

An Indian solution to ‘incompleteness’

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Abstract Kurt Gödel’s Incompleteness theorem is well known in Mathematics/Logic/Philosophy circles. Gödel was able to find a way for any given P (UTM), (*read as, “P of UTM” for “Program of Universal Truth Machine”*), actually to write down a complicated polynomial that has a solution iff (=if and only if), G is true, where G stands for a Gödel-sentence. So, if G’s truth is a necessary condition for the truth of a given polynomial, then P (UTM) has to answer first that G is true in order to secure the truth of the said polynomial. But, interestingly, P (UTM) could never answer that G was true. This necessarily implies that there is at least one truth a P (UTM), however large it may be, *cannot* speak out. Daya Krishna and Karl Potter’s controversy regarding the construal of India’s Philosophies dates back to the time of Potter’s publication of “*Presuppositions of India’s Philosophies*” (1963, Englewood Cliffs Prentice-Hall Inc.) In attacking many of India’s philosophies, Daya Krishna appears to have unwittingly touched a crucial point: how can there be the knowledge of a ‘non-cognitive’ mokṣa? [‘mokṣa’ is the final state of existence of an individual away from Social Contract]—See this author’s Indian Social Contract and its Dissolution (2008) mokṣa does not permit the knowledge of one’s own self in the ordinary way with threefold distinction, i.e., subject–knowledge–object or knower–knowledge–known. But what is important is to demonstrate whether such ‘knowledge’ of non-cognitive mokṣa state can be *logically shown, in a language, to be*

possible to attain, and that there is no contradiction involved in such demonstration, because, no one can possibly express the ‘*experience-itself*’ in language. Hence, if such ‘knowledge’ can be shown to be logically not impossible *in language*, then, not only Daya Krishna’s arguments against ‘non-cognitive mokṣa’ get refuted but also it would show the possibility of achieving ‘completeness’ in its truest sense, as opposed to Gödel’s ‘Incompleteness’. In such circumstances, man would himself become a Universal Truth Machine. This is because the final state of mokṣa is construed as the state of *complete knowledge* in Advaita. This possibility of ‘completeness’ is set in this paper in the backdrop of Śrī Śaṅkarācārya’s Advaitic (Non-dualistic) claim involved in the *mahāvākyas* (extra-ordinary propositions). (Mahāvākyas that Śaṅkara refers to are basically taken from different Upaniṣads. For example, “*Aham Brahmasmi*” is from Bṛhadāraṇyaka Upaniṣad, and “*Tattvamasi*” is from Chāndogya Upaniṣad. Śrī Śaṅkarācārya has written extensively. His main works include his Commentary on Brahma-Sūtras, on major Upaniṣads, and on ŚrīmadBhagavadGītā, called Bhāṣyas of them, respectively. Almost all these works are available in English translation published by Advaita Ashrama, 5 Dehi Entally Road, Calcutta, 700014.) On the other hand, the ‘Incompleteness’ of Gödel is due to the intervening G-sentence, *which has an adverse self-referential element*. Gödel’s incompleteness theorem in its mathematical form with an elaborate introduction by R.W. Braithwaite can be found in Meltzer (Kurt Gödel: on formally undecidable propositions of principia mathematica and related systems. Oliver & Boyd, Edinburgh, 1962). The present author believes first that semantic content *cannot* be substituted by any amount of arithmoquining, (Arithmoquining or arithmatization means, as Braithwaite says,—“Gödel’s novel metamathematical method is that of attaching numbers to the signs, to the series

I reverentially dedicate this article at the lotus-feet of my law-Guru, ‘*Abhinava Madhvācārya*’ Shri Dattatreya Babarao Ambekar, Santa Cruz, Goa.

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of signs (formulae) and to the series of series of signs (“proof-schemata”) which occur in his formal system... Gödel invented what might be called co-ordinate meta-mathematics...” Meltzer (1962 p. 7). In Antone (2006) it is said “The problem is that he (Gödel) tries to replace an abstract version of the number (which can exist) with the concept of a real number version of that abstract notion. We can state the abstraction of what the number needs to be, [the arithmoquining of a number cannot be a proof-pair and an arithmoquine] but that is a concept that cannot be turned into a specific number, because by definition no such number can exist.”), especially so where first-hand personal experience is called for. Therefore, what ultimately rules is the semanticity as in a first-hand experience. Similar points are voiced, albeit implicitly, in Antone (Who understands Gödel’s incompleteness theorem, 2006). (“...it is so important to understand that Gödel’s theorem only is true with respect to formal systems—which is the exact opposite of the analogous UTM (Antone (2006) webpage 2. And galatonic says in the same discussion chain that “saying” that it ((is)) only true for formal systems is more significant... We only know the world through “formal” categories of understanding... If the world as it is in itself has no incompleteness problem, which I am sure is true, it does not mean much, because that is not the world of time and space that we experience. So it is more significant that formal systems are incomplete than the inexperiencable ‘World in Itself’ has no such problem.—galatonic”) Antone (2006) webpage 2. Nevertheless galatonic certainly, but unwittingly succeeds in highlighting the possibility of *experiencing* the ‘completeness’ Second, even if any formal system including the system of Advaita of Śāṅkara is to be subsumed or interpreted under Gödel’s theorem, or Tarski’s semantic unprovability theses, the ultimate appeal would lie to the point of human involvement in realizing completeness since any formal system is ‘Incomplete’ always by its very nature as ‘objectual’, and fails to comprehend the ‘subject’ within its fold.

Note 1: Mokṣa, the final state of the Subject/Person in Liberation away from Social Contract; Advaita, the Non-Dualism of Śāṅkara; Brahman is the ultimate reality, which is Sat, Cit, and Ānanda (Existence, Consciousness, and Bliss), as also Truth, Knowledge, Infinity, by definition; avidyā—ignorance; adhyāsa—superimposition of one thing on the other; Jīva—is the Self existing with false identity, as for example, indicated through the proposition “I am *so and so*”; Sākṣin, the Witness consciousness, the Self as in dreamless deep sleep; Mahāvākya, an extraordinary sentence due to its embedding total identity between the subject and the predicate making it true always; arithmoquining or arithmatization—“attaching numbers to the signs, to the series of signs (formulae) and to the series

of series of signs (‘proof-schemata’) which occur in his ((Gödel’s)) formal system”; Universal Truth Machine, a Machine that speaks always the truth, and also (allegedly) capable of speaking *all* truths.

Note 2: The term ‘Brahman’ is different from the term ‘brāhmin’ or ‘brāhmaṇa’. ‘Brahman’ etymologically means ‘that which projects forth’, and the term ‘brāhmin’ or ‘brāhmaṇa’ generally refers to a caste in the Hindu societal hierarchy. ‘Brāhmin’ is the anglicized version of ‘brāhmaṇa’. It is to be further noted that the term ‘Brahman’ is also different from the Hindu deity ‘Brahmā’, usually with four heads/faces, who is one of the Hindu Trinity, the other two being Viṣṇu, and Maheśvara or Śiva. In this paper, the term ‘Brahman’ has been used to mean the ‘Ultimate Reality’ in its *per essentiam* (*svarūpa lakṣaṇā*) facet of definition as—‘*Satyamjñānamantam*’ (‘Truth, Knowledge, Infinity’) as opposed to *per accidens* (*tatastha lakṣaṇā*) definition—‘*srṣṭi, sthiti, layakarta*’ (the One in whom the creatorship, sustainership, and destroyership are vested).

1 Preliminary background

§0.1 Classical Indian Philosophy, comprising six orthodox and three heterodox systems in general, may be characterized as mokṣa śāstras, i.e., thought-systems that deal with the attainment of a state of existence of the Self (non-existence included) *in* liberation from the normal contingent existence of pleasure and pain. Schools of Vedānta—one among these systems—comprise several sub-divisions; and of them, the more prominent ones are Advaita (Non-dualism), Viśiṣṭādvaita (Qualified non-dualism), and Dvaita (Dualism). Further, among these systems, Advaita, founded by Śrī Śāṅkarācārya, stands at the helm of making many new and lasting contributions to human knowledge.

§0.2 According to Advaita, there is only one ultimate Reality; and that is Brahman. Brahman is infinite, homogeneous, *anādi* and *ananta* (beginningless and endless), Truth, Knowledge, and Bliss (*satyam, jñānam, and ānandam*). It is pure Consciousness or *śuddha caitanya*. *Such a Brahman is one’s own Self*. And, therefore, if one comes to know of Brahman, he will be liberated at once from the normal contingent existence of pleasure and pain and attain a state of pure existence, knowledge, and bliss. A knower of Brahman would become devoid of all suffering and would attain endless bliss. As said, the fundamental idea of Advaita is—*the person himself is the Brahman*.

