

Relations Between Cognitive Development and Spiritual Practice (Yoga)

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Abstract: In this essay I relate aspects of cognitive development to spiritual practices such as yoga and highlight the role of active orientation. I describe some personal experiences stemming from certain developments bridging cognition and yoga, whilst also relating these to societal biases that fail to address the potential for developments of this form.

Introduction and Personal Experience

In April 2017 whilst exploring some literature on the periphery of developmental psychology² I found myself experiencing some unusual phenomena foreign to conventional psychological accounts. In my subsequent searches through various literature, certain features of these experiences only corresponded to accounts presented in yogic literature. These remarkable, yet personal, experiences were of such uniqueness and distinction that I felt compelled to enquire into this newly emerging personal sphere. The new thread led me to widen the conception of active orientation that I had previously discovered and recognize its coherence with conceptions central to yogic science and apparently all mystical disciplines. At the same time, these newly emerging experiences appeared to be congruent with some of the more speculative frameworks of cognitive development³ indicating a continuum between conventional cognitive development and that of higher states of awareness.⁴

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² This literature conveyed similarities to the processes of morphogenesis in skill formation which I had been studying.

³ Cognition, in the sense that I refer to it, may be described as “the guiding aspect of activity”. It typically pertains to how an activity is to be undertaken, as the process of formulating (and revising) a plan of action that necessitates conscious attention. This simple description recognizes cognition's integral role in activity, with an emphasis upon the directing of attention through the use of signs (of varied kinds). Consequently, cognitive development pertains to the reorganisation of the structures used in cognition, notably the nature of the logic employed. Due to the integral nature of cognition with other mental faculties, transformations in cognition implicate significant and often profound changes in one's relations to the world. Although cognition may be applied to both thought and emotion, I typically emphasise cognition as thought, whilst recognising the close coupling between thought, emotion, movement and intentionality.

⁴ Frameworks such as those of Graves (2002) and Jaques, Gibson, & Isaac (1978).



I should like to stress that prior to these experiences, I was largely ignorant of yogic practices and indeed I had not undertaken any overt exercises that might be recognized as formal meditation. This happenstance suggested to me that the mental skills that I had some fluency with (reflective and systemic thinking) might have some correspondence to meditation. Further research led me to a central factor linking the two sources of literature (developmental psychology and yogic practises), this was my personal discovery of active orientation and the processes implicated.

In my original conception of active orientation (Lloyd, 2016) I describe a process in which action, thought, affect, and construal come together (are coordinated) through an interaction of intention, skill, and situational context. Unbeknownst to me, this coordination is highly congruent with mystical principles of achieving coordination and control of different “bodies”, called koshas, or aspects of bodies⁵ such that, upon successful alignment of them, new vistas become apparent in the form of faculties which were previously obscured.⁶ Indeed the formulation of active orientation has some striking parallels with “Ratha Kalpana”, an analogy in the Katha Upanishad that compares functions of man with functions of a chariot (Ratha Kalpana, 2021), see also Gurdjieff’s description of a coach and horses (Ouspensky, 2001/1949).

The implications of both these findings and the experiences were, for me, profound and initiated a protracted process of reorganizing my understanding of the world. Prior to these experiences I had arrived at a fairly resigned recognition that the higher reaches of cognitive development were largely rejected by society at large including within the sphere of academia. The unusual experiences facilitated a significant transition in my world view.

The unusual experiences may be conveniently grouped into three categories. All of these experiences are of a personal character. Furthermore, these experiences may be described as the initially novel experiences, they are not comprehensive. I am also quite confident that from the perspective of an accomplished yogi, these descriptions are quite banal.

- i. The sensation or awareness of energy (prana) within the body.
- ii. Awareness of synchronicities.
- iii. Unusual dreams of an archetypal or spiritual character.

The first category pertains to an awareness of energy in the body that may manifest as a form of sensation and that is often located in the regions attributed to certain chakras. Usually it is of a sense of energy gently residing or moving in a given location that may be seemingly superimposed upon conventional sensation. An exception to this was an experience that was in agreement with accounts of “kundalini energy” which entailed a dramatic ascent of energy within the body.

The second category agrees with Jung’s (1955) characterization. A simple example would be the timely coincidence of three personal events: my discovering new information to an old problem, insight into a method for resolving the problem, and someone unwittingly providing me with an apparatus that I will only be aware of needing when attempting the method that the

⁵ Sadhguru (2016) asserts that thought and emotion are considered to both belong to the mental body.

