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Pratyabhijñā Apoha Theory, Shannon–Weaver Information, Saussurean Structure, and Peircean Interpretant Agency

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Abstract: This paper builds upon my earlier studies in interpreting interculturally how the Kashmiri nondual Śaiva thinkers Upaladeva (c. 900–950 CE) and Abhinavagupta (c. 950–1020 CE) in their Pratyabhijñā philosophical theology respond to and reinterpret the Buddhist semantic theory of reference as the exclusion of the inapplicable (*anyāpoha*). It engages the issues in the Pratyabhijñā debate with the Buddhists, with the interrelations of Claude Shannon and Warren Weaver’s theory of Information, Saussurean structuralist semiotics, and Peircean pragmatic semiotics.

Keywords: Nondual Kashmir Śaivism; Pratyabhijñā; Utpaladeva; Abhinavagupta; Yogācāra; Dignāga; Dharmakīrti; *apoha*; information theory; Claude E. Shannon; Warren Weaver; structuralism; Ferdinand de Saussure; pragmatic semiotics; Charles Sanders Peirce

A “bit” of information is definable as a difference which makes a difference.

Gregory Bateson (1972), *Steps to an Ecology of Mind*, 315

We praise Śiva who, through his own intention [*icchā*], with the chisel of semantic exclusion [*apohana*], divides entities that are a compact mass not different from his own nature [and thereby] creates diverse forms.

Abhinavagupta, Benedictory verse to *Īśvarapratyabhijñāvimarśinī*, 1.6

1. Introduction

The two most well-known and important nondual Śaiva and tantric philosophers are Upaladeva (c. 900–950 CE) and Abhinavagupta (c. 950–1020 CE). Utpaladeva furthered the initiatives of his teacher Somānanda (c. 900–950 C.E.) in creating the originary verses and commentaries of the Pratyabhijñā system of philosophical theology. Abhinavagupta is famous for brilliant and extensive commentaries on Utpaladeva’s writings as well as for the creation of a vast corpus of philosophical hermeneutics, itself comprising both a poetics and an exegesis of tantric symbolism and ritual.

This paper builds upon my earlier studies in interpreting interculturally how the Pratyabhijñā thinkers respond to and reinterpret the Buddhist semantic theory of reference as the exclusion of the inapplicable (*anyāpoha*).

This article will not resolve all the philological puzzles in concepts of negation or exclusion (*apoha*) but suggest dialogical interpretations of basic Pratyabhijñā and Buddhist theories of it that elucidate aspects of and relations between alternative Western theories of difference in information, narrative, and semantics. I am not denying the integrity and complexity of the distinct contexts of the historical development of the various South Asian as well as Western traditions. Rather, I agree with Jonardon Ganeri’s revision of the historicism of Quentin Skinner that the historical context of each set of theories may also be identified in ongoing discussions of *intellectual issues* rather than only immediate socio-historical circumstances (see Ganeri 2008 and the discussion of philology in Lawrence 2011).

2. The Philosophical Reenactment of Nondual Śaiva Myth and Ritual

First, I provide a brief introduction to the Pratyabhijñā philosophy. In current scholarship, one of the most definitive characteristics of what is called “tantra” is the pursuit of *power*, the theological essence of which is the Goddess, Śakti, and the manifestations of which vary from limited *siddhis*, through royal power, to the saint’s omnipotent agency in assuming the divine cosmic acts.

In “nondual Śaivism”, Śakti is, as Alexis Sanderson would say, “overcoded” within the metaphysical essence of the God Śiva. Śiva is the *śaktimān*, “possessor of Śakti”, encompassing her within his androgynous nature as his integral power and consort. According to the predominant myth, Śiva out of a kind of play divides himself from Śakti and then in sexual union emanates, embodies himself within, and controls the universe through her.

The basic pattern of practice, which reflects the mythic-cum-historical appropriation of Śāktism by Śaivism, is the *approach to Śiva through Śakti*. One pursues identification with Śiva as the *śaktimān* by assuming his narrative agency in emanating and controlling the universe through Śakti. *In the fashion typified by Eliade, the ritual of return recapitulates the cosmogony.* (There are strong gender implications to this polarity also, as often the frequent transgression of cultural purity is associated with a feminine understanding of Power. These are implied in Sanderson 1985 and White 2003). The same mythico-ritual process is articulated in a great number of reciprocally encompassing codes, and codes of codes (if $A = B$ and $B = C$, then $A = C$, and so on), in terms of the over-emphasized sexual ritual and other ritually transgressive practices and theosophical and philosophical contemplations, mantras, maṇḍalas, and so on (Lawrence 2008a, pp. 5–18).¹

The Pratyabhijñā system replicates this *modus operandi* in *śāstraic* philosophical discourse as the disclosure that one has Śiva’s Śakti (*śaktyāviśkaraṇa*) (see *Īśvarapratyabhijñākārikā* [IPK] and *Īśvarapratyabhijñāvimarśinī* [IPV] 1.1.2 in Abhinavagupta 1986–1998, vol. 1, pp. 56–59); and IPK and IPV 2.3.17, [ibid., vol. 2, pp. 139–49]). Śakti is conceived as the reason in an inference-for-the-sake-of-others. I am Śiva because I have Śakti (Lawrence 1999, pp. 49–57).

To address a variety of problematics, the Pratyabhijñā thinkers interpret Śakti epistemologically as an idealistically constitutive self-recognition or recognitive synthesis (*ahampratyavamarśa*, *pratyabhijñā*, *anusamdhāna*), also identified with a principle of Supreme Speech (*parāvāk*) derived from the linguistic philosopher, Bhartṛhari. The philosophers interpret Śakti ontologically as universal first-person agency (*uttamapurūṣa*, *karṭṛtva*, *svātantrya*), of the action (*kriyā*) that constitutes existence (*sattā*, Lawrence 1999, 2008b, 2014; Dupuche 2001; Baumer 2011).² The student learns to participate in Śiva’s enjoyment of Śakti as self-recognition/Speech/agency/discursive agency by contemplating her as the reality underlying all immanent experiences, interlocutors, and objects of experience and discourse.

