

The Modern Knowledge Academy, Vedantic Education and Integral Education

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Abstract: The early Upanishads provide a model of education which Sri Aurobindo drew on for his system of education, which has been called "integral education." Yet, having himself been educated in some of the canonical institutions of the modern knowledge academy, Sri Aurobindo's views on education did not adhere to a nativist or essentialist interpretation of indigenous knowledge. This article will consider the critique of both modern knowledge as well as of nativist approaches to knowledge acquisition and dissemination implicit in Sri Aurobindo's and the Mother's vision of integral education; and if or how that can be implemented in a post-secular global society.

Key Words: Integral education, Sri Aurobindo, Vedantic Education

The Modern Knowledge Academy

Questions of restructuring higher education, whether to empower indigenous forms of knowledge or a more integral knowledge (whatever that may mean) require foremost, a critical consideration of the disciplinary boundaries of the modern knowledge academy, within which all such considerations are conducted. What are the assumptions of the academy, from where did they come, who/what owns it and/or is owned by it, and what do they allow or disallow from consideration?

Questions such as these were quite naturally of critical importance at the turn of the 19th/20th century in Kolkata, India, where a native Bengali intelligentsia met to discuss the shape of a national education project. Aurobindo Ghose, later Sri Aurobindo, the philosopher-sage of Pondicherry (and one of the seminal influences on CIIS founder Haridas Chaudhuri), and Rabindranath Tagore, the first non-western Nobel awardee for literature, considered by many

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Indians as the conscience of the nation, were participants in these discussions. In forwarding their analyses and critiques, they considered the place of language, of whole person education, and of traditional epistemologies in comparison with western education. Many of these debates were conducted around the founding curriculum and pedagogical methods of the National College in Calcutta, which became operational in 1905, with Aurobindo as its first principal. Later, both Tagore and Aurobindo continued to develop the ideas voiced in these meetings, giving a more mature shape to them in their own “ashram” institutions, Shantiniketan and the Sri Aurobindo Ashram respectively.

Both were strongly influenced by Vedantic ideas of epistemology and pedagogy – Tagore put to practice his own creative interpretations of these teachings, while Aurobindo developed what he called “Integral Education” on its basis. Neither, however, rejected the epistemology or pedagogy of the modern knowledge academy, both because such a rejection would be a recipe for marginalization and because there were aspects to the modern knowledge academy that provided salutary corrections to some of the shortcomings of indigenous education. The National College is still operating as one of Kolkata’s (and India’s) major universities, though to what extent it embodies the critiques and suggestions of the National Education Council, is a debatable question.

Principles of National Education

To summarize the ideas of the Council, especially as voiced by Tagore and Aurobindo, we can group them into four major points:

1. Priority given to native languages as the medium of instruction, with the corollary need to advance translation projects of western knowledge into the Indian vernaculars. This idea, strongly advanced by Tagore, had to do with the acculturation of a never-fully-translatable continuous tradition and its engagement, on its own terms, with modernity.
2. Equal importance given to the Humanities and the Sciences/Technologies. This point was emphasized by Tagore, since what was recommended by some was an emphasis on technical education, as the basis for developing equality in manufacturing and industrial management with the colonizer. Unfortunately, in the early implementation of national education, this emphasis on Engineering became predominant for some time, and the National College, later called Jadavpur University, became known as an Engineering school. Fortunately though, today the university is well known for its Humanities as well.
3. Related to point 2, was the question of the educational habitus. Both Tagore and Aurobindo drew on the Vedantic idea of the ashram or gurukula (guru’s family) model of educational habitus, which would allow for informal learning as well whole person pedagogy. The implementation of this aspect was contra-indicated by the modern knowledge academy, and the question of how or if at all it could be implemented, remained unanswered. Later, both Tagore and Aurobindo built ashrams of their own, and conceived of the life of the ashram as a form of “unending education.”
4. The privileging of the mind, in the modern knowledge academy, and consequent reduction of knowledge to “intellectual understanding” was sought to be countered by other forms of legitimate knowledge. In Tagore’s case, one scholar has called it “a feeling-ordered

rationality;”² and in Sri Aurobindo’s case, it was a tapping into inner sources of wisdom that Vedantic knowledge wrote about. In this context, Aurobindo (2003) came up with his “three principles of true teaching,”³ of which the first was that “nothing can be taught” (pp. 384-385).

