developed to cater to the demands of socio - economic progress. This is an interpretation of empowering language through social acceptance enabled through political power and promoted through the education system, which is carried over in other domains, such as administration and mass communication. As time progressed, means to communicate advanced through the telegraph, the telephone and the radio. The telegraph, radio and satellite communication systems empowered the languages that were accepted and used through these systems. This is an interpretation of empowering language through social acceptance and technology in the age of globalization.

References:

 Alok Gupta. 2007. "Communication in the Indian Multilingual Industrial Environment: Effect on Knowledge and Productivity". Ph.D. Thesis. University of Mysore, Mysore.

- Bayer, Jennifer Marie, Shalini J. 2009. Report: New Language Literacy Teaching Methods. CIIL. Mysore.
- Bayer, Jennifer Marie. 2007. "English Beka? Kannada Beka? Yeradu Beku. CIIL. Mysore.
- Sheba Renuka. 2008. "A Socio-linguistic Investigation of the Language Needs of the Professionals in the I.T. Industry Needs Analysis of the I.T. Professionals in Bangalore: A Socio-Linguistic Perspective". Ph.D. Thesis. University of Mysore, Mysore.

Jennifer Bayer retired from the Central Institute of Indian Languages, Mysore, and is now involved in social work with the underprivileged. She is a Trustee of the Bapuji Childrens Home, Bapuji Anand Ashram and the Hari Murari Charitable Trust. She can be contacted at jennybayer49@yahoo.com

Language, Education and Social Development - Remembering David Horsburgh

Vijay Padaki



Opening Thoughts

The invitation for an article in Learning Curve came at a time when the subject of Karnataka's "language policy" was in the

news once again. For a subject to retain the value of topicality it must reappear in cyclical bursts, make its presence felt aggressively in many directions, exhaust itself, and retire to its quarters until its next appearance. Other topicalities must be given their cyclical turns - nature vs. nurture in intelligence, elimination vs. rehabilitation of street dogs, reservation vs. merit in public institutions and so on. Not too long ago the games and pastimes of children too followed cycles of appearance, with tops, seven stones, kabaddi, kites and gilli danda following the laws of seasonality. One cannot help wondering about the cyclical nature of our engagements. There must be a scientific explanation lying there somewhere, waiting to be discovered.

The language policy season is upon us once again. In any policy debate we assume that the discussion has a solid, reliable body of facts to fall back upon, so that the prescriptions we adopt for ourselves (affecting future generations) satisfy the basic requirement of informed choice. This way we also accept in a realistic manner that no policy prescription can be perfect, satisfying everybody in all conditions. A policy debate can be expected to be emotional, and we must accept that emotionality will cloud reasoning in many ways. All the more reason to ensure that the base has both breadth and depth.

A disclaimer should be in order at this stage. It is not

the object of this essay to either stoke the fire in the already overheated condition or to take one side or the other in the debate. Rather, it is to remind ourselves that there are, inescapably, both scientific and moral dimensions to the debate. Moreover, in an issue as crucial as language we cannot easily separate the two.

Language and Development

We must begin by shifting our attention from the focus on language temporarily and ask ourselves the seemingly elementary question: What are the objectives of any development effort in a society? This appears a necessary first step, since it is taken as obvious that society's investment in education is for certain crucial societal objectives. In other words, a language policy in education can be assumed to be in line with those objectives.

Let us seek an answer through an actual case. A well established and reputed educational institution launches a rural school. Funds are mobilized for a plot of land, building, hardware, software. A curriculum is drawn up which emphasizes vocational skills, so that the village children may have gainful employment when they grow up.

Questions: Why should our children have the opportunities of becoming scientists, engineers and business executives and their children become plumbers, carpenters and tractor mechanics? Isn't opportunity unequally distributed by the differential in the schooling systems? Is the rural school not institutionalizing a perpetration of differences between the two? If we do find a justification for the differential (as we always do), are we not revealing an underlying assumption that "they are different, hence the difference in what they receive?"

It must be obvious that in spite of its philanthropic sentiment, the rural school has done very little for "development." Indeed, many would label it "antidevelopment" because of its system-perpetration character.

In any developmental process, not in economic development alone, the key concept is empowerment.

For instance, in child rearing we are saying: "Here is everything I know, it is all yours. You can build upon it, and be even better than I." The perspective of all this and more is essential if empowerment is to take place. If we hold back and adopt a part and selective perspective, it ceases to be development. It turns towards maintaining a difference. In essence, the rural school is exactly the same as the housewife who would provide "gainful employment" to the maidservant's little girl. She feels vaguely betrayed when the girl chooses to study further for what she sees as improved prospects in life.

