

# CURRENT SCIENCE

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EDITORIAL

## Being Busy

While listening to an impassioned speaker extolling the glorious past of his discipline and predicting an exciting future, I was struck by something he said. He outlined many wonderfully challenging areas that appeared to be opening up, lamented the fact that he could not turn the clock back to begin research all over again (here I must confess feeling a tinge of regret), and finally burst out: 'Most young people are too busy these days to think about new problems'. Here too, he struck a chord. How often have we all heard the familiar, 'I am too busy' excuse, when something, however minor, needs to be done. As an administrator, of sorts, I have often had to recruit colleagues to the task of carrying out the many (and sometimes tiresome) chores that are so necessary in academic institutions. Not infrequently, accomplished and capable colleagues tell me, 'I am too busy. Find someone else'. Coincidentally, even as I wondered about scientists too busy even to sense the changing contours of their fields, I received an e-mail offering a ray of hope. The senders were marketing a product, which was a publication entitled *Making Every Minute Count: How Pls Can Fit 28 Hours Into a 24 Hour Day*. This 'executive report' produced by an organization called the 'Principal Investigators Association' was described as a 'management survival guide with over 50 pages of valuable methods and expert tips'. The promotional mail noted: 'For most busy scientists it seems there is never enough time in the day. Time management is critical to the success of any investigator'. Why are academics, scientists and professors, so busy? According to the e-mail promoting the time management guide, scientists need to teach classes, mentor research students, write grant proposals, prepare manuscripts for publication and attend scientific meetings, an activity critically important for networking with peer groups, which decide the fate of grants and publications. In addition, there are the committee meetings at institutions which can be an imposition on time available. Reading this I almost began to feel extremely sorry for hard pressed academics, so busy that they can hardly find the time to think – presumably an activity of some importance in the environment of academia. The Principal Investigators Association seemed to be addressing American academics and I could not help but wonder, 'is the situation different in India?'

The situation in India has changed dramatically since I began my independent scientific career over 35 years ago. There was a time when faculty at academic institutions seemed to work at a pace all their own; unruffled by happenings elsewhere. We were unaware of competitive pressures and the need to publish research outcomes quickly. We were also ignorant of the importance of publishing frequently in visible journals. The impact factor was an idea that was hardly known and the *h*-index was to come many, many years later. Research grants were very few and most scientists did what they could with limited funding. Air travel was prohibitively expensive and foreign exchange scarce. The result, of course, was that most scientists stayed at home. There seemed a great deal of time available for reading, books and journals, which seemed so necessary for understanding the sometimes difficult subjects needed to push research forward. Instruments were scarce and immensely valued. Looking after them well and trouble shooting when the need arose were activities that were deemed important. Institutions also seemed to always have a large pool of people to carry out the multitude of tasks that needed to be done; albeit routine chores that could scarcely be exciting to academic faculty. Institutions in India fall into three distinct classes. There are stand-alone research laboratories where scientists do no teaching. There are universities where faculty teach but do not always run large research laboratories. Then there are institutions where faculty are expected to do both research and teaching; the emphasis varying depending on the mandate of the institution. Is everyone really hard pressed for time; overworked and struggling to find the four extra hours promised by the promotional e-mail from the Principal Investigators Association?

Over the last twenty years science funding has steadily grown in India. Old institutions have expanded; new ones have been established. The expansion has gathered pace in recent years, although many old university departments seem to have remained untouched. Even as the scientific enterprise has grown, so too have the demands on scientists. There are more committees to be manned and run; grants need to be reviewed and awarded. More honours and recognitions to both young and old scientists need to be distributed. There are more seminars and meetings to

attend. The demands to advise and mentor new institutions are on the rise. As government departments work with larger budgets than even before, there is a sudden proliferation of advisory committees, whose advice is often discarded unnoticed and unsung. This flurry of activity requires considerably more travel than before, with the result that the more visible and sought after scientists are often on the move. International networking requires considerable investments of time; sometimes dividends are forthcoming, but most often the returns are not always obvious. An interesting feature of the new sociology of science in India is that the importance of academics is often directly correlated to the extent of travel performed. Globalization is advanced as the reason for the excessively large number of delegations that head overseas, ostensibly to learn how other countries run their science and to attract young Indians to return. Ironically, the many available technologies of the information age are rarely used in gathering or disseminating information. In this scenario it is hardly surprising that many scientists find it easier to acquire information on their fields by attending conference after conference, rather than by reading the literature. The multitude of distractions in academia have begun to relegate teaching and research to a lowly status; a situation that must be a matter of concern.

