**Gitanjali and Neuroscience of Music**

The poem 31, containing another occurrence of "bound," sharpens further the notion of boundedness, by distinguishing effort directed to touching the other side of our finiteness from effort to be free of the other side. What makes each effort different is the end to which the will is directed. One is directed to the reaching of the utmost limit or brink of our finiteness, the other to acquiring material or world advantages and benefits, hoping to find freedom through such acquisition. The former is ennobling for developing into persons, while the latter runs the risk of imprisoning or arresting the development and, hence, is a futile striving. The poet underscores the danger or futility in seeking to ignore reaching the limit of our finiteness, by asking the prisoner who is it that has put him in chains:

"Prisoner, tell me, who is it that bound you? 'It was my master,' said the prisoner. 'I thought that I could outdo everybody in the world with wealth and power, and ...' 'It was I,' said the prisoner who forged the chain very carefully. I thought that the invincible power would hold the world captive leaving me in the freedom undisturbed. Thus night and day I worked at the chain. ... When at last the work was done and the links were complete and unbreakable, I found it held me in its grip."

Poem 9 is another expansion or another rendition of futility in trying to do the impossible – the freeing our selves of the very power that defines our finiteness. The poem clothes futility in terms of the power, and ... "It was I," said the prisoner who forged the chain very carefully. I thought that the invincible power would hold the world captive leaving me in the freedom undisturbed. Thus night and day I worked at the chain. When at last the work was done and the links were complete and unbreakable, I found it held me in its grip.

The second occurrence with respect to reaching the limit of one's power, only to find new possibilities opening up without knowing exactly how, but having a sense that it is through a transcendent dimension within us. As poem 37 puts it:

"I thought that my voyage had come to its end at the last limit of my power,--that the path before me was closed,--But I find that thy will knows no end in me. And when old words die out on the tongue, new melodies break forth from the heart; and where the old tracks are lost, new country is revealed with its wonders."

Finally, "brink," the third search terms also has one occurrence. The poet tells of experience at the limit or brink where eternity touches, having sought and failed to find it in spatial locations as in seeking material objects. It is reachable only through subjectivity, or consciously relating oneself to its presence. The relevant lines from poem 87 tell:

"In desperate hope I go and search for her in all the corners of my room: I find her not;... But infinite is thy mansion, my lord,... I have come to the brink of eternity from which nothing can vanish – no hope, no happiness, and no vision of a face seen through tears... Let me for once feel the lost sweet touch in the allness of the universe."

Thus far, we have sought to limn the idea of person implicit in the Gitanjali through the use of three search terms: "bound," "limit," and "brink." The result is admittedly somewhat faint or sketchy of the two senses of bound associated with person. One is in reference to our natural limitations or finitude. We are finite entities like bees, flowers, and sticks. This sense is rather pronounced in the limning. But there is another sense that is comparatively less so, yet important: the sense of striving to reach the limit of our finitude, to touch its other side without going over. This latter sense, clearly not absent in the lines cited so far, is less thick in description or representation. Perhaps using content terms with extremely high raw occurrences would yield a thicker description. Terms at the very top of a word list of occurrences for Gitanjali are heart (71), come (66), life (61), day (51), and love (37). The number in brackets is the raw occurrences. Three of those words, "heart," "love," and "come" have already been introduced in the accounting above. The two instances of "come" are telling with respect to a personal reach or approaching of one's full measure: "my voyage has come to its end at the last limit of my power," (poem 37), and "I have come to the brink of eternity from which nothing can vanish" (poem 87). Personal pronouns "my" and "thy," with relatively high raw occurrences of 404 and 169 respectively in the poems, are also worth considering in a larger and computational analysis of the text for a thicker description. They imply a sense of limit or finiteness and of being in relation. Person is, for Tagore, relational.

---

The third occurrence of "bound" is in poem 35, telling that love is an exertion or striving by which we accept the gift of our limitations. Through that poem/song the poet acknowledges being embraced or defined by a transcendent power and asks that whatever little is left of his will, it may be enough to approach in love that power in all things and in every moment. Becoming a person is connected with exercising the will directed to reaching the brink of our finitude, through loving continuously. The telling lines of the song for our purpose read: "Let only that little of my fettors be left whereby I am bound with thy will, and thy purpose is carried out in my life – and that is the fettor of thy love."

The poem clothes futility in terms of the very power that defines our finiteness from effort to be free of all our shoulders! O beggar, to come to beg at thy own door! Leave all thy burdens on his hands who can bear all, and never look behind in regret. Thy desire at once puts out the light from the lamp it touches with its breath. It is unholy -- take not thy gifts through its unclean hands. Accept only what is offered by sacred love.
To conclude, I have identified in the poems resonances of a person as constituted by a transcendent dimension that is experienced through human effort or will. It is at the basis of our full individuality. Becoming conscious of that dimension through reaching the utmost limit of our finitude is what sets the human apart from other finite creations or entities. And it is accounting for this dimension of wanting to experience the infinite through the finite that eludes neural theory analysis and explanations of the human. In fact, researchers such as MIT neurophysiologist Mriganka Sur acknowledge that the ability to process information via neural networks remains least understood, while others such as Antonio Damasio at University of Southern California simply avoid discussion of consciousness and instead focus on how the brain supports cognition. Should striving to understand the transcendent dimension in us be given up? Clearly not for Tagore, as the lines from poems cited above have shown. For that too, research persistence such as those of the Churchlands as well as the drive create monuments or works of art and have our names inscribed on them, is also indicative of a tendency to touch the other side of finitude, something that studies in neural science has yet to address.

(End of commentary)

doi: 10.5214/ans.0972.7531.1118402

Abrahim H. Khan, Ph.D
Trinity College and Centre for the Study of Religion University of Toronto
E-mail: khanah@chass.utoronto.ca

Reference
1. As cited by William R Uttal, Neural Theories of Mind, pp. 107, 108. Other researchers of the same opinion that Uttal discusses include P. Read Montague at Baylor College of Medicine, and Rudolf Llinas at NYU.