Critique of Modern Knowledge

Before looking at these suggested revisions in detail, or considering what they drew from Vedantic education or what shape they took in Integral Education, it would benefit us to subject the epistemology and pedagogy of the modern knowledge academy to our own critique, based on sources of understanding which are current. The modern knowledge academy, now a worldwide decentralized universal institution, was born out of the 17th/18th century intellectual revolution known as the European Enlightenment. In brief, as a reaction to the dogmas of the Church, European intellectuals sought an object and method for knowledge production that all humanity could agree on. It is the method here that is more important than the object, since the object could more easily be stated as the totality of knowledge of the cosmos (the “what” of human consideration) and the subject of knowledge, the human being (the “who” of its consideration).

What could be universally agreed upon, if we were to avoid being subject to the rhetoric of invisible epistemic real estate of various unverifiable contentions, was what we could affirm as verifiable empirical knowledge, obtained by the senses (or technical extensions thereof), and operated upon by the rational principles of the mind to arrive at testable hypotheses, inductions and deductions. Thus the scientific method became the ground of modern research and the archiving of the results of this method, in systematic form, became the means of acquisition and furtherance of knowledge. This simply put, is the foundation of the modern knowledge academy.

Knowledge here is not the prerogative of any individual, however intelligent, but a constantly developing archive belonging to all humanity; and dependent on all humanity, yoked with or without consent, as knowledge-workers for its production, distribution and implementation. Individuals here did not count for much, because finite human lives, bounded within a small envelope of space (locality) and time (mortality) could only piece together or handle a small quantum of knowledge, while a decentralized knowledge academy, utilizing large numbers of knowledge workers across space and through history, it was supposed, could eventually arrive at the goal of total knowledge and mastery over all circumstances as a result. The assumption behind this was that, since Nature’s laws were cognizable by the human mind, the mind would eventually arrive at the Law or small complex of Laws, which explain everything. One might see this as a displacement of the earlier Greek idea of the Logos or Mind-of-God. Of course, not all Enlightenment philosophers believed in this, but it was a pervasive idea, particularly among Deists, who were very influential in shaping the Enlightenment. Since nature was “reasonable” (i.e. lent

² See the discussion of Rabindranath Tagore in Esha Niyogi De (2002, p. 42) as quoted in Banerji (2010, p.13).

³ From “A System of National Education” published in 1910 in the nationalist magazine *Karmayogin*. See Sri Aurobindo (2003, p. 384). Later, in his magnum opus on yoga, he reiterates this idea more fully: “Nothing can be taught to the mind which is not already concealed as potential knowledge in the unfolding soul of the creature” (1999, p. 54).

itself to Reason), human reason would be able to arrive at a total understanding of nature. This could be seen as a kind of “integral” goal.

Modern Knowledge and Humanism

The assumptions of universality in this premise made for some attractive consequences which were tied to the larger Enlightenment project. For one, it rested on and inaugurated a universal humanism. In defining a universal method and a universal scope of knowledge, it simultaneously defined a universal subject which would be the natural instrument for this project – a human being possessed of empirical sensory means and rational logical means of knowledge. This meant that all humans were equal in possessing universally the faculties of sense and logic. This equalization, which helped Europe to emerge from the epistemic dominance of the Church, was in a sense, liberative for colonized peoples as well. It provided them with a principle for claiming equality as human beings, not only in relation to the colonizer but also against dogmas of social inequality instituted and accepted in their own native societies. It also however, stood in contradiction to native pedagogy in this sense, since indigenous education, such as what was conducted in the ashram or *gurukula*, was often based on a severely patriarchal model, where the word of the guru couldn't be questioned. One can see here how the critique of national education cut both ways – finding principles in the modern knowledge academy to correct biases and prejudices of the past, while also contesting the definitions of epistemology and pedagogy based on indigenous knowledge systems.

However, the privileging of Reason as the highest human faculty was an inherent bias, which we can see at work to this day in separating humans in terms of superiority. Moreover, as thinkers like Nietzsche were quick to point out, this noble-seeming knowledge project was entangled with the “power” project of making a “perfect world” (Nietzsche, 2009). In fact, for Nietzsche (and closer to our times, for Nietzschean thinkers such as Michel Foucault), the power motive was primary, driving the quest for knowledge so as to possess and enjoy the world, exploiting those who were disadvantaged in terms of the instruments of knowledge or its application (technology) (Nietzsche, 2009; Foucault, 1984: pp. 76-100). Still, the good that modern applied knowledge has done to our world cannot be overlooked; and the leaders of national education in Kolkata did not wish to overthrow technology only because it was one of the prime instruments of colonialism. The famous debate between Tagore and Gandhi on this issue is a good case in point.⁴