In development via education, we tend to think only of the content of information as important for the development process. But true empowerment can take place only if the composite whole is transferred completely - the content plus the carrier of information, that is, the medium through which one may develop further, faster. If we release the one and withhold the other, it can only be termed part and selective development, and hence manipulative. In a society in which astonishing differences in standards of living are glaringly associated with access to knowledge and, thereby, to power, can the development objective of empowerment be ever served if there is continued one-sided control over the medium, the English language?

It must be stressed that this is not a devious argument in favour of the State freely permitting English medium schools. That would, by itself, be of doubtful value in our development effort. The real question to any "policy" formula remains: Is this in the direction of empowerment or is it perpetrating the status quo? If it is generally admitted that scrapping the English language completely is impractical, perhaps unwise, and not really intended in any vernacular policy, is retention of the language in the societal system to be only for a privileged minority?

Thus, inevitably, the debate polarizes to the for-English and against-English positions. There are the familiar arguments in favour of the English language in schools, colleges and professional education, and in actual usage in all of our social and economic transactions. These do not require repetition here. So are the arguments in favour of a strong vernacular policy familiar. There is fierce pride, indignation, impatience with the State's leisurely pace and, doubtless, an earnestness to undo the damages from a traumatic colonial past.

Rethinking Language

Following from the above, it is of utmost importance for all of us, decision makers and bystanders alike, to constantly question the premises upon which our prescriptive pronouncements are made. The two most common fears about any other language standing up side by side with the chosen vernacular are: (a) that the progress of one is at the expense of the other, and (b) that the learner cannot cope with two or more languages at the same time.

Ironically it is in the state of Karnataka that we have had the most remarkable experience of Neel Bagh that exploded the fallacious assumptions underlying both these fears. In a rural school in Kolar District, children learned Kannada, English, Hindi and Telugu, the local mother tongue, simultaneously and with the same vigour, with no ill effects on their mental health! Indeed the cognitive cluster that the four languages formed could be regarded as a hugely positive factor in the accelerated rates of learning observed. The socalled "harm" from the "burden" of learning two or more languages is really the problem of the grown-ups. The real harm is in not meeting the child's natural appetite for language.

In Neel Bagh the fluency gained in the English language was matched by a strengthening of the local language, its literature, the local customs and traditions - in short, a rediscovery and reinforcement of the local culture. Educators elsewhere are now recognizing the Neel Bagh experience as a truly Indian alternative.

Cognitive Psychology has always known this

- Children can learn up to eight languages with ease, and with no ill effects whatsoever.
- The more languages learnt, the greater the development of abstract intelligence.

An even more fundamental question to be addressed is: What is language? We normally think of language as the codified verbal communication we engage in though speech, reading and writing, a competency very special to the human species. That, combined with the extraordinary information processing capacity of the neo-cortex, is what makes knowledge cumulative over generations in the species. But is that the only way to view language?

Another form of language that the species developed over about fifty thousand years, ever since it set out to live and function in communities, is in the non-verbal mode, recording and conveying complex experiences as artistic expression. That great music moves thousands of people in the same way is ample testimony that producing the music requires the same levels of abstract intelligence as writing a poem in the spoken language. Indeed, all of the arts can be viewed as languages in their own right. Over time, the transfer of this language and its continuous development also demands codification of its own kind, along with its unique vocabulary and grammar.

How do we view mathematics? At the beginning of the software development boom in the early 'nineties, many young Indian software engineers carried a subtle, unconscious inferiority complex dealing with the technology development partners in the West, mostly in the USA. This arose from a self-consciousness of their inadequacy in the English language, especially in the newness of the globalized business context. However, very soon they realized that the only language that mattered was mathematics and that they were as good as the best anywhere. What a difference in the way the young professionals carried themselves ten years later!

Rethinking Intelligence

This takes us to the subject of intelligence - a much misunderstood (and often maligned) term. The scientific concept of intelligence has come a long way from the earliest propositions of IQ nearly a hundred years ago.

It should not be difficult to accept the value of abstract

intelligence in all human endeavours. As a matter of fact, the higher the level of abstract intelligence in a person, the greater the ease with the person grasps conceptual interconnections across quite different products of human endeavour. The two basic (and complementary) functional components of the learning process, generalization and discrimination are sharpened to higher and higher levels of facility if the person is exposed to a wide variety of intellectual stimulation.

Viewed this way, a simple definition of intelligence would be : the ability to learn.

This definition should also satisfy scientific-technical requirements amply. The learning process is often regarded as the most fundamental of all human characteristics.

The ability to learn also differentiates the human species from all other species in the evolutionary spectrum. The appearance of the neo-cortex in the human species brought with it an enormous capacity for sense data storage and information processing. It was nothing short of a quantum leap, a major departure from the linear, incremental progression seen in other species. (It is estimated that a normal adult living a full life of three score and ten years uses about ten percent of the capacity available.) The most significant consequence of this increased information processing capacity was in determining the repertoire of behaviours in the species. In all other species, the repertoire of genetically programmed behaviours far outweighs the repertoire of learnt behaviours. In the human, the ratio is reversed. As every dog lover knows, the most extraordinarily "intelligent" tricks learnt by a dog cannot be passed on by it to its pup. The human trainer has to start on the pup afresh. And as every teacher knows (but does not necessarily admit), the children in the class one is facing know more about more things that one knew oneself at that age.

