

Welcome Professor Peggy Mohan to Alliance.

Within liberal arts, we have the department of language and literature. This kind of naming is not incidental. We think of envisioning our department as a singular entity where the study of language and literature come together. How would you comment on this idea?

There's an interesting relationship between the two, because when we're looking into the history of language, we're forced to look at literary sources. You can't go out into the field with a tape recorder and record people who died many hundreds of years ago. We're dependent on the written record and we must know about who wrote, what they wrote about. There's also the issue of when these languages themselves came up. We go back in time, to the 12th century, at which time new languages, which are like the modern languages appear in the written record. To what extent did the need to write suddenly bring new players into the game who were different from the old ones, who wrote epics, wrote royal commands, memorized Vedas and different other scriptural things. So, when new players who needed to write in a very different sort of way came in, I imagine that they had a big impact on how standardized language developed and began to look the way it looks now. Language and literature is joined at the hip.

Speaking of the relationship between language and literature is also an occasion to think about the relation between language and science. The historian of technology, George Basalla, speaks about Japanese translators of Western texts on science. These translators heralded Japanese progress in science by redoing the experiments whose descriptions they were translating. What do you think about the role of language as being essential to science?

Science like a lot of other things will be conducted in language and new concepts and ideas must be facilitated. Language is critically important. We tend to think that children will somehow find their way when they are taught in the English medium, but we can never measure the things that they don't receive by using the English language. My husband used to tell me that in IIT, he used to lend out research articles to students to read and when he got them back, instead of notes in the margin about the material in the article, he would get underlined words with dictionary translations, which meant that they couldn't take for granted even the language in which the article was written. That's a very serious problem that has happened in India. If scientific education was in English and not accessible to all people but only those who dealt with the written material, you create a whole scientific structure that's built on the elite, who are the least interested in innovation. You see people from different classes go abroad - Indian peasants, Indian crafts people etc. My family comes from a crafts person's background-goldsmithing. We went into the diaspora, and it was understood that within a generation or two, one aunt would go for optics, one uncle for chemistry; my

father would go for metallurgy, another for dentistry etc. since gold is allied to dentistry and it went on. Through these kinds of professions which are allied, we would grow up knowing the local words for scientific processes along with the Western scientific words. When we were well settled, we felt we should rise to the next level and the next generation like me got into things as arcane as linguistics. However, it had all to come through being able to find a bridge between the things we did, like science. I lived in a home which had an attached laboratory, in which electroplating was done on metals, alloying of metals was done, chemical substances were used. We knew these terms and we also had to learn them in English, and I think that's why we became what we are, whereas the same people in India found themselves increasingly disenfranchised from the world of science and technology.

You talk of the history of Indian science. To be precise, we are speaking here of techno-science as we consider knowledge that comes with the use of technology. It would be great to explore the relationship between Indian languages and Indian techno-science. For better or for worse, the attitude of the current political dispensation is to celebrate native knowledge-systems. Keeping aside the jingoistic dimension of this gesture, it is also an opportunity to pursue challenging research projects that combine linguistics, philosophy and sociology of science and technology.

The present dispensation did not completely come out of the blue. It came out of our being completely satisfied with the way things were going. What about the other people who couldn't understand why things weren't working for them. They just knew that they were on the outside. We have ignored a huge number of people in the country and language is very much a shorthand for how we did this form of discrimination. I've always felt that Macaulay is a funny guy. What he proposed for India is less radical than what you find now. We would love to go back to where he said that children until class 8 would be schooled in the local language, and after that to move into English because obviously it is to be of advantage to the British Raj. Indian boys learnt English as a second language, and they could probably make a transfer much more easily of the knowledge to the things that already existed in their minds. There was a connect between the old world and the new world they reached after class eight. Now we see a sharp segregation between the kind of people who are comfortable in English and those who are not. In between, are those who go into an English medium school who sit looking out of the window not because they're not listening because they are exhausted. They know that their job is to do nothing with their lives but make that crossing for their parents so that their children can be what we are. I feel it's a waste of a generation, it's cruel. Could there be some other way? It's almost scary to think that what Macaulay had in mind was more humane than what we have now. There was something else there, but there are things that had to be fixed obviously. It couldn't just be a tremendous lean towards only Vedic knowledge.