3. The Buddhist Theory of Apoha

The Yogācāra Buddhist logical-epistemological tradition developed in diverse ways by Dignāga (c. 480–540 CE), Dharmakīrti (c. 600–600 CE), and their followers, generally advocated a kind of phenomenalism somewhat analogous and perhaps even an intellectual background to the thought of David Hume. For this school, the only ultimately sound knowledge is the direct perception of evanescent, phenomenal unique particulars (*svalakṣaṇa*). Conceptual constructions (*vikalpa*) of enduring things and types of things (*sāmānyalakṣaṇa*) may have some value in provisional, practical life, but are ultimately erroneous.

¹ The disclosure of emanatory and cosmocratic Śakti is also described as the awakening of Pure Wisdom (*śuddha vidyā*), in which all objective things or “theses” (*idam*) are absorbed into the omnipotent I (*aham*) as “I am this” (*aham idam*) (IPK and IPV 3.1.3–7 in Abhinavagupta 1986, vol. 2, pp. 221–32; see Lawrence 1999, pp. 57–65).

² Elaborating on similar assertions by Utpaladeva, Abhinavagupta explains, “Being [*sattā*] is the agency of the act of becoming [*bhavanakarṭṛtā*], that is, agential autonomy [*svātantrya*] regarding all actions.” *sattā ca bhavanakarṭṛtā sarvakriyāsu svātantryam*. IPV 1.5.14, (Abhinavagupta 1986, vol. 1, pp. 258–59).

Dignāga developed the *apoha* “exclusion” semantic theory out of reflections on the role of observed concomitances (*anvaya*) and noncomitances (*vyatireka*) in making inductions used in practical life. Dignāga makes clear that without specification regarding subject-object, characteristics, and so on, meaning is subject to doubt (*saṁśaya*) and indeterminate (see Dignāga 2015, and the reinterpretation of the same at Pind 2011; Katsura 2011; Yoshimizu 2018). There are also background ideas in Vedic ritualism and grammar of *vikalpa* that indicate practical options (see Olivelle 2016, pp. 34, 76–77, 84–86, 127, 134–35, 159, 178–80), and ideas of negation in the semantics of thinkers such as Vyāḍi. Dignāga and successors believed that because there are no enduring entities, provisionally successful inferences and speech or other sign references are based entirely on noncomitances.³

Dharmakīrti (along with followers such as Dharmottara and Śaṅkaranandana) was the most immediate opponent of the Pratyabhijñā system. Dharmakīrti placed Dignāga’s logical categories within a more complex metaphysical causal framework of explaining how and why erroneous and provisionally and ultimately sound cognitive experiences are generated. Building on Dignāga, people pursue purposeful action (*arthakriyā*) as motivated by beginningless mnemonic impressions (*vāsanā*) to attain their desires.⁴

Dharmakīrti also holds that the highest level of experience is indeterminate and beyond the belief in a dichotomy of the limited subject and limited object. Perhaps Dharmakīrti was at the highest level a nondual Vijñānavādin or even Mādhyamika (see Dunne 2004)?

As I understand it, Buddhism has undergone numerous controversies generated by the core doctrine of “dependent origination” (*pratītyasamutpāda*) since the Pali Sūtras through Abhidharma and the varieties of Mahāyāna. On the one hand, all reality is undermined, for example, as dependent origination refutes both existence and nonexistence; the Buddha refuses to answer Vaccha and others’ theoretical questions; and he asserts the three attributes of all things as temporary, suffering (*duḥkha*), and without substantial nature (*anātman*). On the other hand, dependent origination suggests a causal analysis explaining how things work as collocations of evanescent atomic factors (*dharmā*, and so on).

Catherine Prueitt’s recent Ph.D. dissertation laudably supplements internal system analysis with the more focused study of external works of opponents. Prueitt is correct that the distinction between subject and object by *apoha* is central to the division of consciousness for the Pratyabhijñā. This distinction provides what we may identify as basic categories that are components of both Saussurean structure and the Peircean pragmatic polarities of interpretant agent and object, which complement signs. Prueitt interestingly speculates that the differentiation by *apoha* of subject and object may reflect a development in the post-Dharmakīrti Yogācāra, which is entirely possible, although it has roots in Dignāga (Prueitt 2016, pp. 260–61; see the discussion below).

Prueitt’s main effort is to demonstrate that Dharmakīrti and successors, in line with earlier Yogācāra, responded to a number of objections to defend the adequacy of mnemonic impressions or cognitive and psychological tendencies (*vāsanās*) to explain the diversity of consciousness. This forms the basis of a reiteration of the point made in the 1960s by scholars such as R.K. Kaw and K.C. Pandey that the Pratyabhijñā attempts to counter explanation by *vāsanās* with that in terms of the intentionality of nondual consciousness (Kaw 1967, pp. 135, 150; Pandey 1963, pp. 272–73; Pandey in IPV 1.5.5, vol. 3, p. 59; Prueitt 2016). I would identify this as ultimately the expression of the Icchā Śakti or *svātantrya* and so on. Well-established evidence of the Pratyabhijñā arguments about mnemonic impressions

³ See also Timalisina 2014 on Bhartṛhari. There has been much controversy in contemporary scholarship about the historical changes of the Buddhist *apoha* theory, including whether Dignāga’s approach towards a more “top down” understanding of *vikalpa* in inferential classifications was subverted by Dharmakīrti into a more “bottom up” orientation towards how constructions exclude irrelevant particulars (Siderits et al. 2011). Tom Tillemans, Georges Dreyfus, and John D. Dunne have suggested that Dharmakīrti shifted towards a natural theory of reference in focusing on the causation of *apoha* in the Buddhist account of the dependent origination of human behaviors (Tillemans 2011; Dreyfus 2011; Dunne 2011). Broadly, exclusion is the basis of what Dharmakīrti conceived as a “coordination” (*sārūpya*) between concepts and the particulars, of ironically explaining a “similarity between things absolutely dissimilar.” Stcherbatsky 1962, *Buddhist Logic*, vol. 1, p. 205.

⁴ See Lawrence 2013b on the Pratyabhijñā version of individual and cultural factors on which cognition is contingent.

(*vāsanā*, *saṃskāra*, and so on) are found at IPK and IPV 1.5.5 as well as in the treatments of memory at IPK and IPV 1.2.3–6 (vol. 1, pp. 91–101) and 1.3–4 (vol. 1, pp. 121–92).⁵

I also observe as a digression that the Buddhist epistemologists are not unique among ancient philosophers in their focus on *exclusion* in semantics. The ancient Chinese text Zhuangzi also supported its own special kind of skepticism (Chien 1984) on the basis of all categories' ostensible dependence on the negation of their opposites (Chuang Tzu 1964, pp. 34–35).