§0.3 However, man is not aware of this fact, as he is afflicted by ignorance (*avidyā*) about his real nature. In other words, he is *already* himself the Brahman, but he *does not* know that he is so. The *avidyā*, or ignorance has overpowered the intellect of man, and it continuously deludes him by the things which are really not Brahman.

The person continues to identify himself with what is not Brahman. As such, these non-Brahman entities are *really not there*, yet the *avidyā* or ignorance is so powerful that it has projected forth the existence of what is really not there, and as a consequence, *the person identifies himself wrongly as what he is really not*. If this is true, one must remove such ignorance—or wrong identity, and know the Brahman (his own Self) in its purity. It is with these points in mind Śāṅkara, the founder of Advaita, begins his philosophy with *Adhyāsa Bhāṣya*—a commentary on the concept of superimposition of not-self on the self. Here he says that no one can negate one’s own self’s existence by saying “‘I do not exist’, as it can never be true” (“*Na nāhamasmī*”). Having proved the existence of “I” thus, Śāṅkara puts forward detailed analyses of false identification that ensues between the true Self and the non-self in the day-to-day affairs of human-beings. Some examples for such false propositions are, “I am this” (*ahamidam*), “This is mine” (*mamedam*), etc. In each such false proposition, there is an underlying true self, which is constantly veiled by false predicate-contents. One must realize the underlying true ‘Self’ by eliminating the false predicate contents which seek to occupy the location of true Self. And such a realization or knowledge would at once liberate the individual.

§0.4 His analysis of different states of human consciousness—*svapna* (dream), *jāgrat* (waking), *susupti* (dreamless deep-sleep), and *turiya* (the fourth state) attempts to show the actual existence of true self bereft of any identification with false predicate-contents. At each step, the person’s consciousness is elevated to move along the lines to higher and higher planes of consciousness, where false predicates would become lesser and lesser permanent/enduring. For example, dream predicates are comparatively less permanent vis-à-vis waking state predicates. If one finally comes to equate waking state with dream state, then waking state predicates will become no more real than the dream-state predicates. This realization would dawn upon the individual by constant meditation on “I am Brahman”. In the state of dreamless deep sleep (*susupti*) there would be no predicates at all that infest the Self with false identification.

§0.5 On the theoretical plane, the attempt of Śāṅkara is to create two parallel sequences: Propositional Sequence, and a corresponding Experiential Sequence. These two parallel sequences seek to elevate the individual gradually from the false identity to true identity, both theoretically and practically. For example, the individual is shown the possibility of detachment of his true self from the false entities with which he had identified himself earlier in a dream state. In dreamless deep sleep, the fact that there are no predicates (because there are no ‘objects’) in it with which the self is identified—is demonstrated, to show the actual empirical possibility of detachment of true self from the false

predicate-contents. In fact, when one wakes up from such a sound sleep he says, “I had a good sleep; *I did not know anything then*”. Here the ‘I’, the Self exists, but no ‘objects’ or ‘predicates’ exist. The Self here is called as Sākṣin, since it is a Witness to no-object state, without being identified with *any* object whatsoever. This state of consciousness is quite unlike the dream-state or waking state where there is an identity between the self and (at least some) predicates directly, and with others indirectly. Ultimately, one has to *consciously* identify (or better, *realize* the already existing identity of) one’s Self with the Brahman.

§0.6 A *vākya* is a proposition or a sentence, and has a normal subject-predicate form. Now, along the discourse on higher levels of consciousness, away from identification with false predicates, the disciple is expected to move along this propositional/experiential ladder. In short, the student would be identifying himself to be a different—and a higher—predicate-content, at each successive stage of the propositional discourse by the teacher; or at least, the falsity of false identification, or the false predicates is understood. The student would reach a stage when he is fully readied to take upon himself the task of identifying himself with the Brahman. At this stage he is fully competent to *know* it as he has exhausted knowing all classes of non-Brahman entities. This readiful stage roughly corresponds to the experiential stage of being established in the knowledge of witness-consciousness (*sākṣin*)—as in dreamless-deep-sleep state or *susupti*. The whole process, as said already, involves the propositions, and their counterpart—experiential content.

§0.7 The complete sequence of proposition vis-à-vis experience, excepting the final stage of experience *itself*, is an ignorance (*avidyā*) trail, even though, in this trail, there is successively better enlightenment with regard to what the Self really is, each time over. The Sākṣin state is also in *avidyā* trail, because even though there is no identity with false predicates, there is no explicit knowledge of the Self with self-awareness as yet. In fact, the final proposition—the *mahāvākya* or an extra-ordinary sentence “I am Brahman”—*is also in the ignorance trail*, but with a difference. That is, here, even though there is no false identity, and also that there is a true identity, the proposition itself is *not an experience* of the true identity. Hence it is also within the range of *avidyā*. (However, this proposition no more belongs to the class of subject-predicate form, that is unlike “This is rope”, where “This” is the subject and “rope” is the predicate; and the resulting knowledge is attributive. The *mahāvākya*, “I am Brahman”, is not an attributive proposition; rather it is an identity proposition. Further, it is called an ‘extra-ordinary sentence or proposition, *mahāvākya*’ because it, being an identity proposition, can *never* be false.)

§0.7.1 On the contrary, unlike the subject-predicate type of propositions, the identity proposition “*Aham Brahmasmī*” (“I am Brahman”) (or, “*Tat tvam asi*”—“Thou art

That”), is said to be similar to the proposition “This is that Devadatta”—a Devadatta who is in front of me *now*, is the same as the person whom I had seen 10 years ago. This way a *mahāvākya* seeks to mutually identify the subject terms of two apparently distinct propositions, as one, and which identification is said to be literally true, in theoretical plane, corresponding to its ontological content. The two propositions implicitly involved, in the example are “This (present Devadatta)” and “That (past Devadatta)”. This present Devadatta, who is qualified by older physical attributes, is understood to be identical with the ‘That past Devadatta’ of an earlier time-point with relatively younger physical attributes. Thus, the subject terms “This” and “That” are literally understood to be identical. This is absolutely unlike the earlier (false) identities of one self, such as “I am body” or “I am a teacher” where the “I” and the “body”, or “teacher” are not really identical.

§0.8 The proposition—“*Aham Brahmāsmi*” or ‘I am Brahman’—which is a *mahāvākya*, is, apparently for all purposes, like “X is X”. Yet there are two major differences: one, the “I” here has to be understood as truly a first person declarative, unlike ‘X’ in “X is X” where ‘X’ is normally grammatically a third-person entity. In contrast, “I” must be *used* by the person to claim about himself even if there may not be a final successful public assertion of it. Second, all the factors that hinder me, the ‘I’, at the moment from identifying myself with Brahman, have to be completely negated, as yet, while there is nothing that hinders ‘X’ being identified with itself in a formal identity.

§0.9 Even meditating on the proposition “*Aham Brahmāsmi*” (“I am Brahman”) is not the end of the story. That is, there should remain no trace even of the proposition “I am Brahman” in the mind when the actual fact that ‘I am Brahman’ is indeed realized. The *vākya-vṛtti* (‘sentential modification’ is ‘propositional-shape the mind takes’. In Indian theories, normally mind is held to always undergo transformation as according to the ‘object’ presented to it. In other words, mind takes the form of the cognized object. So, in this case, mind takes the form of the proposition ‘I am Brahman’, this sentence being the ‘object’ presented to it.) itself has to be erased. Needless to say, the mind has to cease to exist. Rather *I must truly experience that I am Brahman*. What is hindering this experiential knowledge, at this stage, is the ‘proposition itself’ as an *avidyā-factor*, which is like the pot, ‘hindering’ the pot-space from identifying itself with the external universal-space. When the pot is broken—or in this case, the *mahāvākya*—“*Aham Brahmāsmi*”—is erased from the mind (as every proposition leaves behind a modification (*vṛtti*) in/of the mind)—that the pot-space is identified with external space in entirety; and ‘I’ is identified with ‘Brahman’, there dawns the pure knowledge of Brahman as the One and Only Reality—the One without a second; *ekamevādviṭīya*.

§0.10 The crucial point in this analysis is the merging of the subject, ‘I’, with the purported ‘object’ —‘Brahman’. If both are identical, then Subject would be identifying Itself with Itself. This is the result. But before such a result is arrived at *experientially*, the difference between them surely *appear* to exist.

