

## book reviews

### **Networking Knowledge for Information Societies: Institutions and Intervention, edited by Robin Mansell, Rohan Samarajiva and Amy Mahan, Delft University Press, Delft, 2002**

**William Currie<sup>1</sup>**

*Networking Knowledge for Information Societies: Institutions and Intervention* sounds like a textbook for students of the New Economy or another academic foray into unravelling the information revolution. It is, fortunately, neither of these. Rather it is a remarkable book about a remarkable man, Bill Melody. Described as a *Festschrift*, it celebrates Bill Melody's 'outstanding contribution to our understanding of the evolution of information and communication technology over the past half-century, and to the problems of regulating and controlling it during a period of revolutionary change in the technology'. It is also a snapshot of the state of debate on the global information society emerging from the rapid changes in information and communication technology (ICT) as reflected through the views of its fifty contributors.

William H. Melody is an institutional economist and academic activist, who began his working life as an economist at the Federal Communications Commission (FCC) from 1966-71. Thereafter he moved through a succession of academic interventions in the USA, Canada, Britain, Australia, Denmark and the Netherlands. In his latest move, post-retirement, Bill is coming to work at the LINK Centre at WITS University in Johannesburg.

These bald facts do not tell the full story of Bill's extraordinary trajectory which the editors, Robin Mansell, Rohan Samarajiva and Amy Mahan capture in the opening section of the book, called simply '**About...**' The editors structured the book around five themes – Inquiry, Change, Next, Bias and What – which were chosen 'to encapsulate central ideas in Melody's contributions to the creation, networking and application of knowledge about interactions between changing technologies and societies'. The contributors were asked to be brief and to be guided by their own preference as to how to honour Bill Melody. What emerges is a mosaic of perspectives and approaches to key issues and debates in the broad ICT sector that also reflect on Melody's contribution over half a century of activism.

**Inquiry...** explores a theme that captures Melody's commitment to the notion that universities as sites of knowledge and research must contribute to developing public policy. In Melody's view, inquiry should lead to change. Melody's own practice as an academic in creating innovative independent research units like the Programme on Information and Communication Technologies (PICT) in Britain and the Centre for International Research on Communication and Information Technologies (CIRCIT) is testament to this. In this section, Nicholas Garnham is sceptical about the possibility for independent critical research at universities given the current sources of funding, while Jean-Claude Burgelman sees the dominance of technology in developing the information society thus far receding in favour of an interaction between the social and technical requirements for building networks of knowledge.

**Change...** focuses on the dynamics in the institutions that drive the changes in policy which underlie the information society. These are the social, political and economic machinations of power that change the structure of the ICT sector. This theme is particularly pertinent to the South African context, in that it explores changes in telecom reform, a process that is still in motion locally. The shifts involved in telecom reform bring in the possibility of the next move in Melody's insight that technological change creates the possibility of social transformation, that will enable a greater number of people to participate in using information and producing

---

<sup>1</sup> William Currie is a former councillor of the Independent Communications Authority of South Africa (ICASA) and is currently an independent consultant.

knowledge – as citizens of the information society. Melody sees all societies – developed or developing – as information societies. This leads to the third theme **Next...** which examines the complexity of the emergence of information societies, which the process of telecom reform over the last few decades has precipitated. Contributions include one by Ian Miles who asks in what sense the information society should be seen as a radical break from earlier ways of arranging society and the economy.

Another concern of Melody's lies in the ways in which scholars have tried to interpret the significance of the new technologies and the bias that arises in doing so. The fourth theme is **Bias...** which draws on Canadian academic H.A. Innis' concept of bias as an emphasis on one dimension of an issue at the expense of another. The interplay of such biases can lead to institutional changes that destabilise attempts to monopolise knowledge. Melody has argued that rapid growth in ICTs can destabilise monopolies and the goal is to introduce competition not as an end in itself but as a spur to enable social change. Paschal Preston and Edward Comor explore the information paradox that there is more information but less knowledge and examine the processes by which information becomes knowledge.

The final theme is on the **What...**; on issues of the content carried on information infrastructures. This includes looking at processes of institutional reform that will regulate commercial programme content in the public interest. John Downing argues for the creation of alternative counter-hegemonic media such as community radio or the Independent Media Centres (IMCs), which arose out of the anti-globalisation protests in Seattle – rather than trying to save public broadcasting. It is ironic that Bill Melody, the Professor of the Economics of Infrastructures at Delft University, should also have made a seminal contribution to children's television by posing the question: 'Should special protections be provided to insulate children from direct advertising designed to stimulate their consumption desires so that they would become active lobbyists for the merchandiser within the family?' A question every parent still asks today!

With so many contributions across such an overwhelming range of issues, it is impossible to illuminate them all, save to say that these are contributions by leading intellectuals and practitioners of the ICT sector and their insights bring one up to speed in the ICT field of knowledge very rapidly. The section on **Change...** traverses a number of telecom issues that have been exercising our collective mind on the southern tip of Africa.