Today, we may articulate the problems with the modern knowledge academy in our own way – first, the “integral” epistemological project of the Enlightenment is faulty in its assumption of piecing together all knowledge through an iterative method. Simply speaking, the whole is greater than its parts and cannot be composed from an addition of its parts. However, so long as we harbor this illusion, even as a general possibility, we will be prey to partial wholes that become ideologies

⁴ Through the 1920s, Gandhi and Tagore corresponded on a variety of topics including Gandhi's national program of boycott of science and technology in native education as well as universal domestic practice of cotton-spinning (*charkha*). Tagore resisted both views. Though he was sorely conscious of the dehumanization contingent on privileging science and technology over the humanities, he felt the solution lay in balancing the priorities, not in boycotting science and technology. In fact he sent his son to study Agricultural Engineering at the University of Illinois, Urbana-Champaign, so as to apply its methods for more efficient produce at Shantiniketan (Robinson and Datta, 2007).

laying claim to all of reality. This is the ground for the universalist stridency of modern religions and political ideologies. Faced with a liberal world which champions knowledge acquisition and application as part of a totalistic drive with the assumption of an absolute rational understanding, religious and political ideologies take on a fundamentalist stance in opposition, staking their own universal claims as having global rights. No claim to integrality based in a mentally comprehensive construction, however compelling and inclusive, can encompass the infinite plurality of the cosmos. There will always be something that will escape the “system;” yet driven by the need to claim integrality, there will always be the attempt to close the doors on inconvenient fractions and force a theoretical ideology on the masses – the essence of fascism. It is an understanding of this danger, that made Martin Heidegger open up the method of “destruction” against metaphysics, later continued by Jacques Derrida in the form of deconstruction and by Michel Foucault, through his archaeological and genealogical critiques.

The problems of the drive for “power,” furthered through technology, are even more obvious. Though claiming the goals of betterment and perfection of human life and worldly circumstances, the motives of power are tainted by the impurities of the human ego, and without addressing this, lead inevitably to possessiveness and exploitation, at the foundation of colonialism and capitalism.

Vedantic Knowledge

For an indigenous basis of knowledge, Sri Aurobindo turned to the Upanishads, India’s earliest proto-philosophical wisdom texts. The Upanishads are centrally concerned with knowledge, but they understand this quite differently from the modern definition of knowledge. The question of knowledge is fielded repeatedly in the Upanishads. The most succinct form of this question, raised variously in a number of texts, can be found in the Chandogya Upanishad (VI.1.3) and repeated in the Mundaka Upanishad (I.3): “What is the one thing knowing which all may be known?” Purely based on the question, this sounds almost identical to the Enlightenment’s project of finding the unitary root of all explanation. But the difference between the two lies in the fact that for the Enlightenment, this is an epistemological project, not an ontological one; while for Vedanta epistemology is never separated from ontology, and the question is a matter not of shareable content but of a certain experience of reality, one through which all is understood. While a rational epistemology proceeds on the basis of a subject-object split, Vedantic epistemology aims at overcoming the subject-object split through non-dual experience. This is done through an insistent focus of attention on the Brahman, the One Being in all beings. In terms of its knowledge project, another way of putting this is the discovery of true Subjecthood (the Atman or Self), whose self-experience is this objective world, cognized substantially as itself (Brahman) and through its faculties, as qualitative (*vijnana*) and functional (*karma*) forms of self-knowledge. This Self is the self of all selves and may be approached through “self-enquiry.” Interestingly, this realization has also been termed “Enlightenment,” in the inverse Orientalist sense with respect to the European Enlightenment.

Comparison of Methods

The method to its attainment is no less systematic and rigorous than the knowledge academy’s scientific method. It consists in following a psychological praxis, yoga, guided by a realized teacher (*guru*) in an intimate habitus (*gurukula*, *ashrama*) where both formal and informal

interactions aid the achievement of the realization. The importance of the lived habitus as the site of pursuit of knowledge cannot be over-emphasized in this approach, since knowledge realization is seen here as an existential preoccupation. Yoga is a vast field of experience in India, aiming to realize a variety of goals through a variety of methods and teachings. Of these, the predominating peculiarity of the Upanishads is to privilege the goal of knowledge. The primary method of the Upanishads can be thought of as the four stages of preparation, reception, contemplation and realization. The clearest articulation of this method comes in the Brihadaranyaka Upanishad (II.iv.5) in the words of the sage Yajnavalkya teaching his wife Maitreyi:

आत्मा वा अरे द्रष्टव्यः श्रोतव्यो मन्तव्यो निदिध्यासितव्यो मैत्रेयि,
आत्मनो व अरे दर्शनेन श्रवणेन मत्या विज्ञानेनेदं सर्वं विदितम् ॥