In previous publications, Mark Siderits (2011, p. 284), I (1999, p. 158), and perhaps others have separately argued that there is some affinity between the Buddhist theory and structuralist and poststructuralist accounts of the determination of linguistic or semiotic value through *difference*. Robert Magliola has advocated a lot of engagements of Jacques Derrida with Mādhyamika Buddhism (for example, see Magliola 1984). Derrida endeavored to undermine the lingering realistic assumptions of Saussure by radicalizing in a reductionistic manner the ideas of linguistic value as arbitrary and based on distinctions (Derrida 1976).

The main difference is that, whereas Derrida claimed that we remain embedded in textuality, such as in his interpretation of Peirce on the “deferral” of signifiers to one another, the Pratyabhijñā philosophers' Buddhist opponents, such as Dharmakīrti and Dharmottara, endeavored to separate signs from the objects as supposedly experienced in meditation. This is what has been described, again in Peircean terms, as comprising the Buddhists' ostensibly signless reality (D'Amato 2003). Janet Gyatso (1992), a bit more “magically” but to the same point, described meditative *dhāraṇīs* as Peircean icons of emptiness.⁶ The Buddhists are not concerned with an entirely syntactic theory of semiotic systems, but are rather oriented towards their own combinations of spiritual realization, nominalism, pragmatics, and causal explanation.

4. The Śaivas, like the Realists, Accept *Apoha* as an Important Feature of *Vikalpa*

Now, in line with their peculiar axiologies and soteriologies, the Brahmanic traditions of Nyāya-Vaiśeṣika and Mīmāṃsā espousing direct realism, rejected exclusion as an adequate account of semantics, but generally accepted that constructions negate irrelevant options, while identifying substantial concomitances about enduring entities, qualities, and processes.⁷ The Pratyabhijñā, as an idealistic and religious system, does not share the problem of explaining the relationship between raw sense data and construction. However, like the realists, it concurs that exclusion is integral to the meaning of conceptual constructions in ordinary experience. In his explanation, Abhinavagupta hearkens back to old conceptions of limiting optionality:

When a pot is seen, it is also possible that there could be, in the place of the pot, a non-pot, such as a cloth, etc. [Such a non-pot would like the pot also] naturally have a location believed to be suitable; it would produce cognition [of itself as object], and would be brought to its location by its own causes.⁸ Since the manifestations of both the pot and the non-pot are possible, there is an opportunity for a superimposition [in which one wrongly takes a pot to be a non-pot]. Since there is the [possibility of the] superimposition of a non-pot, there

⁵ Prueitt also points to the anti-Yogācāra significance of the Pratyabhijñā appropriation and subsumption of the material-causation scheme of Sāṃkhya categories, and stress on the ultimate continuity (as expressions of Śakti) between *puruṣa* and *prakṛti*. That appropriation, subsumption, and assertion of a continuity is basic to the *tantric* traditions, found in numerous nondual Śaiva, Sahajīya and Śākta texts (in fact it was the subject of one of my University of Chicago Ph.D. exam questions written by Wendy Doniger in the mid 1980's). It is a constant theme of the diffuse 6–14th *Devī Bhagavatam*. I also think that the issues between Buddhists and Śaivas are of greater gravity than to be analogized respectively to defeatism and mastery of a video game (Prueitt 2016). Essentially a tantric understanding of the categories is what is advocated by Whicher (1998). Al Collins is also pursuing this understanding in his studies (personal communication).

⁶ I think the mutual (and often conventional) bifurcations of the Peircean triad of sign, object and interpretant still persist with an iconic symbol. In mantric practice, even those dichotomies are supposed to be collapsed.

⁷ A common argument is that the Buddhist theory is also circular. We still need to know what a cow is in order to conceive of non-cows and not non-cow. (Hugon 2011). Yoshimizu (2018) claims to have shown that such a criticism is unfounded.

⁸ Abhinava is trying to show that the non-pot is a viable alternative.

is the operation of exclusion, which is characterized by negation. Thus the ascertainment [niścaya] “pot” has the nature of conceptual construction that is animated by that [exclusion]. (IPV 1.6.2, vol. 1, p. 306)⁹

Generally, the Śaiva program for philosophical explanation is a “Śakti ex machina”. If something needs explanation, invoke a modality of Śakti for it, in this case the Apohana Śakti, although of course, the Pratyabhijñā theorists also do attempt to give a substantive philosophical account for her operation.

5. Cosmic Role of the Exclusion Śakti

The Śaivas analyze a broad Cognition (jñāna) modality of Śakti into three subordinate Śaktis, appropriating the triad of three epistemic functions Kṛṣṇa ascribes to himself in *Bhagavad Gītā* 15.15, that is, jñāna, cognition or perceptual cognition in a more limited sense, smṛti (memory), and apohana.¹⁰ While apohana in this context is often translated as “reasoning” or some kind of obscuration of Kṛṣṇa’s nature, R.C. Zaehner recurs to old associations of overcoming confusing optionality in translating it as the “dispelling of doubt” (Zaehner 1975).¹¹

⁹ This is the Sanskrit: *ghaṭe hi dr̥ṣṭe ghaṭasthāna evāghaṭo’pi yogyadeśābhimatasthānākramaṇaśīlo vijñānajakāḥ svakāraṇopnītaḥ sabhāvyate paṭādisvabhāvaḥ, ato ghaṭāghaṭayordvayoravabhāsasya sambhāvanāt samāropaḥ sāvakaśo bhavati, aghaṭasya satyārope niṣedhanalakṣaṇopohanavyāpāraḥ iti tadanuprāṇitā vikalparūpatā ghaṭa ityetasya niścayasya.* IPV 1.6.2, vol. 1, p. 306.