⁶ Obscured through the friction and dis-coordination of the bodies.

problem pertains to. In such a synchronous situation, these events might all transpire within a short time frame (within hours, or the same day).

Of the third category, an example might be a meeting in a dream with an archetypal figure such as a lady resembling Athena. Of the spiritual variant, I might dream of a happenstance meeting with someone I know of, but not necessarily know personally. Such an occasion occurred whilst I had a chest infection. In the dream I happened to meet someone who was familiar to me from childhood experiences and wished to speak to me. The following day, I sought information about this person and discovered that they had died recently from a lung disease.

On the basis of my experiences and their close correspondence with yogic formulations along with a recognition of the systemic cohesion of the formulations, I found myself to at least be responsive to the broader yogic ideas. These ideas have a very good alignment with my experiences. However, when I have previously sought some contact with Western cultured people who might be aware of such terms like "kundalini" the direction has led to communities dealing with crises. That is, "kundalini" in the West often seems to be associated with crisis in the sense of extreme difficulty. This, however, has not been my experience at all. My experience and thinking has remained lucid, whilst the awareness of synchronicities has remained within a dual perspective in which the synchronous meaning is framed as an "as if". This, I understand, is a quality that persons referred to as psychotic do not enjoy. This experience might also be considered as one data point contributing to the project sketched out by Gopi Krishna for a scientific study of kundalini (Krishna, 1970, ch. 19).

There are, of course, many other details that I could describe and that are of a personal nature. Clearly, these presented experiences are open to criticism and may be reduced to labels of "subjective imagination." It is not, however, the purpose of this essay to prove the existence of these phenomena. One need not rely upon descriptions of these experiences to appreciate the coherence between studies of psychological development and those of 'mystical' development. Similarly, looking to the kinds of transformations that take place in children, one might not be so surprised to discover the possibility for further, yet similarly structured, transformations in adults.

Rather, my intention is to be candid about the various sources of my understandings and insights into the importance for fostering developmentally⁷ fertile environments, to indicate the need for greater cultural openness and awareness of such phenomena and greater opportunities within our society for fostering cognitive development. In the contexts of both cognitive development and yogic practises there seems to be agreement that such transformations do not arise of themselves, rather they arise through sustained conscious effort on the part of the agent.⁸

Prior to these experiences I was immersed, intellectually, in the problem of cognitive development within educational environments. It now seems to me that this pursuit may be

⁷ The principal characteristic of developmental phenomena, as compared with learning and growth, is that of systemic reorganization.

⁸ References to a need for consciously directed transformations can be found in Vygotsky (1998) and Davydov (2008). Refinement of consciousness and awareness is also a cornerstone of yogic practice.

appreciated as an expression, within a wider context, of personal and human development. That is, that the focus upon genuine cognitive development within contexts of education is an ethical issue, rather than considering education as merely serving to satisfy our cultural conditions for qualification. This is not, of course, to assert that everyone should be encouraged to pursue a program of cognitive transformation, but rather that, for those who find this practice amenable, it is necessary to acknowledge that it is unethical to harness people to an educational system wholly unsuited to their expressed directions and manners of interest.⁹

Other systemic relations between cognition and mystical practices

Having cautiously explored the phenomena and studied more widely, I can also account for further systemic relations between yoga (or mystic practices more generally) and cognition, which I describe briefly under four categories.

1) Self-observation and Reflexivity

Detached self-observation is a basic practice in meditation used to establish an “inner witness”. In cognitive activity a similar practice is that of reflexivity – of practising reflection upon what one is doing in the act of doing it. Reflexive activity has the additional complexity of balancing activity and reflection simultaneously. Another basic activity, encouraged in Gurdjieff-based practices, is that of practising self-observation to become conscious of the mechanical nature of much behaviour. Indeed, reflexive activity is in principle non-mechanical due to the alert and responsive nature of reflexivity (which entails both reflection and action).

2) Self-remembering and Orienting to Broader Scales of Awareness

Unlike self-observation, “self-remembering” in mystical practices may pertain to recalling to mind the presence of one's greater self (Atman) or the “unchanging consciousness” implicated in “being aware of being aware.” Punctuation in activity, marked by a change in orientation (cessation of outward focus) provides the opportunity for a recurrence of self-remembering or quiescence of mental work. In contexts emphasizing cognitive development, we may work mentally under the appreciation that there are respectively broader and more powerful ways to think about problem contexts. These circumstances can lead to a circumstance in which one “makes room” for the potential of greater intelligence (insights and syntheses of thought) in one's activity. Although in these two contexts (meditation and problem-solving activity) the direction of attention may appear to be opposite it may not be as polar as it may seem, for genuine insights into problems can arise from a mental state of abeyance from mental work once the problem itself has become familiar.