In thinking about the issue of 'being busy' I turned to a book lent to me by a scholarly colleague, but which had remained unopened on my desk for weeks. *Cognitive Surplus: Creativity and Generosity in a Connected Age* by Clay Shirky (The Penguin Press, New York, 2010) is the kind of book I would normally avoid. Everyone has their own pet prejudices and I am no exception. I do not like books about the Internet and give a wide berth to the flood of books on managerial successes, which seem to occupy a great deal of space in bookshops. But I was intrigued by the term 'cognitive surplus'. This is just the kind of surplus that seemed needed in science today; in a world awash with information and too little time available to absorb it. The blurb on the jacket of the book described the author as an 'internet guru', adding that he 'may be the finest thinker we have on the internet revolution'. Shirky's book is easy to read and I was drawn into the book very quickly after the first sentences: 'In the 1720s London was busy getting drunk. Really drunk. The city was in the grip of a gin-drinking binge, largely driven by new arrivals from the countryside in search of work.' Unaware of the 'Gin Craze', I read on to discover how and why Londoners sobered up. According to Shirky: 'What made the craze subside wasn't any set of laws. Gin consumption was treated as the problem to be solved, when it was in fact a reaction to the real problem—dramatic social change and the inability of older civic models to adapt. What helped the Gin Craze to subside was the restructuring of society around the new

urban realities created by London's incredible social density, a restructuring that turned London into what we'd recognize as a modern city, one of the first.' In Shirky's analysis social transitions, of which the industrial revolution was the first major upheaval of modern times, need 'lubricants' that ease and mitigate the trauma of change, until new structures provide the needed stability of a new order. Shirky goes on to argue that in the postwar years American society has been in the midst of a major historical transition. He notes that 'postwar trends of emptying rural populations, urban growth, and increased suburban density, accompanied by rising educational attainment across almost all demographic groups, have marked a huge increase in the number of people paid to think or talk, rather than to produce or transport objects'. Observers of the ongoing transformation of the Indian economy may see early signs of an impending transition.

Shirky moves on to ask a curious question. 'During this transition, what has been our gin, the critical lubricant that eased our transition from one kind of society to another?' His answer—television. He argues that 'the host of . . . amusements offered by TV has absorbed the lion's share of the free time available to the citizens of the developed world'. TV viewing, most often done alone results, in Shirky's words, in 'underinvesting in relational activities'. He suggests 'treating the free time of the world's educated citizenry as an aggregate, a kind of cognitive surplus' and asks: 'How big would that surplus be?'. He estimates that 'Americans watch roughly two hundred billion hours of TV every year'. Shirky points out that time spent on editing Wikipedia, in all languages, represents 'something like 100 million hours of human thought'. Modern internet technologies make collective effort so much easier, leading Shirky to suggest that what 'makes the current age remarkable is that we can now treat free time as a general social asset that can be harnessed for large communally created projects, rather than as a set of individual minutes to be whiled away one person at a time'. Shirky's book is fascinating in its treatment of 'online' spaces which permit communal, collaborative activity.

I have moved far afield from my initial concern of scientists with too little free time, to Shirky's analysis of the 'cognitive surplus' arising from an unproductive use of free time. Is academia in India in the midst of a social transition and are conferences and excessive travel the 'gin' that is lubricating a transformation? The social fabric of 21st century science may be vastly different from that of the century gone by. In thinking of an appropriate way to end these musings I turned to *Google* and typed in 'being busy'. I was instantly rewarded with an interesting quote: 'A man who is very busy seldom changes his opinions'.

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