(The Self, my dear Maitreyi, is to be realized – by hearing of it, cogitating on it and entering into intimate contact with it (or intuiting it); By the realization of the Self, my dear, through hearing, cogitation and intimate relation (intuition), all this is known).⁵

It should be noted that this method is directly related to the goal of Vedantic knowledge⁶ in the second line. Here, what is to be received (or heard) can be variously construed as: (1) the teaching of the guru;⁷ (2) the revelatory (mantric) utterances (*mahavakya*) of the Upanishads; (3) the cognitive and phonetic structure of the Upanishad.⁸

It is also interesting to note that the term *dhyana* (concentration) is not used for the middle term between *shravana* (hearing) and *nidhidhyasana* (identity) Rather *dhyana* is contained in *nidhidhyasana*; it stands for wordless contact by consciousness. This is also intuition, an intimacy with the being. But the middle term is *manana*, which means thinking, cogitation rather than contemplation or intuition. This is a cultural use of thinking as a means to lead to thoughtless contemplation. Storytelling and the performance arts exist to amplify this element of *manana*, thinking about the object of relation. The story of Yajnavalkya and his teaching of Maitreyi is itself such a story attracting our interest and making us think of the characters and their actions. This thinking intensifies the attention on the objective being pursued. From this the object starts becoming real, that is, its presence is sensed in its expressions and attracts us to thoughtless wonder (*adbhuta*), the presence of the infinite in the finite.

Social Benefit of Upanishads

Would this praxis have any social benefit? After all, if there is a noble side to the Enlightenment, this is its central concern – how can we create a perfect world? Though monastic communities of intense practice did not concern themselves with social good, the attention on the One generated its own ethical consciousness. Ethics here was not a goal but a natural consequence of the intimacy

⁵ Translation by the author.

⁶ What is the one thing knowing which all may be known?

⁷ It is possible that this included the initiatory bija mantra; but the Upanishads are ridiculing of blind mantra repetition. However, they privilege the pranava, the syllable Om. So it is possible that something like this was made an occasion to convey the guru's experience, along with recipes for the cogitation and contemplation of the mantra.

⁸ It is surmised that the formally structured Upanishads such as the Mandukya or the Isha are relatively late ones. If this is the case, then we can see this as an example of the evolution of Upanishads.

with the Infinite One. From the post-Enlightenment point of view, if we made practical reason the guide of our actions, we could call this the application of Knowledge for ethical conduct of life through the intuition of unity (dharma). But that would be putting the cart before the horse.

Modernity can level the following critique on the Vedantic knowledge project, since (and ivory chair intellectuals should never forget) modernity is the normalized global episteme within which any other way of being must adapt and participate. Since post-Enlightenment modernity proceeds through the braided discourses of Knowledge and Power, it can level separate critiques on these lines. In terms of Knowledge, the question of the reality of our common world was subjugated to the question of the self or Subject. A subjective science was created and practiced but it remained isolated in sects and lineages in the form of oral knowledge. This is partly why so little of it exists today. The attention to the subjective subordinated the need to archive and disseminate knowledge. The *acharyas* (spiritual teachers) who wrote Vedanta bhashyas (commentaries) came more than a millennium later and produced new interpretations of the Upanishads based on their intuitions; and it is possible that they incorporated in their lineages some of the ancient oral knowledge pertaining to the practical psychology of the Upanishads. Still, it is certain that much is lost due to material inattention. With this loss of oral (or evanescent) traditions, there is also the loss of the history of knowledge production.

The Power aspect of modernity could level the critique that the ideal of perfecting the world through the application of knowledge was not made a social goal here; and perhaps the most serious charge from the viewpoint of modernity is that of an authoritarian basis to the guru-disciple relationship. Though the first of these critiques could be admitted for certain periods and regions, the second can be contested. In modern times, a perusal of Sri Ramakrishna's *Kathamrita* (Ramakrishna, 1942) would provide a very plausible image of a teacher of the Upanishadic age – someone operating as a peer through unpredictable behavior and teaching through stories, actions and locally relevant jokes. Still, the principle of equality which forms the basis of modern relations would not be in place here, keeping open the door to patriarchal domination in the name of an exalted spiritual status.