§0.11 This is precisely what has bewitched Daya Krishna (DK). DK wonders about the final result of ‘Subject identifying or knowing Itself’. In ‘non-cognitive’ mokṣa, since there is no *separate* ‘object’, as distinct from the subject, to be known, according to him, there can be no knowledge of the sort ‘Subject knowing itself’. However, it appears to be true that *no one can describe* the state of Advaitic lonely existence *being within it*, because then an assertion of description would defeat the claim of Advaitic lonely existence by the fact that there would emerge (as a resulting product of the claim) at least one other thing—the ‘language’ or ‘mode of assertion’ in which such a claim is asserted or made; or, at least the assertion itself as a meaningful semantic content, which presupposes a hearer would emerge as really existing. But this cannot preclude the logical possibility of ‘Subject knowing itself without claiming so’. Therefore, all that anyone could do to show that ‘I’ can be identified with ‘Brahman’ is to show the logical *possibility* in language that such a state is attainable without any contradiction, or without committal of a self-refuting act.

§0.12 It is here Gödel’s Incompleteness theorem comes to play with the implied conception of the unattainability of non-cognitive mokṣa of DK, as there is a parallelism between their problems. They are (1) both Gödel and DK posit a ‘sufficiently long truth machine’, which is necessarily finite. This is explicit in Gödel, but in DK, the same occurs as an implied idea when he makes a distinction between ‘cognitive’ and ‘non-cognitive’ mokṣa; that is, since it is in principle, logically possible for a human-being to know everything except his own self, he is himself a gigantic truth-machine, but finite in nature. (2) Both Gödel and DK agree, in principle, following the possibility of a gigantic—but finite—truth-machine, that there is a shortcoming in such a machine of ‘not being able to know at least one truth self-referentially’. For DK, non-cognitive mokṣa is that truth which cannot be known, and in Gödel it is the truth of G-sentence (We will discuss G-sentence below in Sect. §3.8). For DK, the Subject—the Self, cannot possibly know itself, thereby ensuring the impossibility to know at least one truth. (3) And ‘non-knowledge’ of at least one truth, can *never* be made good by a machine, according to Gödel, while DK wonders how such a knowledge (of the truth of final proposition) could be made possible at all (in an experience).

§0.13 At the object-plane Gödel *appears* to be right if we concede the G-sentence as a valid formulation and its accompanying arithmoquining. Presuming that Gödel’s questioning the machine is in a valid conversation, one can

meaningfully infer that a ‘G-sentence-question’ will never be answered by any machine of any magnitude. But on a subject-plane this need not be true always. And this is demonstrated in this article, by way of an analysis of *mahāvākyas*.

§0.14 Analyses of *mahāvākyas* have been done independently as small components in the past by various scholars. For example, there has been a long debate generated by DK after his article “*Is ‘Tattvamasi’ the same type of Identity statement as ‘the Morning star is the Evening Star’?*” was published in *Indian Philosophical Quarterly*, vol XXV, no. 1 Jan 1998, pp. 1–13. I believe, DK could not conceive of the shift from the ‘object’ plane to the ‘subject’ plane of knowledge; nor could he import Gödel to facilitate a clearer explication and understanding of this possibility. The closest he could think of seems to be of Fregean identity of ‘identifiable physical objects’ with additional rejoinders of ‘psychological or experiential’ aspects of objective order.¹ To my mind, there is no shift from ‘objective’ to ‘subjective’ plane in Frege’s ‘sense and reference’ in the “Morning star is evening star” proposition, either. DK seems to have struggled to prove his contention about the impossibility of non-cognitive mokṣa throughout his life-time without overtly disclosing his discomfiture with Potter,² after having contended the distinction between cognitive and non-cognitive mokṣa, and the latter’s impossibility, with him (see also footnote 6). Unfortunately,—to my mind—the point raised by DK has not been satisfactorily addressed so far, in the modern context.

§0.15 I believe that the semantic content—especially where first-hand experiences are involved—cannot be substituted by mathematical arithmoquining.³ Therefore, what ultimately rules is the semanticity alone of the statements we make. This is voiced, albeit implicitly, by “Antone (2006)”—

and The problem is that he (Gödel) tries to replace an abstract version of the number (which can exist) with

¹ For Frege’s discussion of identity statements such as “Morning star is evening star”, see Moore (1993). Also see Krishna (1998, p. 13) for Krishna’s hidden discomfiture with the non-cognitive mokṣa and its possibility. Even though, apparently, Krishna refers to the “experiential” aspect, which may even be “subjective”, it is completely clear from his approach to Advaita that he is continuously dwelling on the experiences that are normally regarded as “subjective” but on Advaitic construal the same being “objective” away from the true Subject.

² Potter (1972) and Krishna (1984) on p. 49 admits that the controversy between Potter and him began almost two decades ago, i.e., in or around 1964. The actual contention about the impossibility of non-cognitive mokṣa occurred as a consequence of this controversy. Having contended this in his article of 1984, Krishna’s later article of 1998, “*Is ‘Tattvam Asi’...*”, can be seen as an effort to defend this position. This shows, therefore, Krishna’s perennial discomfiture.

³ A detailed discussion on arithmoquining can be found in Antone (2006) and in Meltzer (1962).

the concept of a real number version of that abstract notion. We can state the abstraction of what the number needs to be, (*the arithmoquining of a number can’t be a proof-pair and an arithmoquine*) but that is a concept that can’t be turned into a specific number, because by definition no such number can exist. (*italics mine*)

and also in Meltzer (1962) by R. B. Braithwaite,

Since his ((Gödel’s)) proof is metamathematical he is concerned with a calculus representing his arithmetical system: what he proves in Proposition VI (p. 57) *is a result about the calculus and not about what the calculus represents...* (*italics mine*) p. 4.

2 Introduction

§1.1 This article, initially concerns itself with DK’s following observations⁴; since a particular understanding of these observations, on analysis, is understood to come closer to Gödelian problem of ‘Incompleteness’, eventually but mainly, it would concern itself with an attempt to answering it.

It would be almost blasphemy to think that a Śāṅkara or Rāmānuja had not attained spiritual liberation and that their philosophical thinking was concerned with removing the intellectual doubts which were hindering them from pursuing the path of mokṣa...most of these philosophers (like Śāṅkara and Rāmānuja) wrote their philosophical works *after* they are alleged to have attained mokṣa. If Potter’s arguments were correct, they would have had no reason to engage in such an activity, except, perhaps, removing the intellectual difficulties that were standing in the way of their disciples’ pursuit of the same goal, or of that of other persons who hesitated to become their disciples and thus pursue the path due to the same difficulties.⁵

§1.2 This argument of DK apparently aims at showing that some of the great philosophers of India propounded their philosophy without actually facing intellectual difficulties regarding the conception of mokṣa prior to their ‘attainment of mokṣa’. For, he implies that their philosophy is *posterior* to their attainment of mokṣa. This, if true, would surely negate Potter’s argument that philosophy in India is born out of the intellectual difficulties that stand on the way to mokṣa. DK’s argument has a two-pronged strategy to defeat Potter. If the experience is prior to

⁴ Krishna (1996).

⁵ Krishna (1996, p. 20).

difficulties, then difficulties cannot be said to have stood on the way to experience. On the contrary, if experience is posterior to intellectual difficulties then experience's content could not have been justifiably made out by the concerned propounding philosopher, because of the lack of *knowledge* of the purported content before he actually propounded it.

§1.3 The great philosophers like Śaṅkara or Rāmānuja have propounded their philosophy to remove the intellectual difficulties of others on the path to mokṣa of their conception is a truism, besides the difficulties that may be lying on the path of different conceptions of mokṣa. Therefore, if someone wants to know, for example, what mokṣa means according to Śaṅkara, then the intellectual difficulties on his way to understanding Śaṅkara's concept of mokṣa would be removed by reading/studying Śaṅkara's philosophy. Thus, such propounding can be seen as having been done explicitly for others' sake, so that others may not face intellectual difficulties on the path to the concerned concept of mokṣa. The profounders themselves must have had a conception of mokṣa prior to propounding their philosophy, because presumably, no one can propound a theory without the knowledge of what one is propounding about. However, these philosophers themselves cannot be attributed, as DK covertly seems to do, with facing of intellectual difficulties to the understanding or realization of their own conception of mokṣa, as it is plainly absurd to do so.