This conception is related to ideas seen from the beginning about determinate ascertainment using exclusion to overcome doubt:

Conceptual construction [vikalpa], which comprises distinction from the alternative, is the construction in diversity, that is, the construction of that which is doubted [śaṅkitasya] in diversity. Diversity exists when there is not [yet] the rejection of the superimposition of the possibility of the non-fire in the fire. [Conceptual construction] destroys this duality of the fire and non-fire. Therefore, it is necessary that in conceptual construction [vikalpa], this is the object of determinate ascertainment [niścetavya] and not-this is the object of exclusion [apohitavya].

na asya vikalpalakṣaṇamasti, tathā hi—vividhā kalpanā vividhatvena ca śaṅkitasya kalpo’nyavyavaccedanaṁ vikalpaḥ, vividhatvaṁ ca vahnāvanagnisaṁbhāvanāsamāropanirāse’sati bhavat, dvayaṁ vahnnyavahnirūpaṁ samākṣipati, tena vikalpe’vaśyaṁ tacca niścetavyam attacca apohitavyam bhavati.

(IPV 1.6.1, vol. 1, pp. 303–5)

Maintaining the Hindu and Buddhist concern with practice, Abhinava also observes that semantic reference and exclusion are basic to the behaviors of accepting and rejecting things. Thus he states:

But those objects of the bound creature correspond to conceptual construction [vikalpa], which is concerned with reciprocal exclusion, because of use for worldly affairs in saṁsāra such as abandoning and taking.

paśostvanyonyāpohanaheṅvākinī vikalpe samārūdhaste’arthā bhavanti, sāṁsārikahānādānādīvyavahāropayogāt iti.

(IPV 4.1.8–10)

It is because it has this rudimentary epistemological function that Abhinava asserts that the Semantic Exclusion Śakti aids both the Memory and Cognition Śaktis. *evaṁ smṛtiśaktijñānaśaktiśca nirūpitā. atha tadubhayānugrahiṇī apohanaśaktirotatya . . . nirṇīyate.* IPV 1.6 introduction, vol. 1, pp. 299–300.

¹⁰ These are Utpaladeva’s original verses:

Thus, there would be destroyed the situation of humanity [janasthiti], which is born from the recognitive synthesis [anusamdhāna] of cognitions [jñāna] that are different from one another and do not have knowledge of one another [aparaparavedinām],

If there were not the Great Lord, who contains within the endless forms of the universe, is unitary, has the nature of consciousness, and possesses the Cognition [jñāna], Memory and Exclusion Śaktis.

*evamanyonyabhinānāmaparasparavedinām,
jñānānāmanusamdhānaṁ nāśyejjanasthitiḥ.
na cedantaḥkṛtānantaviśvarūpo maheśvaraḥ,
syādekaścidvapuriñānismṛtyapohanaśaktimān.*

(IPK 1.3.6–7, vol. 1, pp. 136, 139)

The *Gītā* of course was not addressing the Buddhist *apoha*, but the meaning is, as we shall see, not necessarily irrelevant. See also IPK and IPV 1.6 intro.-6, vol. 1, pp. 299–327.

¹¹ This is his translation:

As illustrated by Abhinava's epigraph to the *apoha* chapter in the IPV, which I have also used in this article, the Pratyabhijñā philosophers in the fullest perspective conceive of exclusion as a mode of Śiva's *fragmentation* of his primordial unity. Because of *apoha*'s role in fragmenting what is really one, its description leads into issues of illusion.¹² The capacity for producing illusion is explained theodically as the Māyā Śakti, the Power of Magic Illusion, which forms the basis of ordinary life:

In the condition without conceptual construction [*avikalpa*], the pot has the essential nature of consciousness [*cit*], and just like consciousness [*cit*], has the nature of everything [*viśvaśarīra*] and is perfect [*pūrṇa*]. However, there is no worldly activity with that [pot that has the nature of everything and is perfect]. Therefore, [the knower], manifesting the operation of Māyā, causes the thing, even though perfect [*pūrṇa*], to be fragmented. By means of that, is created semantic exclusion [*apohana*], having the form of negation of the non-pot, such as the self, cloth, and so on. On the basis of that very exclusion [*vyapohana*], there is said to be the ascertainment [*niścaya*] of the pot. The meaning of "only" [*eva*] in [the ascertainment] "only the pot" is the negation of other things that are supposed to be possible. Therefore, there is this complete distinction, by distinction all around, like cutting. (IPV 1.6.3, vol. 1, pp. 309–10)¹³

6. Overcoding with Chief Frameworks of Recognition and Agency

The Pratyabhijñā theorists recur to their primary codes to explain the *philosophical* import of the Exclusion Śakti as the divine Self's comparative synthesis, or recognition, of what does and does not fit into categories. Abhinava introduces Utpaladeva's main argument in IPK 1.6.3 with a rhetorical inquiry:

There may be this doubt: The pot is perceived as confined to its own form. How can a conceptual construction [*vikalpa*], as pertaining to the cognition of the pot, effect the negation of the non-pot? For not even the name of non-pot has been apprehended by anyone. How can the mental impression of the non-pot be awakened when the pot is seen? [This reasoning is accepted by the Śaivas:] True. [However,] the Buddhist is to be censured in this way, and not us. (IPV 1.6.3, vol. 1, p. 308)¹⁴

I make my dwelling in the hearts of all: from Me stem memory, wisdom, the dispelling [of doubt]. Through all the Vedas it is I who should be known, for the maker of the Vedas' end am I, and I the Vedas know. (Zaehner 1975)

¹² See the discussion of Platonism below.

¹³ *tadavikalpadasāyām citśvabhāvo'sau ghaṭaḥ cidvadeva viśvaśarīraḥ pūrṇaḥ, na ca tena kaścidvyavahārah, tat māyāvōyāpāramullāsayan pūrṇamapi khaṇḍayati bhāvaṃ, tenāghaṭasyātmanah paṭādeścāpohanam kriyate niṣedhanarūpam, tadeva vyapohanamāśritya tasya ghaṭasya niścayanamucyate 'ghaṭa eva' iti, evārthasya sambhāvayamānāparavastuniṣedharūpatvāt, eṣa eva paritaśchedāntakṣaṇakalpāt paricchedaḥ.* IPV 1.6.3, vol. 1, pp. 309–10.