Post-Secular Integral Education

Sri Aurobindo's mature hermeneutic analysis of the relation between these two epistemologies was given voice by him in the chapter "Knowledge by Identity and Separative Knowledge" in *The Life Divine* (Sri Aurobindo, 2005, pp. 543-572). Here, he draws attention to the fact that what Vedanta calls Ignorance, modern epistemology designates knowledge. This Vedantic understanding proceeds from a psychological view of an indirect and inferred knowledge being an ignorance, the category of "knowledge" being reserved for direct knowledge, viz. knowledge by being. This is in keeping with the lack of separation between ontology and epistemology in Vedanta. One knows because one identifies with the being of that which one knows. Sri Aurobindo was to call this mode of direct knowing knowledge by identity. Our normal mode of knowing, methodized in the modern academy, in which the evidence of the senses is used by the mind to give us a picture of reality, was designated knowledge by external contact by him, a form of indirect knowledge. While knowledge by identity was held out by Indian wisdom texts and yoga traditions to be a possibility, it was taken as a goal only by those few who made a yoga of knowledge their central preoccupation. For Sri Aurobindo however, it assumed the place of a species goal for taking

humanity as a race out of the misery of ignorance into the certitudes of direct knowledge. In fact, he could conceptualize such a goal only under conditions of modernity, based on the ubiquity of the modern knowledge academy, which construes humanity as the universal subject of its methodical systems of knowledge production, archiving, dissemination and pedagogy; and the perfection (by technology) of cosmos and humanity as the universal object of its inquiry.

Modern Knowledge and Invented Realities

A corollary of this is the need of modern knowledge to arrive at a single truth and a single integrated statement of the truth. Indian metaphysics or darshan was not invested in such a goal, since it was subservient to a transformational psychology (yoga). Praxis took precedence over theoría; and theoría existed as *techne* and *poiesis* of praxis. This meant that theories were invented based on the goals of yoga; so as to provide efficient conceptual handles for dynamics of practice; and development through states of experience. Such theories born as philosophical aspirations (leading to and validated by ontological experiences) invented the realities they set out to realize, under the metaphysical assumption that conscious being was infinite possibility. Not under much compulsion or aspiration to an exclusive epistemology or a perfect society, multiple yogas, yoga-darshans and realizations of reality co-existed under common and more-or-less-fixed material conditions in India.

It is interesting to note that Michel Foucault and Gilles Deleuze both gravitated towards this inverse (*viparít*) relation between epistemology and existentialist praxis as a turn from the epistemic hegemony of modern knowledge. Both got there, of course, from Nietzsche (2008) and his definition of the human as a “rope thrown between the beast and the god.”⁹ For Foucault (2010) these are his subject-making exertions of internal power, acquired through truth-telling (*parrhesia*) in the interests of the ideal one has set oneself. This is not a social ideal, but an individuating ideal.¹⁰ Individuating ideals arise from existential questions which form problematic fields. Since existential questions belong to the class of questions common to existential beings, one may presume commonalities yet differences to the questions sought to be answered by different existential beings.

Beyond affirming the critical tradition of the Enlightenment, Foucault does not much discuss the ontological implications for commonalities, which may extend individual praxis to social praxis; he veers in the direction of radical individualism or romanticism, to the point of equating the disciplines of subject-making with artistic creativity (Foucault, 1988, p. 49). Deleuze and Guattari on the other hand, think both of the individual and the social and (micro)-political that mediates between them (Deleuze & Guattari, 1996). Not that Foucault is not political; he is in a way, nothing but political, but his politics are an uncompromising radical anarchism. Deleuze and Guattari are no less radical in their anarchism, but they think the conditions of polis and episteme that can manifest a subjective radical anarchism (Guattari, 1995). Can we find a typology for the practices of subjectivity and intersubjectivity that would help to make this possible? This thinking leads to his theorizing the place of philosophy as one of inventing concepts and in other terms, the project of establishing a field of consistency on the field of immanence (Deleuze & Guattari, 1996).

⁹ Nietzsche, Friedrich. (2008). “Zarathustra’s Prologue 4” from *Thus Spake Zarathustra*. Retrieved from: http://www.gutenberg.org/files/1998/1998-h/1998-h.htm#link2H_4_0004

¹⁰ Though not a social ideal per se, Foucault relates this to a social ideal in terms of critique (2010).

The invention of concepts arises from questions which belong to existential beings, and/or the Being of Existence. The solutions sought by the existential beings also apply to the Being of Existence. Hence a bridge may be built between the individual and the universal, through relation of individual beings, forming a collective cosmos-realization.