§1.4 DK points out—or at least implies, that forming the 'conception' of mokṣa theoretically is one thing and experiencing it is quite a different matter. These two things can exist separately under normal cognitive-knowledge-situations. For example, one may have a conception of the taste of 'sugar', however, wrongly, with/without actually having the taste-experience of it. One could speak of such experienced/non-experienced sugar-taste, even though it could be an incorrect narration. On the other hand, if sugar is tasted, the taste per se cannot be put into words. That language operates quite satisfactorily in these situations, notwithstanding. However, in a case where the conception and its experience become identical, and inseparable, one cannot possibly have a conception of a thing without actually experiencing it. In the case of the conception of mokṣa and its experience, the two become inseparable or identical, according to DK. Hence, the commonsensical difference between 'conception' and 'experience' would vanish in Śaṅkara's conception of mokṣa. In such a situation, DK would hold, an experiential understanding of the content of mokṣa is the only and true understanding of mokṣa available to anyone, if such an experience is possible at all. DK seems to go deeper into it. He appears to claim that such an experience of mokṣa is impossible. This has been alluded to by DK when he makes the distinction between cognitive concepts and non-cognitive concepts of

mokṣa, and that Śaṅkara's concept allegedly belongs to the latter category. If so, then it follows that at least Śaṅkara, as a non-cognitive philosopher, *did not* have the conception of (his idea) of mokṣa prior to propounding of his philosophy, as neither commonsensical 'conception of mokṣa', nor experiential knowledge of mokṣa is available to him. However, if he had 'experience' of his mokṣa at all, then he could not have propounded his philosophy because the (experiential) understanding of a non-cognitive mokṣa cannot be put in words. Hence, either Śaṅkara had no conception of mokṣa, and he spoke non-sense of a 'philosophy', or he had the experience of mokṣa and spoke out non-sense. Non-sense being the end-result in either case, Śaṅkara either had no conception of mokṣa or no experience of mokṣa, where in either case he had no expressible true knowledge of mokṣa in the form of a claim.

3 Intellectual difficulties; knowledge of mokṣa and its claim

§2.1 DK appears to have committed a serious error in holding that a conception of mokṣa and experiencing it to be co-extensive, at the level of discourse. That is, it appears to be wrong to hold that there cannot be conception of non-cognitive mokṣa without experiencing what is conceived, at the very time of conceiving it. For DK, thus, where the denotation and connotation become identical, one cannot use the term exclusively without the simultaneous occurrence of the other. Applying this point to the mokṣa of Śaṅkara, one will get the impossibility to speak about either of 'conception of mokṣa' or 'experience of it' exclusively. But, suppose that Śaṅkara had experienced the mokṣa, and also later spoke about it. What is wrong in it? To show a wrong here, DK will have to show the *logical impossibility of speech-act with an intention to claiming that very experience*. Has he shown such a logical impossibility?

§2.2 A different, but related, point: Let me first hold that these philosophers *did* face intellectual difficulties on their path to mokṣa—mokṣa of other's philosophies, before they propounded their own philosophy. Certainly DK would concede that neither Śaṅkara nor Rāmānuja must have attained the spiritual liberation on day one of their life of reading any philosophical literature, unless it is also held that they performed mere self-reflection without reading any literature, which existed at that time, and immediately thereafter they attained mokṣa. But this cannot be the case because they have refuted the many existing rival conceptions of mokṣa in their works, which is possible, conceivably, only if they had read through others' literature. This means that they *did face intellectual difficulties on their path to mokṣa* (conceptions) *as in the existing literature about it*, and because of the difficulties that they

had found in it thereof, that they decided to provide a *new* conception of mokṣa unto themselves and for others; and accordingly they put down their new conception of mokṣa in writing for the sake of others.

§2.3 DK's central idea⁶ seems to be to pose a critical question—'how could an author of a non-cognitive mokṣa *know* of it (non-cognitive mokṣa), and also *speak about* the same *later*?' because; a non-cognitive mokṣa would not permit knowledge—in the usual sense of the term—at all. As said earlier, the 'knowledge' under non-cognitiveness, coalesces with experience. *Ipsa facto* then, it follows that one *cannot* know of it, without also experiencing it *simultaneously*. Alternatively, if one *can* experientially know of it, then he *cannot* claim it in speech, either at that very time or later, in a normal cognitive language. Attempting to hold contrary views to this DK's paradox, in a way, seems to constitute an epistemological nightmare for every philosopher of non-cognitive mokṣa, because if we hold that the concerned philosopher had knowledge of mokṣa prior to propounding, then there is the problem of impossibility to claim it in language; on the contrary, if the philosopher is said to claim it, then there is the doubt whether he really had the knowledge of the mokṣa he is speaking about, after all, as DK's formulation goes.

§2.4 It is true that, logically speaking, the final content of mokṣa in an alleged non-cognitive mokṣa cannot be known in a normal sense of the term, either by an intellectual grasp of the content *per se* of it, or by experiencing it, in the normal sense of the term 'experience', because there is no 'subject-knowledge-object' triplet (*tripuṭi*)—that is, there is no cognitiveness—that normally acts as a facilitating factor in knowledge-situations.

§2.5 However, the exponents of non-cognitive mokṣa could very well claim that there indeed *is* some experiential content for the non-cognitive mokṣa. For example, one may claim the experience himself. But it would lead to a sort of self-refutation that may be called as 'definitional self-

refutation'. Self-refutation⁷ would follow such a claim, as for example, in Śaṅkara's proposition "*Aham Brahmāsmi*"—"I am Brahman"; in this situation, there is a peculiar impossibility involved in claiming it, because a claim here involves minimally the *reality of the action of claim*, which is different from the defined concept of Brahman as 'One Real without a second'. Such a refutation arises by virtue of the defining and fixing certain semantic content to a concept that goes against any claim of the proposition in which the said concept occurs. In this case there are two minimal things that go against the claim of Brahman-experience: (1) language, and (2) action of assertion. Now, at least, action of claiming goes against the purported interpretation of the meaning of the term 'Brahman' in the proposition '*Aham Brahmāsmi*'. Take for example, at a particular time I want to claim that "I am doing nothing". I cannot claim it by *saying* "I am doing nothing" because I am then *saying* it, such that 'saying' being something-some action—I would be *doing something* at the time of claiming that 'I am doing nothing' that falsifies the claimed proposition. This follows by defining the action as inclusive of speech acts, which are 'somethings or some actions'. The term 'saying' here is defined to be an action. Thus, if an act of speech is 'something' by definition, then I *cannot* claim that 'I am doing nothing' through speech-act. Still, I can be really doing nothing, but I cannot speakingly assert so. Suppose that I definitionally construe the semantic content of 'speaking' to be really a part of nothing, or a non-action. Then, in that case, I can speak out 'I am doing nothing' without refuting myself. And this kind of an explanation can be acceptable too, as long as there is no challenge to the definition that is put forward.⁸ But if there is a challenge and if it sustains then the claim falls.

§2.6 Operational Self-refutation of Perrett (1984) presumes the possibility of the existence of state-of-affairs which is the intended 'object' of an imaginarily self-refuting proposition, even though there is no

⁶ Even more basic idea is the attempt at exposing a category incongruity between non-cognitive-mokṣa and cognitive mokṣa. This, if true, then it would annul the Potterian idea of "spiritual liberation" as the central concern of Indian Philosophy. If there is *no way* to spiritual liberation, then the central concern of Indian Philosophy cannot possibly be "spiritual liberation". However, our answer to the "question of non-cognitive mokṣa" as logically conceivable, if acceptable, would remove the hurdle of supposed category-incongruity. Category-incongruity means that one cannot meaningfully classify the two alleged types of experience under the rubric of "experience"; thus, DK holds, while cognitive experiences may be called as "experience", non-cognitive "experience" cannot be really called as experience. I quote—"Now an 'intellectual moment' cannot make a non-cognitive quest cognitive. ...And does mokṣa represent "an ideal state of cognitive attainment" *in the usual sense which is attached to the word 'cognitive'?*" (*italicization mine*) Krishna (1984, p. 57).

⁷ For example, nowhere in his works Śaṅkara claims "*Aham Brahmāsmi*" himself. All that he does is to quote such a sentence from sources as having been claimed by a "Self". "This Self was indeed Brahman in the beginning. It knew only Itself as 'I am Brahman'..." "*Idamagra āsī tadātmanamevāvet 'Aham Brahmāsmi'*"//See Mādhavānanda (1934, p. 100), Bṛhadāraṇyaka Upaniṣad I.iv.10. Brahman being all-pervasive and homogeneous, and without a second, by definition, there would positively be no communicative mode either. If one makes a communication, then it would not only imply that there is a communicative mode but also that there is someone else, who is receiving such communications. See Perrett (1984) for a detailed, but somewhat different, discussion of Self-Refutations, especially, Operational Self-refutation.

