.20) was dispelled by him for good. But in order to make his expertise established in the mind of the listener/reader, an elaborate story

10 For the views of later Buddhist philosophers in relation to the other-world and its deniers, see, e.g., Dharmakīrti and Prajñākaragupta (1953, pp. 52-67). For a general survey of the *pramāṇavādin* tradition of 'proving the existence of the other-world' (*paralokasādhana* or *-siddhi*) directed to the refutation of materialist philosophy, see Namai (1991, pp. 227-41).

starting with a sacrifice (*yajña*) is introduced; Naciketas is brought step by step in the presence of Yama. Yama is shown to be extremely reluctant to part with 'the secret knowledge' he carried within himself. Even the gods, he says, are not conversant with what happened after the death of a person (*Eighteen Principal Upaniṣads*, 1958, *Kaṭha* 1.1.21). Thus, without resorting to any argument by analogy, Yama imparts to Naciketas the ultimate affirmativist (*āstika*) view – not of any god or idea, but of the other-world.

In spite of all this, the point to be noted is that the refusal to accept the continuance of the extra-corporeal soul has been, from the outset, the hallmark of materialist thinking in India.[11] It is found in a Brahmanical sacred book as well as in the Buddhist and Jain canonical or paracanonical works.

Thus the believers in the other-world, whether a Vedist, a Buddhist or a Jain, combat the negativist (*nāstika*) view either with the help of argument by analogy or by producing the testimony of an authoritative person. The King/Governor called Pāyāsi is as much imaginary as Yama and Yājñavalkya in the Upaniṣads; Master Kassapa and Kesi too are equally fictive characters like Naciketas and his father. Together they are brought to perform only one task: defeat any sceptic or non-believer in the actual existence of heaven and hell.

Some are of the opinion that Pāyāsi's experiments reveal Greek influence. Balcerowicz has convincingly shown that experiment was as much a part of the Indian tradition as of the Greek.[12] He has referred to Uddālaka Āruṇi's experiments as stated in the *Chāndogya Upaniṣad* (*Eighteen Principal Upaniṣads*, 1958, 6.12.1-2, 13.1-2) in support of this view. One interesting point is that, while speaking about *arche*, Uddālaka too resorts to analogy: the fig fruit and its seeds (*Eighteen Principal Upaniṣads*, 1958, *Chāndogya* 6.12.1-3). Argument by analogy is known in the Upaniṣadic times, but in the case of the *Kaṭha Upaniṣad,* verbal testimony has been considered a better form of argument than analogical reasoning.

The Pāyāsi parables as well as the Yama-Naciketas duologue then do not concern ontology alone; they are no less significant in tracing the development of Logic in India as well. In all the different versions of the parables we come across three specific instruments of cognition employed. They are perception, analogy, and verbal testimony.

11 It is interesting to note that Dante places Epicurus, not in the first circle of Hell to which many Pre-Socratics (some of whom were proto-materialists) are assigned (Alighieri, n. d., *Inferno* canto 4), but to the sixth circle, along with similar sinners, 'who make the soul die with the body' (Alighieri, n. d., *Inferno* 10.13-14). Thus the denial of the immortality of the soul is as much an essential part of proto-materialism (a heresy) in non-Indian cultures as in the Indian.

12 For details see Balcerowicz (2005), pp. 575-76.

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