As observed, this approach, which is similar to premodern Indian metaphysics (darshan), inverts the goals of the Enlightenment, based in faith in the primacy of Rationality (Logos), a displacement of the transcendental Solar Divine. The modern knowledge academy hence comes with the assumption and demand of absolute singularity in terms of cosmos, subject and their relation. The demand of the Enlightenment for a single coherent Law that explains All, and the activation of that Law through technology to create a perfect world, came into contact with the empirical transcendentalism of Indian yoga-darshans at the turn of the 19th/20th century. Sri Aurobindo's yoga darshan follows from this, keeping in front the need for individual freedom and agency, the subjective conditions of anarchism or plural becoming. An absolutism which can have only one description violates the condition of pluralism which it must enable—a cosmos of radical anarchism. Sri Aurobindo posits such an aporetic radically plural singularity as the integral. This is not a co-existence of relatives but a state of being. One can intuit it as a higher dimension of being than ours; naturally one and infinite.

Looked at in the Deleuzian sense, Sri Aurobindo's "invention" of the ontology of the integral proceeds from intuiting the vanishing point of these perspectives. I use the term "invention" in the empirical sense of an existential life-journey in which experiences provide intuitions of immanent ideas, forming problematic fields with sets of virtual solutions. The dogmatic image of thought accepts the collectively operating field of solutions; but creative thought can break this conditioning and arrive at a new plane of solutions, a new dimension of evolution (Deleuze, 1994, pp. 147-167). Its intuiting of an adequate description of the field of solutions is its "invention of concepts," intimately related to a form of praxis leading to a form of experience. It is thus that Sri Aurobindo came to the idea of the aporetic integral as a philosophic concept (darshan) and aiming for it, developed the conditions, and the praxis (yoga) of the integral yoga.

We can see how the ideas of Deleuze (and in implication, Foucault), who saw the power of epistemes binding an age arising from new fields of consistency invented by philosophers (Deleuze & Guattari, 1987, pp. 310-350), can lead to a rethinking of the modern academy. It is even more so in the case of Sri Aurobindo, for whom the academy needs to open to a plurality of subjective praxis-concepts (yoga-darshan) and develop the coherence of this field as a universal archive of information and practice along with grammars using which creativity may "invent" meta-realities. Part of this disciplinary field would be the science of categories, media and mechanisms for archiving and accessing subjective experience. Expansion of capacity along this line would lead closer to a mode of thought and experience belonging to forms of cosmic consciousness.

Intuitive Knowledge Consciousness

For the transition from the state of knowledge by external contact to knowledge by identity, Sri Aurobindo (2005) found the need to develop an intermediate intuitive knowledge consciousness, through the discovery and formation of means of "direct contact" (p. 544). This development of an intuitive consciousness thus became for Sri Aurobindo his postcolonial epistemological project,

approached through an inward turn to the intellect and senses, their “purification” (*shuddhi*) and their opening to sources of direct knowledge above or within the human surface consciousness.

In his text on transformational psychology, *The Synthesis of Yoga*, Sri Aurobindo (1999, pp. 799-810) outlines some paths towards the formation of an intuitive mentality. These are related to alternative practices:

- a) Achieving a cessation of thought (nirvana) and keeping that blank, in a state of receptivity to near self-evident (nonduality) experience, presented through the subjective appropriation of the senses, which could be called states of objectified intimacy (pp. 802-803).
- b) As a variation or degree of a), achieving the ability to refer all questions to a transcendental source and receive its answers without distortion (*shuddhi*, purification) (pp. 805-806). Without a panentheistic intuition of consciousness, the notion of a transcendental, on which this practice rests, could not arise.
- c) Once again resting on a panentheistic intuition, the receptivity of a purified (simplified and neutralized, *shuddhi*, and equanimity, *samata*) emotional (heart center, *anahata*) channel to “the immanent Knower/Controller and (universal) Self within” (*jnata purusha, antaryamin, antaratma*) (pp. 803-805). Sri Aurobindo identifies this immanent intuition with Socrates’ (2005) “daemon” (p. 238), the inner leading, that as Plato avers, Socrates never disobeyed.
- d) The use of thought to go beyond thought into realms of intuition (pp. 806-807). Though Sri Aurobindo does not provide examples for this, this entire area should be of interest to pedagogy in the modern knowledge academy, since it does not violate the latter’s requirement of logical argument.

Examples of Intuitive Mentality in the Academy

Since these are forms of intuitive mentality, we may look for examples within the modern academy, particularly in disciplines which make the most stringent applied use of thought, such as mathematics or the physical or life sciences. The first method requires sustained conscious discipline, such as of a meditation system like raja yoga to arrive at a thoughtless state and spontaneous examples of pure receptivity in a silent mind are not to be expected in normal human mental functioning, at however high a pitch of intelligence or imagination. Still something resembling this operation of intuition, coming unbidden to a genius, can be seen in the case of Srinivasa Ramanujan (1887–1920), who claimed he received “thoughts of God” that were given to him by the goddess Namagiri Lakshmi of Namakkal in dream, through directly revealed mathematical formulae (Ono and Aczel, 2016, p.67). There is little of a method possible in this category, except for the preparation of mental passivity and receptivity, which, indeed, is more specifically addressed by practice b.