The idea of fragmentations is also well-articulated in the following passage:

That [object] which is manifested is differentiated from consciousness. Consciousness [is differentiated] from that. One consciousness [is differentiated] from another consciousness. One object of consciousness [is differentiated] from another object of consciousness. This differentiation is not really possible. Thus it is explained to be the mere manifestation of the differentiation. As such, that [differentiation] is not ultimately real. For this [manifestation] is the ultimate reality of everything which is created. Due to the differentiating all around [*paritaśchedanāt*], there is said to be all-around differentiation [*pariccheda*]. The capacity for the manifestation of that [differentiation] is the Semantic Exclusion Śakti.

tat ābhāsyate tat saṃvido vicchedyate, saṃvicca tataḥ, saṃvicca saṃvidantarāt, saṃvedyam ca saṃvedyāntarāt, na ca vicchenam vastutaḥ sambhāvati iti vicchedanasya avabhāsmātram ucyate/na ca tat iyatā pārmāthikam nirmayamāṇakya sarvasya ayameva paramārthah/yataḥ eṣa eva paritaśchedanāt pariccheda ucyate, tadavabhāsanāsamārthyam apohanaśakti. (IPV 1.3.7, vol. 1, pp. 142–43)

For another description of the creation of the limited subject distinguished from objects, which invokes both the terms Māyā and Exclusion, see IPK and IPV 1.6.4–5, vol. 1, pp. 312–23.

¹⁴ *nanu ghaṭe pariniṣṭharūpe dṛṣṭe taddarśanamupajīvātā vikalpena kathamaghaṭasya niṣedhanam kriyate, na hyaghaṭasya kenacinmāmāpi grhītam, aghaṭvāśnāpi ghaṭe dṛṣṭe kathamākāram prabudhyatām? satyam, evam śākyah paryanuyojo na tu vayanī* (IPV 1.6.3, vol. 1,

Since the Buddhists cannot even account for exclusion, because of their understanding of cognition as an evanescent phenomenal stream, it would be impossible for them to posit that as the sole basis of reference.

Dignāga himself sometimes rather ironically invoked his source Bhartṛhari's concept of semantic intuition (*pratibhā*). However, Utpaladeva is not ironic in taking such intuition as pertaining to the ultimate nonduality of words and objects, one of the integral components of the Śaiva self-recognition. Utpaladeva asserts:

The determinate ascertainment [*niścaya*] of “that” results from the exclusion of the “not-that” by the knower who experiences the semantic intuition [*pratibhā*] of both the “that” and the “not-that.” This [determinate ascertainment] is explained to be conceptual construction [*vikalpa*] [as is expressed]: “This is a ‘pot’”. (IPK 1.6.3, vol. 1, p. 309)¹⁵

Again, later in the text, Abhinava quotes a “preceptor”, who is perhaps Utpaladeva or some other predecessor, on how exclusion involves the application of categories in (either a priori or a posteriori) memory to present experience:

That is the knower's mnemonic impression [*saṃskāra*] of the previous experience by which the previous experience persists even at the time of semantic exclusion [*apohana*]. (quoted at IPV 2.2.3, vol. 2, p. 45)¹⁶

I point out that the Pratyabhijñā philosophers have not only made the common argument that a negation relies upon recognitions of the similar things to be negated, but have rather paradoxically explained that *difference is a kind of recognized similarity*.¹⁷

Abhinavagupta also explains the knower (*pramātr*) of exclusion, referred to by Utpaladeva in IPK 1.6.3, with his favorite ontological category of *agency*:

Here, it has been demonstrated that what is called the knower [*pramātr*] is different than the means of knowledge [*pramāṇa*], and to be an autonomous [*svatantra*] agent [*kartr*] with respect to cognitions [*pramā*] by bringing about their conjunction and disjunction. There is the manifestation [*avabhāsa*] of all objects within the knower [*pramātr*]. (IPV 1.6.3, vol. 1, p. 309)¹⁸

p. 308) According to Bhāskarakaṇṭha, there is only supposed to be the awakening of the mental impression of that which is similar to an object of cognition. Bhāskarakaṇṭha's commentary *Bhāskarī* on the IPV (BIPV) 1.6.3, vol. 1, p. 308.

¹⁵ This is the Sanskrit:

*tadatpratibhābhājā mātṛaivātadvayopahanāt,
tanniścayanmukto hi vikalpo ghaṭa ityayam.* (1.6.3, vol. 1, p. 309)

Abhinava supports the idea of the subject's comprehension of both the that and the not-that with the analogy of a city reflected in a mirror. *cīnmātraśarīro'pi tatsāmānādhikaraṇyavṛttirapi darpaṇanagaranyāyenāsti—ityapi uktam* (IPV 1.6.3, vol. 1, p. 309). Cf. the explanation of *pratibhā* by Abhinavagupta at IPV 1.7.1, vol. 1, pp. 352–55. Here, he identifies it with the Great Lord/subject having the nature of self-recognition, and asserts its effectuation of both the conjunction and disjunction of things.

¹⁶ This is the Sanskrit:

*pūrvānubhavaśaṃskāraḥ pramāturayameva saḥ,
yadapohanakāle'pi sa pūrvānubhavaḥ sthitaḥ.* (quoted at IPV 2.2.3, vol. 2, p. 45)

¹⁷ *Bādha* is explained similarly. Cf. IPK and IPV 1.7.6–13, vol. 1, pp. 364–89.

¹⁸ *iha pramātā nāma pramānādatirikṭaḥ pramāsu svatantraḥ saṃyojanaviyojanādyādhānavaśāt kartā darśitaḥ* (IPV 1.6.3, vol. 1, p. 309). Abhinavagupta asserts that even the Buddhists contradict their own theses by inadvertently acknowledging *ekapratyavamarśa* by the *pramātr*. In the discussion of the triad of epistemic Śaktis taken from the Bhagavad Gītā, Abhinava explains that by them the ordinary person is the agent or direct perception (*anubhavitṛ*), agent of memory (*smartr*), and agent of conceptual constructions (*vikalpayitr*). He quotes *Ajādapramātrīśiddhi* (*yadyayarthasthitiḥ prāṇapuryaṣṭakaniyantrite, jīve niruddhā tatpāpi paramātmāni sā sthita*; see Utpaladeva 1921, vol. 1, pp. 8, 20) that things which seem to be established in the individual are actually established in the Supreme Self, and again further elaborates that all these epistemic Śaktis come from the Lord's perfect agential autonomy (*svātantrya*) (IPV 1.3.7, vol. 1, pp. 143–44).