⁸ Warrior (1983, p. 106) Compare Śrī Kṛṣṇa's definitional statement of action: "None indeed, even for a moment, remains without doing work. All, being dependent, are made to work by the constituents of Prakṛti." "*Na hi kaścit kṣaṇamapi jātu tiṣṭatyakarmakṛt/kāryate hyavaśaḥ karma sarvaḥ Prakṛtirjairguṇaiḥ*" B.G III.5.

proposition *made* to that effect; and it also presumes that, of logical necessity, when the proposition is put in any mode of assertion it falsifies. In other words, it is presumed that the state-of-affairs is conceived/conceivable independently of language under the operational self-refutation scheme; and secondly, the falsification of the proposition is realized only through a *linguistic assertion* in any mode. In this way operational self-refutation is a hidden ‘definitional self-refutation’, because it covertly defines the ‘object’ in a certain tailor-made fashion.⁹ A *definitional self-refutation occurs with those propositions whose subject is characterized by definition in such a way that a claim of it in any mode becomes false, purely and merely because of the definition of the subject*. So, if a definitional statement can be made for the division between language and state-of-affairs, the same definitionality can formulate definitions of concepts like ‘Brahman’, i.e. what it should mean may be specified by definition, which may or may not be substantiable by other arguments. So, while Buddhism defines ‘Śūnya’ with a clear break in language and state-of-affairs, Śāṅkara defines the term (‘object’) Brahman as ‘One without a second’. Hence, an assertion or claim in language, of “I am Brahman”—in the light of the definitional meaning as ‘One without a second’, attributed to the concept of Brahman—becomes definitionally self-refuting, because, *by definition*, the Brahman prohibits a ‘real second’ in any form.

§2.7 Thus, being disabled through the definition of ‘Brahman’, mokṣa *cannot* be claimed by oneself. Since content of mokṣa per se cannot be communicable without self-refutation as by asserting the proposition ‘*Aham Brahmāsmi*’, the exponent can choose to put forward supporting arguments/evidences to ‘*point*’ at the putative mokṣa’s content. Hence, the logical impossibility of a claim based on his own experience, *need not necessarily* imply either the impossibility of *actual experiencing* it by the exponent, at any point of time—prior or later to exposition—regardless of his exposition of his philosophy, nor that the experience per se cannot be ‘*pointed at*’ by, for example, a sort of ‘elimination logic’.¹⁰ In other words, an exponent of non-cognitive mokṣa has to simply demonstrate the logical possibility of experiencing the purported non-cognitive mokṣa-content, irrespective of *his* having the experience of it. Once the logical possibility of experiencing a non-cognitive mokṣa is demonstrated, what is demonstrated *itself*

acts as an intellectual conception of mokṣa. This action of *demonstration of logical possibility* cannot be held as self-refuting as the discourse itself can be construed as a loud soliloquy without involving a claim about ‘Brahman-experience’ directly. It is for *others* to make the best use of what they hear. On the contrary, the claim, if made, of ‘*Aham Brahmāsmi*’, it will become necessarily false.

§2.8 Many a time, a direct claim based on one’s own experience *does* contradict the content of the claim. Take for example, a claim by someone, in speech, that “I am dumb”. This is clearly false as a dumb person *cannot* speak, and the one who speaks cannot be dumb. In Buddha’s philosophy, the concept of Nothingness would contradict its being claimed in the form of a proposition. Let us convert this ‘Nothingness’, for convenience’s sake, into a proposition as “*All our assertions are false*”. This proposition itself cannot be claimed in any mode of assertion because of a kind of said operational self-refutation involved in it. Hence the claim would falsify the alleged ‘content’ of mokṣa (in this case ‘*nirvāṇa*’). In fact, the claim of this proposition in *any* mode of assertion falsifies the claim apparently due to the ‘creation’ of contents *in* and *through* such a claim, and such ‘created’ contents go against the averred position concerning the ‘object’ of claim. Even with all these, the possibility of experience of “Nothingness” (nor “All our assertions are false” as reflecting the state of affairs need be false) per se cannot be ruled out, as long as no contradiction of such an experience comes forth, and supportive arguments can be provided with. Contradiction, in direct terms, can emerge only when an assertion is made of such a non-cognitive experience. Unlike in Buddhism, in Advaita, we have greater cogency through its logic of elimination.¹¹ In Buddhism, one could not use the ‘elimination logic’ to the desired extent of effectiveness. However, Buddhism could also be called as loud soliloquy. But unfortunately, Śūnyatā-conception (“Nothingness”) is not forthcoming even at least in linguistic terms, in a direct propositional form, which is unlike Advaitic logical set-up with its acceptance of scriptural testimony.

§2.9 If the critic (here, DK) wants to speak of distinct category hood for cognitive and non-cognitive experiences, then he must also demonstrate that they cannot be possibly brought together under the head of ‘experience’ at all. In other words, he must demonstrate the non-cognitive experience as a *logically impossible event*. As long as he fails to do so, the experience involved in these conceptions of mokṣa avails itself to be incorporated into a larger

⁹ See Kumar (2001). I had made this query about whether a realized person in Advaita is able to make a claim “*Aham Brahmāsmi*”. The reply given by D. N. Tiwari (2001) appears to have entirely missed the point.

¹⁰ Precisely this idea of elimination seems to have been used by Śāṅkara, when he reiterates the necessity to have “apprehension” of both the entities in an “I-Adhyāsa”. Thus, when one eliminates all non-self entities involved in Adhyāsa, what conceptually remains is the “Self”. See Kumar (2006) for details of Adhyāsa.

¹¹ Elimination logic presupposes a restricted universal, as for example, a small box containing ten chalk pieces of different colors, is first known to be so. When nine colors are eliminated, one could at once infer that the tenth color is what is being referred to, by a process of elimination.

category of “Experience” without any logical *faux pas*. Thus, the critic has to show that such an *inclusion* of it (the non-cognitive mokṣa) in a larger category of Experience is logically not possible if he wants to prove the category difference between cognitive and non-cognitive experiences. In the absence of substantiation of this point, a mere statement of a ‘difference’ in the ‘types’ of experience at the alleged experiential stage of mokṣa as of non-cognitive sort is without any logical merit. Presumably, having anticipated this argument, DK wanted to beat it. To do this, DK had attempted to question the very possibility of experience of non-cognitive mokṣa, without elaborating on it. Continuing of our logical elaboration of it would lead us to a different plane, the plane of Gödel.

4 Gödel

§3.1 DK’s attempt at drawing our attention to non-cognitive mokṣa as inexperiencable has a special merit involved in it. That is, it has facilitated bringing to light an extremely interesting logical problem similar to that of the Gödelian problem of Incompleteness of any and every formal system. Indian philosophies of mokṣa—especially non-cognitive mokṣa—wittingly or unwittingly, or overtly or covertly, appear to have seriously considered—and reasonably solved—this problem. Once the purported Indian attempt at solution of Gödelian sort of problem is understood, DK’s problem of ‘inexperiencability involved in non-cognitive mokṣa’ vanishes.

§3.2 Gödel in his famous Incompleteness Theorem states that there is at least one truth, of which a formal system of any complexity and magnitude *cannot* speak, but which the humans know as true and can speak about. The Gödelian proof of this theorem shows that a formal system is necessarily incomplete always. The relevance of this point to the present discussion is that DK seems to subconsciously treat a human-being as purely formal system vis-à-vis a philosophical theory; and by doing so Daya Krishna appears to create a situation similar to that of Gödelian Incompleteness.