An example of a researcher in the sciences experiencing intuition of the kind related to practice b is Friedrich August Kekule (1829-1896), the German Chemist, who discovered the ring structure for Benzene. Having grappled with his data for a long time, Kekule came to an impasse. In his words:

I was sitting writing on my textbook, but the work did not progress; my thoughts were elsewhere. I turned my chair to the fire and dozed. Again the atoms were jumbling before my eyes. This time the smaller groups kept modestly in the background. My mental eye, rendered more acute by the repeated visions of the kind, could now distinguish larger structures of manifold conformation; long rows sometimes more closely fitted together all twining and twisting in snake-like motion. But look! What was that? One of the snakes had seized hold of its own tail, and the form whirled mockingly before my eyes. As if by a flash of lightning I awoke.... (Kekule as quoted in Roberts, 1989, pp. 75-81)

Here a method can be distinguished. One may gather all the information one can on the subject and offer it up to another level of understanding or knowledge not accessible normally (and hence, transcendental), and wait for the answer to come through states of dream, imagination or other form of revelation.

An example from the life sciences that can be adduced for practice c is the discovery of “jumping genes,” DNA sequences that transpose themselves to other positions in a chromosome without external agency. McClintock, in her biography, speaks of studying maize cells under a microscope and experiencing non-verbal communication and identity with the elements of the cells, leading to her discovery of the very unusual behavior of these genes. She attributes her experience to “a feeling for the organism,” a phrase her biographer, Evelyn Fox Keller (1984) used for the title of her biography. In her press statement for the Nobel Prize in Physiology/Medicine awarded to her for this in 1983, McClintock noted: “It might seem unfair to reward a person for having so much pleasure, over the years, asking the maize plant to solve specific problems and then watching its responses” (McGrayne, 2001, pp. 144-174). This demonstrates the affective dimension of knowledge, which we usually associate with the humanities, operating here in the rigorous domain of science.

An example of method can be seen in the case of Albert Einstein, who made frequent use of what he called “thought experiments.” These were attempts to think of boundary conditions of experience and arrive at hypotheses, which could be worked out theoretically through mathematical physics and practically through empirical observation or experiment. Here we find the use of thought to stretch its capacity to intuit what lies at or beyond the borders of sensible knowledge.

Subjugated Knowledges – Affective, Volitional and Physical Intuition

In Sri Aurobindo’s model of human consciousness, however, the arrival at a mental understanding through intuition is a partial and instrumental use of intuition. Even as instrumental use, there are forms of intuition relating to other modes of consciousness through which we simultaneously experience reality, but which are given less importance (subjugated knowledges) under the post-Enlightenment privileging of mind in modernity. These other independent modes of consciousness include the physical, the affective and the volitional (Sri Aurobindo, 1999, p. 804).¹¹ In practice d for building an intuitive mentality, we came across a use of the affective

¹¹ It is possible to infer different forms of intuition pertaining to each of the chakras in the sevenfold system of Tantra in Sri Aurobindo’s later writings, but in general he worked with these four kinds of consciousness each with their own intuition.

intuition to achieve the goals of the mental understanding. But affective intuition has its own ontological domain, effects and functions. The romantic impulse in poetry or other creative arts, connecting the individual through affective intensity to an intimacy in being with the object of consideration, is identical at its root with the sense of numinous intimacy with all things experienced by mystics in their love-affair with the cosmic Being. The method in developing this intuition would be an affective openness to the cosmos as a conscious Being and all its beings as instances of its expression.

In the west, examples of the above may be found among the romantic poets, such as William Wordsworth or William Blake, who gave voice to the cosmic expansion of space and time in such experience in his first four lines of the poem, *Auguries of Innocence*:

To see a World in a Grain of Sand
And a Heaven in a Wild Flower,
Hold Infinity in the palm of your hand
And Eternity in an hour.¹²

And from India, Rabindranath Tagore provides a good example of affective intuition in his nature mysticism (*Gitanjali*, poem 97):

WHEN MY play was with thee I never questioned who thou wert. I knew nor shyness nor fear, my life was boisterous.
In the early morning thou wouldst call me from my sleep like my own comrade and lead me running from glade to glade.
On those days I never cared to know the meaning of songs thou sangest to me. Only my voice took up the tunes, and my heart danced in their cadence.
Now, when the playtime is over, what is this sudden sight that is come upon me? The world with eyes bent upon thy feet stands in awe with all its silent stars.¹³

