

Alternative Intelligences

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AltI before AI : Reframing the discussions on Artificial Intelligence

There is a question on Quora, a public internet forum, which goes as follows - "Can wisdom be made plural to wisdoms?" [1] This seemingly naive question has been answered fairly confidently by a respondent to the thread, Xander Singer, a 'Pseudo-Science Fictionist' as follows, "No, (*sic*) wisdom, like knowledge, information and intelligence, are nouns without plurals because they are mass nouns. You cannot "*count*" wisdom or assign a numerical value to it. Still, you can use these as singular and plural without changing the form". [2] This discussion reflects the general folk imagination on concepts such as wisdom and intelligence and how they are often unthinkingly used only in their singular sense.

In logical vocabulary, if A has fulfilled all the criteria necessary to be acquire all properties of B, then it is as good as inferring that A has acquired B. Here, A refers to the general notions assumed by humans and B refers to intelligence apprehended with the aid of their intellect. As a critique to this kind of singularist vocabulary, I am interested in the plural potential of the A's and B's. This implies that there can be several ways in which various A's can reach the condition of B's. In this particular analogy, the A's stand for beings including organisms, animals, humans and potential extra-terrestrials, and B's stand for plural intelligences which are alternative to a singularist notion of intelligence.

By way of offering an expansion to the discussions on *Artificial Intelligence*, I propose that we first consider, what I propose to call- *Alternative Intelligences (AltI)* in order to truly examine what we intend to mean or do with AI. *Alternative Intelligences (abbreviated. as AltI)* therefore reflects a philosophical formulation of the concept of 'intelligence' which is predominantly presumed to be a concept belonging to psychology, by proposing plural intelligences that will conceptually reconsider the very foundational presuppositions entrenched in the generally circulated vocabulary around intelligence. This theoretical reframing has the potential to expand conceptually across the arts, humanities and sciences, and is essential if we are to meaningfully engage with contemporary discussions on Artificial Intelligence, Algorithmic systems and Post/Trans Humanism where technology and the human condition are entangled in intuitive and fuzzy ways.

The Problem of Thinking about Intelligence

How can we pluralize the concept of intelligence? Several fractal questions emerge from this question. For instance, how do senses think? How do we formulate recognition of intelligences in differently abled beings? What is the nature of alternative intelligence in children? How is animal intelligence different from human intelligence?[3] What can we learn from bio intelligences is organisms? What kind of intelligence does creative practice constitute? These are questions that several thinkers have also pondered upon, several cultures have reflected upon. Most important aspect of all these questions is to recognise that this seed question of reconceptualizing intelligences can pave way for radical decolonized formulations of the idea of intelligences and its applications.

While the vocabulary on artificial intelligence (AI) technology and machine learning as well as digital humanities has picked up fast currency in our contemporary world, the basis upon which agency and power is bestowed upon these concepts often goes unquestioned. Although there is a reigning interest in possibilities of such intelligence technology, what often falls out of purview is the categorical perspective from which we are approaching this intelligence. Are we to understand intelligence from the philosophical standpoint of mind-body dualism? Are we to understand that intelligence is automatically related to information and data? Can we imagine affective, emotional or sensory textures to data and information? In other words, are we doing justice to the notion of intelligence in the most creative and expansive way or do we merely mimic the existing hand-me-down concept of intelligence which emerged from a Eurocentric discourse? The problem lies in the lack of sufficient questioning and conceptualization of the concept of intelligence from a pluralist and

decolonized perspective. What would it mean to arrive at a decolonized understanding of intelligence as a philosophical concept? If we begin to try and understand this question, then we are a step closer to articulating plural intelligences.

Artificial intelligence, then, forms only *one kind* of such plural intelligences that is embodied by machine learning alongside other kinds such as possible bio-intelligences in plants, animal intelligence and organisms.

The problem of re-imagining intelligence can be traced to the problem of conceptualizing *reason* and *senses* in relation to each other. While there is a Cartesian tendency to ascribe intelligence to reason, contemporary research in areas of embodied cognition, affective politics in feminist discourse and climatic implications on certain subjects resulting in areas like eco-feminism, environmental philosophy or ecosophy, signpost the inherent entanglement of the intellect with the senses. In language, for instance, one way of recognizing plurality of intelligence is in the ways in which figures of speech operates including metaphors, synecdoche and so on. Tonality, comedic and satirical registers, linguistically specific idioms are all ways in which to intelligently subvert the flatness of language. [4] Similarly, the untranslatability and ineffability of ideas could be considered as a form of *unique* intelligence belonging particularly to regional languages.

Biological science lends itself to the discussion on sensible intelligence readily, given the centrality of life and its forms as its core subject matter, also having varied new research in biological intelligence in plants and organisms. Mathematics, on the other hand may have a harder task of relating to senses, aligning more with logic and a certain pre-suppositions of the way rationality operates. While a mathematical equation can be reasoned out perfectly, what *experience* can mathematical truths convey? Are there alternative ways of coding and calculating that try to critique binary notions of logic and rationality? What would a plural imagination of mathematics look like? While it is possible to consider these questions as mere speculations, what offers to be more exciting is to arrive at new definitions that push the *speculative* into the *possible* and the *actual*. A brief reconsideration of the history of this bifurcation of reason and senses can shed some light on addressing the problem.