One of the main themes of the chapter on *apoha* is that in its highest nature the Lord's self-recognition that generates exclusion is ultimately unfragmented or nondual,¹⁹ a "transcendental synthesis of fragmentation". Through the proper understanding of this one comes to participate in it.²⁰

7. Information as Differentiation from Entropy and the Development of Systematic Sign Usage

An early Western theorist of the mathematical theory of information is actually not Claude Shannon but Plato in his *Timaeus*. Timaeus therein explains the fragmentation of the nondual God, Good or Ideal form, known through the exercise of reason that he called knowledge and later came to be called *a priori* truth, into the realm of quotidian *a posteriori* cognition, which he called "opinion." This occurs precisely through the Creator's mixture of the unchanging with the principle of difference (Plato 1989, p. 1161).²¹ A couple pages later, he explains the origin of the Soul and subsequent creation in terms of extremely obscure mathematics and cosmology (Plato 1989, pp. 1165–66).²² I leave to other

¹⁹ Though the Lord's self-recognition synthesizes the exclusion in gross conceptual construction, the Śaivas stress that this recognition is not made through it. They deny the possibility of a superimposed alternative to be negated on the basis of the familiar idealistic premise that "there cannot be the manifestation of another, like awareness, which is different [from awareness]".

prakāśasyeva nānyasya bhēdinasvstvavbhāsanam. (IPK 1.6.2, vol. 1, p. 305)

Also see IPV 1.6.1–2, vol. 1, pp. 301–8. In this regard, a distinction is made between two levels of I, the nonconceptually constructed recognitive apprehension, Supreme Speech and so on, and the conceptually constructed self that is distinguished from the non-self. IPK and IPV 1.6.4–6. I note that the creative freedom evident in *acts of fantasy* (e.g., of an elephant with a hundred tusks and two trunks) is also taken by the Śaivas as demonstrating the principle that all dichotomizing conceptual construction is generated by the Lord's Exclusion Śakti. See IPK and IPV 1.6.10–11, vol. 1, pp. 337–43. Cf. the precursor to the Pratyabhijñā in the holism and intentionality toward Being in the semantics of negation in Bharṭṛhari, in Timalina 2014. Thomist Emerich Coreth asserts:

Whereas the act of being is the principle of all positivity in every existent, its essence is the principle of negativity, of limitation. Essence implies a negation of being, not a negation which suppresses being the being of the existent and reduces it to nothing, but a negation which limits its being and reduces it to a finite being. It is not a total or absolute, but a partial and relative negation which refers to certain determinations and denies their presence in this existent. Such a relative negation is also a negative relation, as it refers one existent to all others and distinguishes it from them. (Coreth 1968, p. 83; cf. *ibid.*, pp. 86–89)

²⁰ Abhinava explains:

This investigation of the differentiation of manifestations was made in connection with [the discussion of] the capacity for internal manifestation. From this [investigation of differentiation] the purpose in this *śāstra*, the chief thing aimed at [*abhisamhita*], i.e., the recognition of the Lord in oneself, is established without effort, according to the principle that when one thing is demonstrated its correlative is demonstrated.

asmācca antarbhāśasambhavasamarthanaprasaṅgāt ābhāsabhedavicārāt śāstre yat prayojnam mukhyatayā abhisamhitaṁ svātmani tīvarapratyabhijñānarūpaṁ tadadhikaraṇasiddhāntanīyā anāyāsiddham iti darśayati. (IPV 1.6.11, 1:341)

Cf. *taduktiśca prakṛtāyāmīśvararūpasvātmaprayabhijñāyāmupayujyate iti ślokena.* IPV 1.6 introduction, vol. 1, p. 301.

²¹ I am also reminded of Heidegger's account of how unity leads to difference in his difficult *Identity and Difference* (Heidegger 1969).

²² This gives a taste of the main part of the discussion:

Now God did make the soul after the body, although we are speaking of them in this order He made the soul in origin and excellence prior to and older than the body, to be the ruler and mistress, of whom the body was subject. And he made her out of the following elements and on this wise. From the being which is indivisible and unchangeable, and from that kind of being among bodies, he compounded a third and intermediate kind of being. He did likewise with the same and different, blending together the indivisible kind of each with that which is portioned out in bodies. Then, taking the three new elements, he mingled them all into one form, compressing by force the reluctant and unsociable nature of the different into the same. When he had mingled them with the intermediate kind of being and out of three made one, he again divided this whole into as many portions as was fitting, each portion being a compound of the same, the different, and being. And he proceeded to divide after this manner. First of all, he took away one part of the whole [1], and then he separated a second part which was double the first [2], and then he took away a third part which was half as much again as the second and three times as much the first [3], and then took a fourth part which was twice as much as the second [4], and a fifth part which was three times the third [9], and a sixth part which was eight times the first [8] and a seventh part which was twenty-seven times the first [27]. After this, he filled up the double intervals [that is, between 1, 2, 4, 8] and the triple [that is, between 1, 3, 9, 27] cutting off yet other portions from the mixture and placing them in the intervals, so that in each interval there were two kinds of means, the one exceeding and exceeded by equal parts of its extremes [as for example, 1, 4/3, 2, in which the mean 4/3 is one third of one

scholars the task of translating all this to Claude Shannon and Warren Weaver's mathematical theory of information.

Also, a lot of the Western theories of the narrative quality of experience, humans as *homo narrans*, and the correlative ethic and epistemic theory of pragmatism, though ultimately also traceable to Plato, such as in the account of God's creation of the world, have their direct source in Aristotle. It has already been suggested that, though Kenneth Burke attempted to derive his "narrativism" with its ostensible grammatical scheme of "motives" of grammar from Aristotle's poetics and four causes of action (Burke 1945)—act itself from the formal cause, the agent from the efficient cause, the scene from the material cause, the agency (i.e., instrument) from an unspecified cause, and the purpose from the final cause—they may actually reflect the Indo-European verbal action and cases: respectively, the action itself (*kriyā* in Pāṇini), nominative (correlated with *kartr* in Pāṇini), locative-cum-accusative (*adhikaraṇa*-cum-*karman*), instrumental (*karāṇa*), and dative (*sampradāna*).

Ludwig Bertalanffy also acknowledged the roots of general systems theory in Aristotle's organicism and teleology (Bertalanffy 1972). I believe that Aristotle is the ultimate inspiration of Peirce's pragmatism, and perhaps the Indo-European cases are also reflected in Peirce's elaborate sets of triadic categories. Those cases are interpreted in the advertence of Sanskrit grammars and philosophy to accounts of the relation of action to what Pāṇini understood as the mythico-ritual, syntactico-semantic "factors" (*kāraka*) of action. Of course, Aristotle and subsequent Thomism have their own complex theory of act and potency, but that need not concern us here.