This ontological intuition of the cosmic being in each of its manifestations and in itself, arises here from affect. However, affective intuition is not only ontological or epistemological. It may be eminently practical as in the instances of the “daemon” of Socrates referred to by Sri Aurobindo (2005, p. 238). Here, the affect is at work in the trust one has towards the immanent Guide, to whom one can surrender unconditionally (*samarpan*) and receive the direct command (*adesha*, *shruti*) or revelation (*darshan*) on what is to be done (*kartavyam karma*). It is this kind of knowledge of guidance in action that Aurobindo had sought when he approached Vishnu Bhaskar Lele as a yoga guru in 1908. Lele’s meditation instruction gave him the silence of the mind which I have referred to above as the foundation for method a for building an intuitive mentality. But it also gave him the experience of total surrender to Narayana/Krishna as the Supreme Divine and his inner Guide, from whom he received directions from that time.

The knowledge of what is to be done, however, is not merely a directive or revelation received by the inner senses and carried out by the will and body. The energetic (vital) constitution has its

¹² <https://www.poetryfoundation.org/poems-and-poets/poems/detail/43650> (last accessed 12/02/2016)

¹³ <http://tagoreweb.in/render/ShowContent.aspx?ct=Verses&bi=72EE92F5-BE50-40B7-EE6E-0F7410664DA3&ti=72EE92F5-BE50-4B67-0E6E-0F7410664DA3> (last accessed 12/02/2016)

own seeking for the direct control of its impulses by a higher Will, which it can translate to action, with or without (or sometimes before) the mind's understanding or sanction. This is the volitional intuition, which operates as a "hunch" evidencing a relation of will or power between all beings and things. If affective intuition rests on a relation between the individual and other beings or the cosmic/immanent Being, volitional intuition rests on a relation in becoming with all becomings and a participation in the cosmic Becoming. As an energetic intuition, it provides impulsion to the will, both in mind and body and is also dependent on the immanence of the integral principle of Becoming (*Kali, Iccha Shakti*) in all beings.

This is the kind of intuition drawn on by Henri Bergson in his invitation to experience reality as a vitalism of Becoming. Gilles Deleuze, in explicating Bergson's apprehension of vitalism, sees it as a philosophical method, and had titled his Book on Bergson in these terms – *Bergsonism: Intuition as Method* (Deleuze, 1990). In this sense, vitalism is not primarily an energetic intuition, but becomes a philosophical one of methodically divesting oneself from a spatial perception and analysis of "given" objects (actuality) to an apprehension of their pre-individual basis and the dynamic relations of forces that constitute their problematic field (virtuality). An apprehension of this kind is also inventive of the reality it intuits, since it perceives the problem in a certain way which allows for certain outcomes not yet manifest.

Finally, the direct knowledge of the body, evidenced in acts of physical skill belongs to the operation of physical intuition. Picking up accurately without measurement, a predetermined weight in one's hand is an example Sri Aurobindo gives of a translation of mental requirements to the physical intuition. A good example related to the modern academy is the Japanese American architect, George Nakashima, who worked towards marking pieces of lumber directly with his hands, and without using any measuring rule (Nakashima, 2012).

Integration of Intuition

Development of intermediate knowledge resources in the form of varied modes of intuition need, at the same time, to be integrated through the development of the ability to move at will between these forms of consciousness, and enhance the sense of the combined working of all these forms as different instruments of individual knowledge. With the increasing normalization of such intuitive subjective properties, the deeper sense of personhood, belonging to what Sri Aurobindo (2005) calls "the psychic being" (p. 926) will increasingly come to the fore as the integral experiencing subject.

Clearly, all these forms of intuition, however methodically developed, need to be tested and supplemented through standard intellectual measures, until they produce repeatable results. To introduce such goals and methods in the academy, even as experimental possibilities of subjective knowledge, would require existential integration of informal opportunities as part of the learning habitus. This can be implemented officially through residential learning in intentional communities, or through collective cohort formation, flipped learning and/or mentorship models. Agency for learning/realization must be accepted by the student, so that the teacher is minimally involved in conveying content, rather his/her role is to facilitate learning through suggesting resources and methods, generating problems through dialog and leading by example. The learning environment cannot operate on the unequal basis of a gurukula; and egalitarian settings must be

developed for the promotion of these forms of intuition. Validation methods and archives of subjective experience/knowledge need to be developed phenomenologically within the learning environment, towards the constitution of an additional domain of subjective science in the academy.

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