He doesn't talk about the kind of learning that happened in homes of craftsman families, in the families of many of the agricultural castes, who would know things that would benefit from having scientific words. For example, Genetic breeding- people have been breeding plants for decades. They didn't have words for it, so that this knowledge could be passed on outside the family, but there could have been a better way to carry this on. The Japanese did it by making it available to any Japanese person. I believe that to this in this day, almost any book worth the while is available in Japanese, within a month. Now it's only just beginning to happen in India. I look at places in Delhi, like the government schools, where they want to be as good as the private schools. They try to do this by offering a stream of English medium education, and these children therefore have English medium textbooks which are the same as in the private schools. However, the teachers don't understand the instructions. So, they make the kids stand up, read a paragraph and sit down. No explanation is given because then the teacher would be exposed as not fully understanding the question, that the child brought up. A very simple solution would be to have a teacher's text- in English and in the local language, so there is no question about whether the teacher understands what he/she is required to do. This was a very difficult thing to do but the fact that we haven't done it is because, we haven't seen the urgency for this kind of transformation. It is in the process of happening in India, with people who don't speak English, who are not like you and me. They are the ones who are going to change the languages, bring them in line with each other and resolve other kinds of issues. They need to be able to access all kinds of scientific information, without having to feel diminished by not knowing English. It doesn't have to be one Indian language, there are so many Indian languages. As many as are in the schooling system, what would it take for this to be done in at least school textbooks?

What you describe is diglossia is the name of the pathological condition that so many Indian students have to face, as opposed to developing genuine bilingualism. It is difficult to address this this complex policy problem at the scale of a large country like India. But within our department, we see learning multiple languages as essential to the curriculum. And we place foreign languages, classical languages and regional languages on equal footing. What is your view on this approach?

We're talking about university time. University tends to be when you're very far from your optimal language learning age. I would not even put this in high school, I would put this in elementary school, where there needs to be quite a lot of crossovers and understanding that the curve from learning a language is not a gradient. It's a long period of getting fundamentals. I think a university is well set to look at theoretical implications, and assess the kind of needs that are about to arise- what kind of students you could create, what kind of careers appear to be on the horizon etc. For example, one thing that mystified me when I first came

to India from the Caribbean is that most of us, if we were doing liberal arts, picked up two languages in addition to English like French and Spanish. However, where was the immense amount of manpower skilled in translation. I thought Indians hadn't studied translation, because there was an understanding that languages were so different in terms of the work they did. You couldn't translate from one to the other and understand it too. For example, if I ask you questions in philosophy in Hindi, you would be struggling a little more, whereas if I asked you about wiring a house, you will struggle in English. There's that diglossia type of thing going on, which is understood to be normal here, whereas one has to break that somewhat to make it possible that the things you say in English, you could say in a local language. The things you say in a local language, let's work on how these are spoken in English. But you need to create equivalences, because once you have the capacity to translate, things start getting very demystified and they need to be demystified, because whether we like it or not and admittedly, we do like it, we wish it was happening faster.

While I agree that university is too late to develop genuine multilingualism, we can still consider focus on the relationship between language and the world it refers to. Proper multilingualism would mean a radical flexibility to move between different entire linguistic worlds. But at a limited scale, liberal arts promotes multidisciplinary which is effectively the skills of navigating “disciplinary worlds“. Disciplines are disciplinary worlds with their own jargon, their own language. Learning Greek and Spanish may give us the sensibility of shifting between the worlds of Spanish cinema and Greek philosophy, for example. Can we say this kind of multidisciplinary mindset, at least, is encouraged by learning multiple languages?

You have all these students who know incredibly good Kannada and probably very good other neighbouring languages. Bring them into the ambit of how you create bilingualism, as opposed to diglossia. Let them be involved in writing the kind of texts you need, in a very naturalistic way. Involve them in a collaboration with the kids who do not know this, and you have the beginnings of a crossover. Utilize it in the best possible way. In Mysore they're doing things like this, and they're trying to create a bank of academic literature which crosses into different disciplines. You're starting with a lot of people, who are very educated except maybe not so in English, and a lot of people who are very educated in English. You just need to bring them together and interesting things could happen. For a start, they're equal partners. It's important that they're also in sync with what is happening organically within the country. The language is fusing in very useful ways, linking one part of India to another to create the kind of bridges that are required.