§3.3 A non-cognitive mokṣa per se becomes intellectually—and possibly experientially (cognitively) unintelligible precisely because certain preceding propositions in the *theory* in which the *concept* of it occurs are not fully grasped. Every material proposition of a concerned theory of non-cognitive mokṣa has a corresponding experiential content; and every experiential-content must be *actually* experienced in order to claim the complete understanding/knowledge of the proposition. Intellectual unintelligibility of non-cognitive mokṣa is due to the absence of human involvement, and conceived formalism of a system of mokṣa as an ‘objectual-system’. Thus, a mokṣa-system continues to remain formal

and incomplete forever in a Gödelian sense, as there is no subject’s involvement. In such Gödelian sort of formalistic backdrop for Indian Philosophy of non-cognitive mokṣa, only the *propositions* that directly make out non-cognitive mokṣa are taken to task *merely* propositionally, apparently formally, and outside the context. There is a hesitation to assign truth-value ‘T’ to the proposition of mokṣa *within* the system, because the *proposition* of non-cognitive mokṣa is virtually taken *outside*, and a total disconnect is affected with the rest of propositions of the system and their experiential contents, including its own content. In such circumstance, the phrase ‘non-cognitive content’ completely baffles the intellect, since the possibility of a direct claim based on experience is not coming forth. However, the involvement of the subject may directly lead to the realization of mokṣa at two levels, of (1) intellectual grasp and of (2) the experience. The former is the minimal requirement for an understanding of non-cognitive mokṣa.

§3.4 However, if a proposition claiming non-cognitive mokṣa has its own logical drawbacks, such as for example, self-refutations (as seen in “*Aham Brahmāsmi*” above), then that would highlight the *impossibility of assertion* of the proposition that speaks of its experience. But if no such claims are made, and merely one’s attention is drawn to the possibility of *its experience* per se then there is no fear of self-refutation involved. So, if some reader of the complete philosophy of non-cognitive mokṣa smoothly travels up to the *proposition* of non-cognitive mokṣa without any logical hassle, but questions the truth of the ultimate proposition that directly deals with non-cognitive mokṣa, all of a sudden, at that level, then such questioning would make little or no sense as the putative proposition then appears to have been viewed from *outside* the *context* by removing it from the rest of the bunch of propositions. Just because someone suddenly finds himself in a non-cognitive realm of experience, he cannot make a formulation to imply ‘non-experiencability’ of it, and its claim subsequently.

§3.5 Unlike in Gödel (as we would see shortly), where the formulation is *avowedly* external, in the case of DK, we find the attack is *covertly* external. This is because there is an absence of first-person *human involvement* even when subjective ‘I’ is clearly formulated within the concerned propositions. This subject’s involvement is essential for a proper understanding of non-cognitive mokṣa. We should also note that DK is *not* in a debate-situation with an Advaitin. Therefore, DK’s case has to be basically distinguished from the possible criticisms from Self-refutational arguments. DK cannot also hold that Śāṅkara’s philosophy *in toto* is self-refuting, since nowhere a self-refuting statement is made or claimed or found, individually or collectively, in it.

§3.6 Externality-arguments like that of DK’s, treat non-cognitive mokṣa in a Gödelian fashion, that is, they

pre-postulate a ‘silence’ of the system regarding the content of non-cognitive mokṣa, and attribute inability of an actual experience of non-cognitive mokṣa-content. While the term ‘system’ in Gödel denotes a formal system,¹² in DK’s context ‘system’ would denote a concrete human-being vis-à-vis the concerned philosophical theory.

§3.7 Let us take up Gödel’s matter in its most simplistic formulation and later show that Gödel’s idea involves a kind of ‘category mistake’, even though the essential idea of incompleteness of any formal system may be taken as generally proved, provided ‘G’ is a mathematical problem, and not a ‘G-sentence’ that includes the purported G as a mathematical problem.¹³

§3.8 First of all let us see how a Universal Truth Machine (UTM, a formal system) ‘fails’ to answer a simple question.

1. Someone introduces Gödel to a UTM, a machine that is supposed to be a Universal Truth Machine, capable of correctly answering any question at all.
2. Gödel asks for the program and the circuit design of the UTM. The program may be complicated, but it can only be finitely long. Call the program P (UTM) for Program of the Universal Truth Machine.
3. Smiling a little, Gödel writes out the following sentence: “The machine constructed on the basis of the program P (UTM) will never say that this sentence

¹² Gödel’s “Formal System” (P) is described “by specifying (1) its basic signs, (2) its formulae (i.e.) its well-formed formulae, (3) its “axioms” (initial formulae), (4) the relation of being an “immediate consequence” of. He says that P is “essentially the system obtained by superimposing on the Peano axioms (for whole number arithmetic) the logic of PM (*Principia Mathematica*)” (p. 41)” Meltzer (1962, p. 6).

¹³ Braithwaite in his introduction to Meltzer (1962 at p. 4) says —“Since his ((Gödel’s)) proof is metamathematical he is concerned with a calculus representing his arithmetical system: what he proves in Proposition VI (p. 57) is a result about the calculus and not about what the calculus represents, for what it directly establishes is that neither of two particular formulae—the first referred to by “17 Gen r”, the second by “Neg (17 Gen r)” (p. 59)—can be obtained from the initial formulae of the calculus by the rules of symbolic manipulation of the calculus. If the calculus is interpreted (as it can be interpreted) so that it represents the arithmetical part of the Principia Mathematica deductive system, with the second formula expressing the contradictory of the arithmetical proposition expressed by the first formula, then the theorem about the deductive system which corresponds to the calculus-theorem states that the proposition g to which “17 Gen r” refers is such that neither it nor its contradictory is provable nor disprovable.” Now, one could claim that if Gödel’s calculus is interpretable in terms of any formal system, and that Advaitic system is one such formal system, then, even Advaitic system cannot lie outside the ambit of Gödel’s conclusion of “incompleteness”. This is true so long as, or rather *only* so long as the “human involvement” is not fulfilled. The same reply would be given even if Tarski’s unprovability theorems that were semantical are brought as counter to Advaitic semantical claim. See p. 29 ff of Meltzer (1962) for Braithwaite’s elaboration on the semantic and syntactic contents in Gödel.

is true.” Call this sentence G for Gödel. Note that G is equivalent to: “UTM will never say G is true.”

4. Now Gödel laughs his high laugh and asks UTM whether G is true or not.
5. If UTM says G is true, then “UTM will never say G is true” is false. If “UTM will never say G is true” is false, then G is false (since G = “UTM will never say G is true”). So if UTM says G is true, then G is in fact false, and UTM has made a false statement. So UTM will never say that G is true, since UTM makes only true statements.
6. We have established that UTM will never say G is true. So “UTM will never say G is true” is in fact a true statement. So G is true (since G = “UTM will never say G is true”).
7. “I know a truth that UTM can never utter,” Gödel says. “I know that G is true. UTM is not truly universal.”

§3.9 “With his great mathematical and logical genius, Gödel was able to find a way [for any given P (UTM)] actually to write down a complicated polynomial equation that has a solution if and only if G is true. So G is not at all some vague or non-mathematical sentence. G is a specific mathematical problem that we know the answer to, even though UTM does not! So UTM does not, and cannot, embody a best and final theory of mathematics...

§3.10 “Although this theorem can be stated and proved in a rigorously mathematical way, what it seems to say is that *rational thought can never penetrate to the final ultimate truth...* But, paradoxically, to understand Gödel’s proof is to find a sort of liberation. For many logic students, the final breakthrough to full understanding of the Incompleteness Theorem is practically a conversion experience. This is partly a by-product of the potent mystique Gödel’s name carries. But, more profoundly, to understand the essentially labyrinthine nature of *the castle* is, somehow, to be free of it.” (*Italics mine*)¹⁴

§3.11 Now, there can be no doubt that a purely formal system of any complexity and magnitude (finite) cannot be considered as truly universal or complete, if we follow Gödelian formulation of G. Let us, preliminarily, note two points here: (1) That Gödel would say that he knows at least one truth which the UTM cannot utter, and (2) that the whole experience of going through Gödelian formulation gives us a “sort of liberation”.

§3.12 Now, does an understanding of Gödelian formulations, etc., give us a real ‘liberation-experience’? Maybe, partly, yes. That is, it shows the limitation of humans in constructing machines; but it *does not* liberate us either by overcoming the limitations of the machine or of our own selves. Perhaps, in a way, it reveals to us with a flash the

¹⁴ Denton (2009) Please scroll down for Rucker’s “Infinity and the Mind”, <http://www.miskatonic.org/godel.html>.

possible awareness of oneself as compared with and contrasted from a machine; but it does not reveal the actual liberating experience of *being human*, as distinct and different from a machine, and having ‘consciousness’ at our core existence.