Edwin Parker addresses Melody's contribution to toppling the natural monopoly doctrine on which AT&T's monopoly rested. With the introduction of a new telecom technology, microwave radio communication, in the 1950s, Melody argued that when technology changes, the assumption of natural monopoly cannot hold. His arguments enabled the FCC to grant MCI a telecoms licence, which began the process of ending AT&T's monopoly. Curiously, Tom Barry, former COO of Telkom SA Ltd, recently argued, with a straight face, that telecom is a natural monopoly. It is worth quoting Parker on this point at length:

One of Melody's arguments was that if the provision of long distance telecom service by any and all technologies was a natural monopoly, then AT&T had nothing to fear from a risk-taking entrepreneurial company. If AT&T's natural monopoly assumption was correct, then the MCI experiment was doomed to failure. If the natural monopoly assumption was correct, there was no need to protect that monopoly with regulations barring competitive entry. If, as Melody believed, the assumption was false, there was no need for government regulations designed to protect a contrary-to-fact economic theory.

Heather Hudson's succinct deconstruction of a number of myths regarding telecoms in rural areas resonates with the failure of Telkom to sustain the development of its rural infrastructure. Recent reports indicate that Telkom has connected and disconnected two million customers in under-served areas over its five year period of monopoly just ended in May 2002. Hudson attacks the common views that demand for telecom in rural areas is limited, that voice telephony is all rural customers need and that it is sufficient to require the incumbent operator to provide rural access to telecoms through the imposition of universal service obligations (USOs). On this last point, she says that the approach may fail if the

operator has no incentive to use the most appropriate technology and to operate it efficiently. This seems to have been the case in South Africa where Telkom's use of DECT in its rural rollout has been criticised as being costly and ineffective.

Hudson is of the view that imposing USOs on incumbent operators also allows them to claim protection from competition because the operator has additional costs and obligations not required of new entrants. Telkom used exactly this argument to justify its refusal to provide facilities to VANS and ISPs during its exclusivity period – to the detriment of South Africa's information economy.

Alison Gillwald subjects the dominant telecom policy paradigm to critical scrutiny. The 'Washington Consensus' paradigm is premised on the argument that privatisation of the incumbent telecom monopoly and liberalisation of the telecom market will lead to greater public access to the means of communication by increasing efficiency, providing greater choice and reducing the costs of communication to consumers and the economy. Gillwald claims that the privatisation element of the policy has not worked in developing countries in that it is often implemented in the absence of an effective regulator and without any commitment to the general liberalisation of the market. Early outcomes of this approach indicate that developing countries that privatised at the beginning of widespread usage of the Internet in the mid-90s may have formally met their USO targets in under-served areas but at considerable cost to the broader development of their ICT sectors.

She cites some of Melody's research to show that where competition has been permitted in under-served areas, service rollout has been quicker and more widespread. South Africa (with a teledensity of 11.4% in 2001) has grown more slowly in fixed-line services than other comparable economies such as Turkey (28% teledensity), Poland (28%), Argentina (21%) and Chile (22%).

The section on **Change...** includes three neat pieces by Martin Cave, John Ure and Johannes Bauer on the question of spectrum allocation and a review of the disastrous 3G auctions, which are sobering warnings of what can go wrong. The raising of excessive income from spectrum can cripple an industry at a critical moment of development. This may also apply to the South African government's plans to charge R700m for access to 1800 MHz frequency spectrum, which could divert funds from MTN and Vodacom's plans for telecom rollout across Africa, one of the goals of NEPAD.

In a keynote address to the Telecom InfoTechnology Forum in Hong Kong in 2000, Melody accused 'the European governments of first restricting the amount of spectrum available for 3G mobile telephony, and then profiting from the resulting artificial scarcity to extract the maximum revenue from the auctions.' Melody's solution to the fiasco was to propose inter alia that bidders should be told that more spectrum would be made available at the time of the auction, that existing mobile licensees should be authorised to use their spectrum for 3G services and that there should be no limit on 3G licensees.

It is simply not possible to do justice in this review to the protean scope of Bill Melody's contribution to the incredible growth of the ICT sector nor to the range and diversity of his colleague's tributes to his work. On a personal note (each contributor marked their point of intersection with Bill's trajectory), I first met Bill Melody in 1994, when Pallo Jordan as Minister of Posts, Telecommunications and Broadcasting was strategising an approach to formulating a new telecom policy for South Africa. Bill was one of the experts who had been identified to work on the Green and White Paper process. It was not to be. But I wonder whether Bill might not have been able to persuade the South African government not to put so much store on privatising Telkom and rather to put more energy into opening the market for competition.

In South Africa, the struggle for telecom reform continues. Bill Melody is entering the terrain at an interesting moment, at the point when the telecom policy of 1996 has run its course and fresh, dynamic ideas are urgently needed.