⁹ Conventional schooling does not support such transformations. It is oriented towards acquiring formal schemas, rather than learning to construe, interpret, and understand. In order to transform one's mode of cognition one must work beyond one's familiar capabilities, engaging in activities for which one does not have pre-established methods.

3) Concentration and “Will Power”

Discipline, hard work and persistence regularly feature in accounts of mystical practice, and the same can be said for intellectual work. Both practices entail self-transformation. Without efforts to “work upon oneself”, significant transformations are not expected. In this regard, the concentration of intellectual work exhibits rigorous mental work akin to the quiescence achieved in meditation, for in disciplined intellectual work the contents of thought are far from arbitrary – only particular and appropriate kinds of thought are admitted to the process. Hence there is a commonality of discipline in the controlled movement of thought with a disciplined inattention to irrelevant factors compared with either the abeyance of thought or single-pointed focus of attention in meditation.

4) Access to “Essence” or Divine Self and Cognitive Development

Mystical practices distinguish between an unreflective and mechanical manner of being that is often associated with a myopic or obsessive focus upon material, bodily desires and those practices pertaining to awareness of the greater Self. Hence in mysticism there is a distinction between the superficial habitual manifestation of being and the being latent with the greater Self. In cognitive work the emphasis of distinction can be placed between the habitual, unreflective activity and the activity that entails transformation in the way one thinks and acts. This cognitive transformational process can be likened to the process by which the mystic approaches the Self. Although in mystical practices the Self is considered to be unchanging, our means of approaching that unchanging nature seems to require much effort and personal transformation.

Complementarity Between Yoga and Cognition

A Russian mathematics teacher who spent many years teaching within a school programme designed on the basis of developmental psychology described his interest as “working with people with wings” (Matusov, 2017, p. 54). This applied to students who exercised the self-conscious direction to learn through active discovery and who endeavoured to resolve educational problem tasks. In the scientific and technical context within which this rationale was expressed, I think that it is relevant that these particular descriptive words were assiduously adopted - “to have wings”. This mode of education cannot, however, be transplanted to school practices that we typically find. It requires a curriculum designed upon an entirely different basis of education using principles of understanding rather than formal knowledge. It entails relating emotion, thinking, and action together in acts of construal rather than of simply learning a prescribed grammar of notation divorced from the intimate experience of problem-solving activity.

It is perhaps also appropriate to address, briefly, a converse shortcoming often found in the perspectives presented in mystical settings regarding the disparagement of “logical thinking” as a reputed obstacle towards higher forms of awareness.¹⁰ These disparagements generally assert that “logical thinking is all about cutting” (or abstracting). It is apparent that these assertions correspond loosely with the category of thought called formal logic. Formal logic, however, is by

¹⁰ For example, Sadhguru (2016) disparages “logical thinking” frequently in the section titled “Mind.”

no means synonymous with logical thought. Thought may be expressed in a variety of logics, of which formal logic is one category that is perhaps the most frequently employed. The thought of "genetic logic", dialectics, or simply of considering the relationship between phenomena is, rather, a movement towards synthesis, of yielding a concrete understanding rather than an abstract categorization that is "cut."

From what I can discern, the disparagement of "logical thinking" in mystical circumstances may pertain more to the temperament and culture of the practitioners rather than anything necessarily inherent to the realization of 'higher' states of being. Indeed, a contemporary popular yogi gives allowance for the viability of this argument in the recognition of a "yoga of the intellect", Gnana yoga,¹¹ and, also, an alternative approach to schooling which entails non-dogmatic exploration of a curriculum (Isha Home School, 2021). My own experiences and unwitting "path" certainly seem to have some correspondence with these appreciations which find agreement with the spiritual interests that have been shared amongst many leading practitioners of the systems scientists, who might be considered to represent the acme of Western "logical thinking" (Pickering, 2008).

In a similar context, the consideration by Wilber (2016) that both spiritual development and cognitive development may express different strands of personal development lends some theoretical rationale to the notion that one can exhibit a high level of development in spiritual aspects whilst manifesting quite localized and simplistic forms of cognitive expression. This implies that spiritual awareness is expressed in a manner appropriate to the medium of awareness, thereby paralleling studies of conventional activity and understanding in which understanding is mediated by cognition (Zinchenko, 1979; Piaget, 1980).

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¹¹ Gnana yoga is described as "attainment of a state where one's intelligence is employed to reach one's ultimate nature"(Sadhguru, 2016).

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