Claude E. Shannon, in his classic *Mathematical Theory of Communication*, described information as any statistical *differentiation* from maximum randomness, noncorrelatedness, or taking a model from thermodynamics, what is called the *entropy* of a communication medium (Shannon and Weaver 1998; Pierce 1980). Shannon was especially concerned with the engineering relationship of signals to noise or entropy in telegraphic lines. As *apoha* excludes optionality and doubt in *vikalpa*, John R. Pierce explains that information theory

provides, in the bit, a universal measure of an amount of information in terms of choice or uncertainty. Specifying or learning the choice between equally probable alternatives, which might be messages or numbers to be transmitted, involves one bit of information. (Pierce 1980, p. 8)

Bit is actually a technical term for "binary digit" (Pierce 1980, p. 98).

Already from the beginning, Shannon's classic interpreter Warren Weaver attempted to distinguish and relate the engineering of information to the semantics and pragmatics of information (Warren Weaver, "Some Recent Contributions to the Mathematical Theory of Information", in Shannon and Weaver 1998, pp. 1–28). Dignāga was himself already cognizant that the intentional dichotomy of

more than 1, and one third of 2 less than 2], the other being that kind of mean which exceeds and is exceeded by an equal number. Where there were intervals of $3/2$ and $4/3$ and $9/8$, made by connecting terms in the former intervals, he filled up all the intervals of $4/3$ with the interval of $9/8$, leaving a fraction over, and the interval which this fraction expressed was in the ratio of 256 to 243. And thus the whole mixture out of which he cut these portions was all exhausted by him. This entire compound he divided lengthwise into two parts which he joined to one another at the center like the letter X, and bent into a circular form, connecting with themselves and each other at the point opposite to their original meeting point, and, comprehending them in a uniform revolution upon the same axis, he made the one the outer and the other the inner circle. Now the motion of the outer circle he called the motion of the same, and the motion of the inner circle the motion of the other or diverse. The motion of the same he carried round the side to the right, and the motion of the diverse diagonally to the left. And he gave dominion to the motion of the same and like, for that he left single and undivided, but the inner motion he divided in six places and made seven unequal circles having their intervals in ratios of two and three, three of each, and bade the orbits proceed in a direction opposite to one another. And three [sun, Mercury, Venus] he made to move with equal swiftness, and the remaining four [moon, Saturn, Mars, Jupiter] to move with unequal swiftness to the three and to one another, but in due proportion . . . (Plato 1989, pp. 1165–66)

subject and object emerges from the primordial nonspecificity of meaning. Dignāga explains the intentional context of the noncomitance of *apoha*:

The denotation of the referent is also by means of joint absence, like, for instance, [the technical term] *karman* denotes what the agent (*kartuḥ*) most wants to obtain (*īpṣtamam*) [by his action]. (*Pramāṇasamuccaya*vṛtti V. 54 in Dignāga 2015, p. 147)

This passage, which quotes the Pāṇinian definition of the karma, is closely followed by Utpaladeva's statement of the idealistic and pragmatic significance of the *kāraka*:

Otherness of the Self does not result from the differentiation of the recognitive apprehension [*parāmarśa*] of the condition of "I", and so on, because there is the creation of it only as the object of the recognitive apprehension of I [*aḥammṛśyatā*], like the direct object [*karman*] expressed by the conjugal ending [*tiṅ*]. (IPK 1.5.17)

From the Śaiva perspective, Dignāga should have more greatly attended to the idealistic and pragmatic context of the direct object described above.

The Peircean pragmatic semantics of meaning in biosemiotics "overcodes" general systems theory of the evolution of life as self-organizing systems. The Peircian biosemiotician, Terrence W. Deacon, brings the notion of information back to the thermodynamic context. In this scheme, self-organizing living systems, while utilizing resources and increasing overall entropy, paradoxically maintain themselves in a state of informational difference contrary to entropy (Deacon 2007, 2008, 2010, 2012). Deacon maintains that this Shannon information is homologous and nested within thermodynamic conceptions of past and potential *work* as constraints on Ludwig Boltzmann's formulation of entropy, and, also, Darwinian broadly "pragmatic" conceptions of the survival of the fittest, or the nonsurvival of the nonadaptive.²³

Life (and its associated semiosis) evolves through what systems theorist Ilya Prigogine called order through fluctuation (see account in Jantsch 1992). The process of evolution itself evolved (Deacon 2012; Hoffmeyer 2008a). From the simplest organism through human consciousness, a self-organizing system's semiosis has an intrinsically "pragmatic" or "narrative" character (Deacon 2007, 2008, 2012). The Peircean theorists variously explain that when there is information as counter-entropy, there is either a nonanthropomorphic or recognizable precursory form of *agency*, *intentionality*, and *action*, which Deacon encompasses with the notion of teleodynamics.²⁴

While at all levels, self-organization as information based on difference²⁵ along with its elaborations in narrative, living systems evolve from using more iconic and indexical signs with minimal differentiation from environmental objects to what Hoffmeyer would describe as the more elaborately differential, "conventional" "digital codes" of DNA, and finally innate and learned cognitive schema, and the linguistic and cultural differential structures of symbols as

²³ Deacon believes that concepts of information in Shannon, Boltzmann, and Darwin roughly parallel the classic distinctions, respectively, between syntax, semantics, and pragmatics (Deacon 2012, p. 414).