§3.13 Gödel knows that ‘G is true’ even if it is a fact that UTM has not said—and cannot say—that ‘G is true’. Now, which ‘G’ he knows to be true—‘G’, the mathematical equation, or ‘G’, the sentence which incorporates the mathematical equation? Incorporating G, the mathematical equation into G-sentence would give us a non-mathematical entity. Any careful reader would notice that in the supposed G-sentence, ‘G’ itself is embedded. This is an adverse self-reference, because the non-mathematical part in the G-sentence prohibits the UTM from responding, due to its self-limitation of speaking only true propositions. On the contrary, if the G-sentence were to run like: “UTM will always say G is indeterminate” then even if there is a self-reference it would not be adverse, and UTM would have ‘gladly’ responded. Thus, ‘Incompleteness’ seems to be easier to overcome than thought earlier.

§3.14 It has to be the mathematical equation whose answer Gödel may know, and not the G-sentence (as in §3.8–3); or else he will find himself in many linguistic troubles, if G-sentence is taken. Further, a diehard skeptic might ask ‘why should not’ the UTM be able to say that ‘G is true’ *in future*?’ The answer to this is the logical proof of Gödel—if the UTM says G is true, then it would entail falsity of G, because $G = \text{“UTM will never say G is true”}$. This proof is patently based on the G-sentence rather than G-equation. In other words, linguistic formulation intersperses and mars the mathematical formulation. Semantic proofs are, again, ‘objectual’. Since the UTM always speaks the truth—to be precise, *mathematical* truth—it will not say G is true since saying so would entail falsity of G. The said entailment is possible only through the linguistic formulation, arithmoquining notwithstanding; and “UTM will never say mathematical equation—G is true” is necessarily a linguistic formulation. Therefore, the UTM would keep silent for eternity on this point, not because of mathematical problem, but because of linguistic formulation of the question about ‘G’, a mathematical problem—due to adverse self-reference contained in it.

§3.15 But then, *why or how* did the UTM *choose* to keep quiet? Does the UTM *know* that G is made equivalent to “UTM will never say G is true”? Or, is ‘G’ merely another mathematical equation to be considered by the UTM for assigning truth-value T? If it is the latter, then the UTM is not adequately universal not because of any logical limitation, but merely because of physical limitation, which, however, can possibly be made good in the times to come when technology has sufficiently developed. But if it is the former, then there will be a host of non-mathematical

points to be made. To be sure, the term “UTM” at the subject-place is very much like a personal pronoun, ‘You’, or ‘I’. Gödel’s claim for knowledge of at least one truth in contrast to the UTM’s lack of the same would make sense only if the UTM belongs to the category of the two pronouns. An insertion of the pronoun ‘it’ to refer to the UTM would constitute an unsupported transition from a ‘you’, since a ‘you’ was in reality involved in the questioning of the UTM. A ‘you’ cannot suddenly become an ‘it’. Or, if Gödel claims that the UTM is always an ‘it’, even then in a direct speech, that is, a conversational situation, the ‘it’, of necessity, has to become a ‘you’. On the contrary, if we agree with Gödel that the UTM would be merely an ‘it’ then there would be the problem that *Gödel himself would become an ‘it’*, since Gödel has claimed knowledge of a truth in *contrast* to the lack of the same in the UTM. Contrast is afforded by the *differential* concepts of ‘knowledge of truth-quantum’, and comparison by the sameness of the ‘knowledge of truth’ involved. In continuation, a higher level program may be designed to include the ‘knowledge’ of Gödel; and if it is done then it would certainly reduce Gödel to a Machine (‘I’), and so, conclusively.

§3.16 Now, suppose for a moment that Gödel is like a UTM. Let us have a V-sentence = “Gödel will never say V is true” where V is this sentence itself. One does not even require a complex polynomial whose truth is based on V-sentence. In that case, how would Gödel respond to the question “whether V is true?” If he is truly a UTM-like entity, he *must* keep quiet. On the contrary, if he is not, then he must respond- and must respond in a way that avoids falsity to V. If he keeps quiet, then there is no point in claiming that Gödel knows at least one truth more than the UTM, because such additional truth may be incorporated into a higher system called ‘Gödel’—the next stage of UTM; or that such a ‘truth’ is trivial as the same is common to machines and humans wiping out the difference between them. In that case there is no true universality even in ‘Gödel’. On the other hand, if Gödel is *not* like a UTM, then he will have to respond in a *positive* manner (without keeping quiet) to the question ‘whether V is true?’ What would be Gödel’s likely response? It could be: “Why don’t you, Mr. VK, substitute every occurrence of V with the sentence it is supposed to represent or be equivalent to, and then—and only then—put this question to me?” The details of this problem of substitution are as follows:

§3.17 A UTM *does not* have the capability to look at itself as a UTM in *totality* (or, P (UTM)) *from outside*, by using a pronoun, say, ‘I’. One who *is* outside alone can *move* inside. He should be able to do so without loss of himself to outside world, if he wants to view himself in totality. But one who is inside—*without* any idea of externality would remain inside eternally, or else he would

be destroyed when he attempts to go outside, because by definition ab initio he is inside, and so totally, exhaustively. UTM is a name given to the Machine as *a whole from outside*. From inside, there is nothing called UTM. From outside a UTM does not know that it is a UTM. In other words, there is no comprehension of totality from outside by itself. This is the reason why the UTM has not been able to convert a ‘You-intention’ into an ‘I-intention’, and so kept quiet. To be inside is to *falsely* identify a totality, which is necessarily finite. The UTM—unto itself—is identified fully internally, part-by-part. This is unlike Gödel-as-a-human-being, who, when confronted with the V-question, an antinomy comes out of himself, which the UTM could never do. *And, since he (Gödel) is by his very nature an external entity unto himself he could go inside at will. In contrast, the UTM, by its very nature being inside, tries hard to go outside*, when it is fed with the algorithm for $G = \text{“UTM will never say } G \text{ is true”}$, would try to substitute every occurrence of G with the sentence “UTM will never say G is true”. But then every try ends up in a failure. $G = \{\text{UTM will never say (UTM will never say (UTM will never say (UTM... (UTM...}, \infty\}$ Actually the UTM breaks down *a la* Isaac Asimov’s character in “Foundation” series.¹⁵ This is an infinite regress of an incomplete and broken series. The UTM can never hope to go outside. It cannot go outside. In fact, at the outset, it could not substitute the subject ‘UTM’—a ‘you’ in G -Sentence—by the term ‘I’—a *totality* of the program. This impossibility of substitution is the root cause of the silence of the UTM, and its subsequent incompleteness. This problem would continue to persist, no matter what is the degree of complexity of the mathematical matters that are involved, as long as ‘ G ’ occurs in the sentence it (‘ G ’) represents, irrespective of which equation ‘ G ’ stands for. The UTM has no ‘knowledge’; Gödel has. UTM has no knowledge of the impossibility; Gödel has. Neither the UTM, nor Gödel, nor the interrogator himself, could substitute every occurrence of V with the sentence it is supposed to represent. But the difference is: UTM *did not know* that it is impossible, while Gödel and the interrogator knew that it was impossible; because UTM could not go out, whereas Gödel and interrogator could. *Does Gödel know ‘ G ’ is true? If yes, then which ‘ G ’ he knows as true?*

§3.18 Therefore, if Gödel has to be rescued from lapsing into a UTM-like object he should be enabled to ‘stand outside’ and also be enabled to go ‘inside’ of himself *as if* he is himself a formal system without loss of his outside self—which is what Śāṅkara did.

5 The Indian solution, the ‘human involvement’ through pure consciousness ‘I’

§4.1 Indian solution for a non-cognitive mokṣa banks on making the human-being a UTM-like entity with a difference: that is the human-being would become a *True Universal Truth Machine (TUTM)*, as here, the UTM itself would be infinite, *without* an ‘inside’ or an ‘outside’. And there would be no Gödel to question him—the TUTM—from *outside* with question “whether G is true?” Condition of cognitivity that stipulates a triplet for any knowledge would breakdown in this situation. How do all these happen?

§4.2 Unlike Gödel’s purely ‘formal’ systems, the Indian mokṣa-śāstra has developed a propositional logic that is closely connected with experience. Thus, every proposition (in a non-cognitive mokṣa-śāstra, for example) exactly ‘reflects’ the contents it purports to claim, in experience (*vr̥tti* or mental modifications). This gives us *apparently* two sequences but which are in reality one: Propositional Sequence (PS) and its corresponding Experiential Sequence (ES). In the normal life, correspondence (or identity) between PS and ES is contingent, or at least we are not entirely conscious of, in many instances. However, when it comes to the question of the concerned mokṣa-systems, the correspondence (identity) between PS and ES is made a *necessary logical condition* for true knowledge. Each successive stage of the PS in the concerned mokṣa-śāstra is built firmly upon the previous stage (s).