Critiquing the Binary of Reason and Senses

The now quite well-known and old notion of Multiple Intelligences [5] had been explored by psychologist Howard Gardner in an attempt to revolutionize ways in which teaching and learning can be reconceptualized. He identified eight intelligences - linguistic, logical-mathematical, musical, bodily-kinaesthetic, spatial, interpersonal, intrapersonal, naturalist and suggested that there might be more to be added to this list.[6] While we can adhere to a Cartesian understanding of intellect as being the propriety of the human mind, what has not been articulated conceptually till now, is the possibility of there being various *kinds* of intelligences in the world across species and beyond linguistic frameworks. We must first acknowledge that any concept *per se*, including that of intelligence, is anthropocentric by origin. In simpler words, the concept 'intelligence' owes its existence to human beings by way of origin. In a world without human beings, there would be no way of knowing if the concept would exist as it does for human beings. However, the concept, *can* be recognized not only in the human world but also in the natural world, across species, organisms, machines and systems. The term *Alternative Intelligences* aims at capturing this expansive imagination of intelligence as a concept.

Historically speaking, we can trace the bifurcation between reason and senses in Euro-American and Greek philosophical traditions - emerging from the Platonic rejection of the senses and progressing into general historical claims of reason being held in contrast or in some cases *superior*, to sensory experience. [7] While Kant distinguished categories of knowing objects in the world through the sensible phenomenon and the intelligible noumenon [8], Hume distinguished all objects of enquiry in humans as being either 'matters of fact' or 'relation of ideas'[9]. While matters of fact referred to all uncertain yet imaginable experiences like 'it may rain tomorrow', relation of ideas referred to all kinds of certain truths eg, mathematical statements like ' $1+1 = 4-2$ '. In both of these formulations, the underlying presupposition is that reason and senses are distinct and what is sensible is not necessarily eligible to be called rational. In this regard, even the concept of *aesthetics*, which emerged from a rationalist construction in Baumgarten [10], later evolved into a discipline engaging predominantly with the senses (the Greek interpretation of the word *aisthesis* is 'belonging to the senses').

However, there have been radically different ways of conceptualising intelligences in various other traditions of thought. The Naiyāyikas argued that the mind was materialist in nature thereby challenging a purely psychological claim over the concept of intelligence.[11] The Buddhist view (often critiqued for its lack of a systematic rationality) upholds a metaphysics that does not differentiate between human and non-human in terms of identities. Instead, it imagines *beings* as

aggregates of compositional parts. In this case, the very foundation of distinguishing rationality as a human prerogative is challenged. This implicitly presupposes that we as cohabitants of this world are potentially all plurally intelligent. This pluralist cosmopolitan view can be seen in the Jaina *anekāntavāda* which does not distinguish between the lowliest of creatures, humans or gods but instead imagines them as mutational states.[12]

The Pluralist Imagination and its Significance

We can find fascinating parallels between Buddhist ideas and Whiteheadian philosophy of the organism [13] which also critiques the bifurcation of nature into human and non-human, and eventually into subject and object. A.N Whitehead, as is well-known, was also a mathematician and co-authored *Principia Mathematica* with Bertrand Russell. Much scholarship has also evolved in recent years on the close intersections between Buddhist metaphysics, embodied cognition, mathematics and artificial intelligence.[14] Considering such prevalence of alternative understandings of intelligence already in global philosophical histories, we can see that a radical revisioning of the notion of intelligence involves a pushing of the concept towards contingency - one that *situates* intelligences in environments across senses and reason. Such a revisioning also has significance for education and ways in which learning environments can be made inclusive and innovative.

In contemporary and postmodern European philosophy, we find in the works of Gilles Deleuze, and Alain Badiou, the intention to strive towards a *contextual approach* to concepts and their imports. In recent times we can see a major decolonial turn in curatorial studies [15], arts practices [16] and social commentaries [17], and attempts at imagining experience and intellect, the rational and the sensible in a synergetic way such that it is possible to talk of all kinds of wisdoms, intelligences, feelings that have rational validity. Moreover, the wide emergence of studies of systems and complexes in philosophical, creative and scientific research show that collectives emerge with their own undeterminable kinds of intelligences.

Particularly in the context of Artificial Intelligence studies, one can argue that there is a lack of imagination in its nomenclature. Both the terms are imagined rather parochially as binaries - artificial as opposed to natural and intelligent as opposed to unintelligent (often conflated with irrational). This logic also incipiently feeds into the smartness race, be it smart gadgets or smart cities - a phenomenon that threatens to flatten and gentrify our emotional geographies instead of nourishing its diversification. Therefore, active research engagement in the trajectory of *Alternative Intelligences* is a necessary attempt to put the entire AI / post-humanism discourse in a larger cluster of perspectives where it can be located as one *kind* of intelligence amidst several others. It, thereby, has the potential to also diffuse that the authoritarian significance that is now attributed to AI and infuse a more egalitarian perspective by infusing it with discussions on reason and senses.

References

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- [3] For more insight on intersections between bio-intelligence and computational systems, see Kak, Subhash (2007) Quantum Mechanics and Artificial Intelligence. In: Schuster A.J. (eds) Intelligent Computing Everywhere. Springer, London. https://doi.org/10.1007/978-1-84628-943-9_5
- [4] Author's previous research in *Dhvani* or theory of resonance in poetics and art can be considered as one such exploration along such kind of a para-linguistic intelligence. See: Kaikini, Srajana. 2018. *Resonance in Dhvani Aesthetics and the Deleuzian Logic of Sensation*. Deleuze and Guattari Studies, Vol 12 (1). pp. 29 - 44.
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