The turning point in the understanding of human intelligence was in the factorial analysis of the structure of intelligence, as early as the sixties. It took another twenty years for this to be developed further into the concept of multiple intelligences. Without going into the academic details of the subject, we need only to note the four most important lessons for education from the whole body of researched evidence on the subject of intelligence:

- Fulfillment, development and puposefulness in human endeavours require a wide spectrum of competencies that may be viewed as multiple intelligences.
- The higher the level of abstract intelligence, the greater the connectivity across the different facets of intelligence.
- The wider the exposure and stimulation, the greater the development of abstract intelligence.
- Multiple intelligences can be developed.

Theatre Studies and the Learning Process

Why do we teach physics in school? Why teach history? As elementary as the question might appear at first, the more important point is that we do not expect all the students to become physicists. We teach physics because we believe that learning physics is good in itself, and that somehow it is useful in the business of life and living. This logic applies, of course, to many other subjects. They are good in themselves. They have therefore earned their places in the curriculum.

What about theatre studies and performing arts? Indeed, all the arts?

Theatre Studies in the school curriculum is recognized in other parts of the world as a powerful avenue for

- life skills development
- cultivating multiple intelligences
- general right brain development

The explanation for this lies in the experiential methodology employed in theatre studies, rather than the left-brain oriented cognitive inputs in most other subjects. The research evidence includes longitudinal studies examining the impact on the children, the teachers, the classroom, the families, and the community.

The legitimate place of theatre studies (and all of the arts) can be appreciated only if we adopt a vision of societal development in which the galloping pursuit of economic development is not at the expense of cultural development - a sad state in many post-colonial "developing" countries, including India.

The Whole Over the Parts

Finally, we need to constantly seek the dividing lines between the responsibility of identifying societal needs and the responsibility of serving them. While the given political system may be acceptable for the latter responsibility, perhaps with more vigorous checks and balances, we need to ask if the former is served satisfactorily. The question of language appears too serious and too fundamental a matter to be left to language champions.

Political leadership, in any land, is rarely endowed with a sense of history. On the contrary, the calculation of short term gains invariably leaves wounds and scars on the societal body, with serious consequences long after the leaders have departed. In short, the politician-leader can be expected to act on a fleeting, opportunistic, sentiment-based idea, inflicting it on the people concerned, remaining unaccountable to anybody for the grave and far reaching consequences afterwards.

Professor Vijay Padaki is a psychologist and behavioural scientist by training, and has a long experience in programmes of consultancy, research and training in the areas of organization and institutional development. He was associated with David Horsburgh and Neel Bagh from its earliest years, both as a resource person and a trustee. Prof. Padaki has been active in theatre for fifty years, joining Bangalore Little Theatre (BLT) in 1960, the year of its inception. He is currently assisting BLT in developing the Academy of Theatre Arts, with its mission of Theatre Education. He can be contacted at bangalorelittletheatre@gmail.com

Curiosity, Learning and Language

Nat Ramachandran



Curiosity is a naturally inherent and an evolving trait in all animal species amplified at its best in human beings. The innate drive in human beings "to know"

leaves a residue in the brain (i.e., knowledge). Such knowledge can either be definitive (e.g. a categorical answer) or learning i.e., despite one's curiosity one can't always arrive at a satisfying answer, which in itself is learning. The fruits of such curiosity are at times deployed for the consequential benefits it confers on humanity atlarge, as typified in scientific inventions and discoveries. Regardless of the consequences, "to know" is an act of mind aimed at satisfying its urge of curiosity. Hence, curiosity, in addition to being an innate human activity ought to be nurtured primarily for its own sake; and secondarily for its potential consequential benefits.

A newborn child comes into this world devoid of

any knowledge and understanding of things, people and events. But it comes gifted with curiosity, which it uses as a propellant to "learn" in order to satisfy its own curious urge. In thus satisfying its curious urge, the child "learns." However, as the newborn grows, the primary sustenance of its curiosity is expected from its caretakers, parents, custodians, family elders, etc. who provide the initial scaffolding for a child to both satisfy and sustain its curiosity. They do so typically by aiding the child to express, associate and be heard through language constructs. As a child grows and feeds its nerve cells with more associations, words, and sentences, its innate curiosity will clamor for even more learning, akin to a teething child that wants to eat and taste anything it can lay its hands on.

One could equally argue that language is not necessarily a scaffold but the first confinement of a