§4.3 It is here the yoga practice plays a crucial role. The yogic effort with respect to non-cognitive mokṣa-system is to acquire ability by the person to ‘*identify*’ the two sequences as one: the PS with its corresponding ES. After a certain point, in such yogic practice, one will have the ability to identify the propositional content with the experiential content with ease. In the domain of false predicate contents, the corresponding Experiential content is discerned to be false. A crucial stage is reached in such identification-process when *two (apparently) distinct propositions lead to one experiential-content*. One of the two propositions will have some amount of false predicate contents (either as *jīva*-predicates, like ‘body’, or as limitation predicates as the Sākṣin does not have self-awareness), and these false contents hinder the total identity between the two subject-terms. When these false contents which hinder the identity are removed, the *avidyā* (ignorance) gets annihilated completely, and *simultaneous* to it, there would be propositional identity between two propositions, and also the corresponding Experiential content would be identified. In the final stage Experiential content alone would remain. Hence that is when the realization of Brahman arises.

§4.4 Let me illustrate the above-mentioned proposition with the help of a stock analogy: the space inside the pot

¹⁵ See Asimov’s (1951, 1952, 1953, 1994) Foundation Series/Robot series.

and the space outside (where the notions of ‘inside’ and ‘outside’ are mere fictitious ‘creations’ through another equally fictitious idea of pot) merge at once when the pot breaks (‘pot’ is the incompatible false predicate as in P and Q below). In other words, a single event of pot’s destruction leads to a ‘unification’ of pot-space and external-space. What is significant here is the two earlier distinct propositions losing their distinctness due to the emergent single cognitive content experientially which results consequent upon the breaking of the pot.

This space. (pot-space) (limited by pot)—————
————— (P)

and

That space. (external space) (limited by pot)—————
(Q)

While P and Q are distinct propositions, the ES that follows the event of breaking the pot (‘event’, for short) — that is common to P and Q, is a unified content. That is, there are *no* two spaces. There is only “(This) Space-experience IS (that) space-experience”. *The two subject terms are identified as one. Consequently there is only one Experiential content.*

§4.5 Perception of the event of breaking the pot is itself a *non-event* or self-annihilating event, just as the mere existence of pot is, in the *avidyā-mokṣa* sequence, because *avidyā* is a non-entity ab initio, which somehow had projected itself. Therefore, breaking of pot and realization of identity are entirely simultaneous.

§4.6 And, when this analogy is interpolated to the *avidyā-mokṣa* experiential sequence, we have *mokṣa*-experience alone in its absolute purity, which, in this case, is infinity. The question ‘how can the ‘infinite’ make itself an object of knowledge, even when it has to be outside of itself?’ is an inconsequential question; because there cannot be an application of the condition of triplet to this experience or knowledge. And, further, there is no condition of epistemic nature as far as experience per se is concerned.

§4.7 Now let us take up Śaṅkara’s example of “*Tat tvam asi*” (“That thou art” or “That You are”).

When the teacher speaks of:

Tat tvam asi. ————— (P-1),

to the student, the student has to convert the You-intention involved in P-1 into an I-intention. This is just like when one asks me: “What is your name?” I cannot respond to him by saying: “Your name is...” Rather I have to intend and say: “My name is...” The transformation is immediate, and complete, and without break. The interrogator’s intention and the recipient’s intention coalesce, even though there is an apparent discordance between the

two terms of ‘you’ and ‘I’. Although grammatically, ‘you’ and ‘I’ mean different things, their intention in the above usage point to the same object. So, the term ‘You’ stands entirely translated into an ‘I’ at one go. Further, P-1, in point of fact contains two propositions, and they are:

You are (identified with false predicates) (*jīva*)
———— (P-1a)

and

That IS truth, knowledge, and infinity. ————— (P-1b)

P-1a is expected to undergo transformation as witness-consciousness, the *sākṣin*, even though some *jīva*-predicates could persist. In such a state all the false predicates, which hinder the identification of two subject-terms of the two propositions, have to be removed. Basically, witness-consciousness or *Sākṣin* as the corresponding Experiential content for the subject-term ‘I’ would be an ideal situation. So the ‘you’ referred to by the teacher, as such may be taken as witness-consciousness.

You are.(witness-consciousness—*sākṣin*)—[Trans—
P-1 a]

At the second stage of the teacher-disciple dialogue, *all* the ‘characteristics’ attributed to the ‘That’ and the ‘I’, if any, have to be examined in order to eliminate the false ones. The factors that stand on the way to identification are normally the ‘finite’, and ‘false’ factors. When such factors are removed, the proposition—

Aham Brahmāsmi (or I am Brahman or I am That)
———— (P-2)

emerges, along with its experiential content, but now completely identified with oneself. Again, at this stage, one could claim, there are two propositions, and they are

I am. (Witness-consciousness) ————— (P-2a)

and

Brahman IS. (Truth, Knowledge, Infinite) —————
(P-2b)

But this has to be avoided since it may lead to infinite regress. Suppose one goes on analyzing the contents of the proposition P-2. This would lead to a propositional regress, which has to be necessarily avoided, or else there would be no end in linguistic chain of propositions before we arrive at the experiential identity, which is the only real finality. Thus, P-2 *as a proposition* is certainly outside the pale of experiential-identity. However, since there are no false predicates anywhere in the vicinity in it, by virtue of their removal, the subject terms get identified. ‘Predicates’ in P-2b are already identical with Brahman. So ‘I am Brahman’ is experientiable. As can be made out, the so-called ‘false’

predicate-contents are secondary truths dependent on the truth of ‘I’, like secondary truths of complex polynomial dependent on truth of G-Math Equation. If and when the foundational truth itself can be known, the rest of the subsidiary truisms lose their significance.

§4.8 Yet, the realizer of this identity cannot assert it by saying “*Aham Brahmāsmi*”. If he asserts it, then it would mean that he did not, after all, have a total identity of himself with Brahman. He *should entirely ‘forget’ separate existence for such a proposition too*. As such Śāṅkara has nowhere made a claim that he is Brahman by saying ‘*Aham Brahmāsmi*’.¹⁶ Perhaps visualizing this kind of a situation that DK must have implied that Śāṅkara might not have had the realization of mokṣa before he (Śāṅkara) propounded his philosophy, after all. It is to remove this final *vr̥tti* (cognitive modification in and of the mind) created by such a *vākya* or proposition in the mind, one has to practice a special sort of meditation called *nididhyāsana*, where one attempts to forget the distinctness of the two ‘terms’ that denote the object of meditation and the object itself. Otherwise, a claim of ‘*Aham Brahmāsmi*’ would land one in the problem of retaining the *vākya vr̥tti*.

§4.9 However, Madhvācārya, a later dualist Vedāntin, catches hold of this weakness of Śāṅkara’s system *in a debate- situation*, since a debate presupposes an ‘outside’ of a system. Śāṅkara has to come outside of infinity, however, large the infinity may be, in a debate situation. But in a non-debate situation, it is possible to construe whole of his (Śāṅkara’s) philosophy as a lengthy soliloquy, while the listener can take it as a discourse being addressed to him. And the ‘listener’ is free to accept or reject the propositions contained in it. But in a debate-situation the freedom of soliloquy is curtailed. It logically, necessarily, presupposes an ‘*other*’. Therefore, debate situations have always been suicidal for the Advaitic position. In other words, a debate-situation creates a Gödel by its very presupposition, of logical necessity, to the detriment of Advaita.

§4.10 One could still persist with the question, as perhaps DK would: can one really attain true infinity? To ask

this question is to seek to know the experiential counterpart of the final proposition of non-cognitive mokṣa. And to know such a truth one has to *become* Brahman.¹⁷

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¹⁶ In view of the proposition “*Aham Brahmāsmi*” being understood as an identity proposition, in reality it should not have deterred Śāṅkara from claiming it, since then by definition whatever is Brahman would be identical with “I”. However, it appears that common people being used to the linguistic mode of communication, even uttering (including writing) a shortest claim as “I am...(Brahman)” would be construed as self-refuting because of the emergence of a *real* linguistic mode of communication. If this obstacle of *vākya vr̥tti* were not to be there, perhaps Śāṅkara would have claimed the proposition “*Aham Brahmāsmi*” himself.

¹⁷ Gambhīrānanda (1982), *Muṇḍaka Upaniṣad* III.ii.9. p. 169, “*Sa yo ha vai tat paramam brahma veda brahmaiva bhavati...!*”—“Anyone who knows that Supreme Brahman becomes Brahman indeed...”.