²⁴ A couple of less telling passages:

Something other than that feature of the medium that conveys the information—the specific form of the reduced Shannon entropy—provides evidence of another absent physical phenomenon: whatever performed the work on the signal to effect this reduction. (Deacon 2007, p. 138)

What makes something information is not something intrinsic to its immediate properties and even its causal history. It is a difference that is interpreted to refer to, or mean, something with respect to some functional consequence. (Deacon 2007, p. 146)

²⁵ (Deacon 2012, vol. 182, pp. 191–92), homologizes difference with constraint, and quotes with approval Ashby 1962, p. 257:

While, in the past, biologists have tended to think of organization as something extra, something added to the elementary variables, the modern theory, based on the logic of communication, regards organization as a restriction or constraint.

conceived by Saussure in linguistics and semiotics, Claude Levi-Strauss in anthropology, Jean Piaget in developmental cognitive psychology, and so on (Hoffmeyer 2008a).²⁶ These codes are generated through some kind of complex statistical derivation of the root binary operations defining information.²⁷

These “binary” oppositions defining information and counter-entropic systems, as stressed in information theory, are elaborated in the conventional “digital” codes of structuralism. This pertains to Gregory Bateson’s definition of a bit of information as a “difference that makes a difference.” The comparative priority of information, structuralism and pragmatic semiotics becomes a question like that of which came first, the chicken or the egg. I believe it can be proven that the chicken came first, as life in self-organizing systems existed before the evolution of sexualized reproduction. Likewise, the fact of binary difference should be slightly prior or temporally simultaneous with initial structural difference, inasmuch as one binary difference likely precedes a whole system. I think, however, that a practical impetus would have a temporal or at least some kind of metaphysical priority to those differences defining the systems of Saussurian structuralism. There is both temporal and causal priority in the thought experiment of imagining two people in the pragmatic situation of living together, with no common languages, developing their own rough system of communication.

Anyway, we are here reminded of Charles Morris’s efforts to situate broadly conceived *syntax* within semantics and pragmatics (Morris 1938, pp. 7, 13–21) as well as Karl Otto Apel’s further efforts to situate Saussurian within Peircean semiotics (see “Trancendental Philosophy as First Philosophy” in Apel 1994, pp. 112–31). The same contextualization would apply to Derridean poststructuralism, which we might call “reflexively deconstructive structuralism”. *Langue* is defined within the symbolic action of *parole*: an agent applying memory to recognize and enact interpretations in experience for self and perhaps others for the accomplishment of its intentions.²⁸ This is illustrated by Apel in a simple manner:

²⁶ Incidentally, both Amita Chatterjee in her interpretation of Dharmakīrti and Deacon in his difference-based biosemiotics (Chatterjee 2011) find support in James Gibson’s notion of sensory-motor “affordances” (2015).

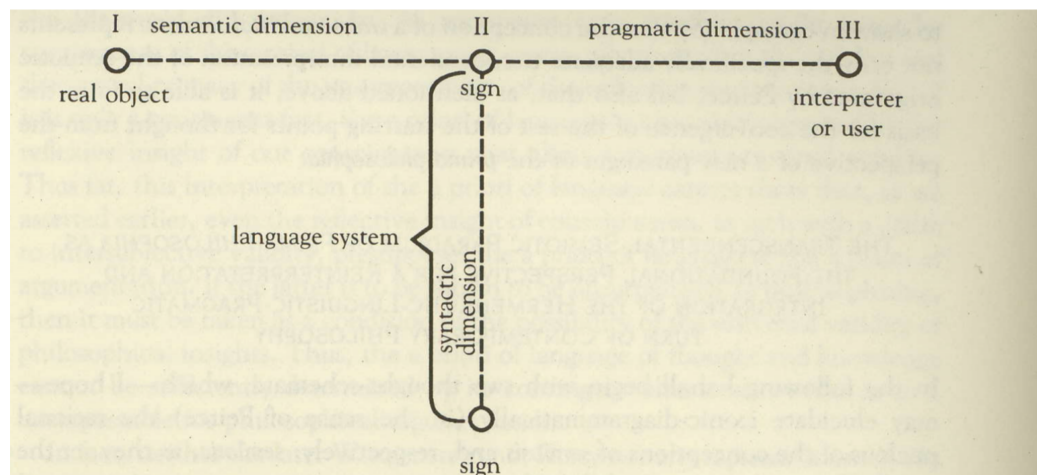
²⁷ See the discussion of the binary derivation of early Chomskian phrase structures in “Language and Meaning” (Pierce 1980, pp. 107–24).

²⁸ Though not always so candidly acknowledged, the application of Peircean semiotics to biology is in effect a kind of neo-vitalism. With respect to the current discussion of semantic exclusion, we may be reminded of the reflections on negation of the earlier vitalist, Henri Bergson. Discussing a different sort of idea of “nothingness”, “void”, or “nought” as the negation of presence and intended order in our teleological pursuits, Bergson makes the relevant observation:

A being unendowed with memory or prevision would not use the words “void” or “nought”; he would express only what is perceived; now, what is, and what is perceived, is the *presence* of one thing or another, never the *absence* of anything. There is absence only for a being capable of remembering and expecting. (Bergson 1911, pp. 280–81).

Kenneth Burke is influenced by Bergson in his famous “Definition of Man”, where negation is basic to the intentionalities of symbol use and moral striving:

Man is the symbol-using (symbol-making, symbol-misusing) animal, inventor of the negative (or moralized by the negative), separated from his natural condition by instruments of his own making, goaded by the spirit of hierarchy (or moved by the sense of order), and rotten with perfection. (Burke 1989, p. 70)



(From Apel 1994, p. 238)

Moreover, substantiating the Pratyabhijñā's transindividual first-person, agent-centered syntax as well as cognitive science accounts of the religious detection of, and conversion as acquiescing to, a higher executive agency (Boyer 2001; McNamara 2014), the biosemiotician Hoffmeyer has argued that in both physical and cultural evolution there is evidence of a natural teleology towards what he calls "semiotic freedom": more semantically rich and practically efficacious interpretations of the world (Hoffmeyer 2008a, 2010b).

In conclusion, I believe the Pratyabhijñā situation of negation within what may be called a broadly absolute idealistic context of agency, intentionality, and narrative provides greater accordance with an optimal semiotic account of the inductive scientific data.

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Abbreviations

BIPV	Bhāskarakaṇṭha's commentary <i>Bhāskarī</i> on the IPV
IPK	<i>Īśvarapratyabhijñāṅkārikā</i> by Utpaladeva, for convenience cited in edition with BIPV and IPV, rather than the better edition of Torella
IPV	<i>Īśvarapratyabhijñāvimarśinī</i> by Abhinavagupta, commentary on IPK, cited in edition with BIPV
IPVV	<i>Īśvarapratyabhijñāvivṛtivismarśinī</i> by Abhinavagupta, commentary on Utpaladeva's now fragmentary <i>Īśvarapratyabhijñāvivṛti</i>

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