

Telecommunications Policy, Vol. 21, No. 4, pp. 317–328, 1997 © 1997 Published by Elsevier Science Ltd. All rights reserved Printed in Great Britain 0308-5961/97 \$17.00+0.00

PII: S0308-5961(97)00012-8

Residential consumers and 'rejected knowledge'

Exploring and acknowledging the margins in broadband services in Australia

Gerard Goggin and Christopher Newell

It is important for residential consumers to have the economic, institutional and conceptual space and independence to conduct their own sustained reflection and research regarding converging communications technologies. This independence is likely to lead to different constructions of knowledge and discourse, and to suggest a different set of cultural practices, compared with that currently dominating industry and government policy making and research. An example of research by residential consumer groups in relation to broadband services in Australia in 1994 is examined, and suggestions are made for how consumer knowledge can be fostered to make a contribution to telecommunications policy. © 1997 **Published by Elsevier Science Ltd**

Dr Christopher Newell can be contacted at Division of Community and Rural Health, University of Tasmania, 17 Liverpool Street, Hobart, Tasmania, 7000, Australia (Tel: 61 3 62357731; Fax: 61 3 62357730; Email: Christopher.Newell@comm.utas. edu.au). He is Senior Lecturer in the Division of Community and Rural Health, and represents people with disabilities on a number of telecommunications and other committees. Gerard Goggin was Policy *continued on page 318*

It is fundamentally important for residential consumers¹ to have the economic, institutional and conceptual space and independence to conduct their own sustained reflection and research on converging communications technologies. This independence is likely to lead to different constructions of knowledge and discourse, and to suggest a different set of cultural practices, compared with that currently dominating industry and government policy making and research. The first section of this article examines one attempt to construct such conceptual space and independence in Australia, that of the 'Have Your Say' Seminars on new communications technologies initiated by the Telstra Consumer Consultative Council.² Next, we attempt critically to analyse broadband policy exchanges in Australia. Finally, the knowledge constructed in and through such policy exchanges is situated, and we suggest some of the preconditions for consumer knowledge to make an important contribution to Australian, and international, telecommunications policy and research.

Telstra's 'Have Your Say' seminars

One example of residential consumers engaging in substantial reflection and research is found in a critical examination of the consultations on new communications technologies initiated in 1994 by the Telstra Consumer Consultative Council (TCCC).³ These consultations involved research conducted on new communications technologies by consumer groups, research institutions and academic researchers. This research was

Residential consumers 'rejected knowledge': G Goggin and C Newell

continued from page 317 Adviser at the Consumers' Telecommunications Network. He is presently a Ph.D. candidate in the English Department, University of Sydney, NSW 2006, Australia (Tel: 61 2 9351 2349; Fax: 61 29351 2334; Email: ggoggin@extro.ucc.su.oz.au).

We acknowledge with gratitude the assistance of a number of people in the preparation of this paper, including Peter White, Liz Jacka, Jock Given, Richard Joseph, Patricia Gillard, and especially the contributions of Trish Benson and Ann Moyal who provided comments on drafts. An earlier version of this paper was presented to the Bureau of Transport and Communications Economic and Communications Law Centre 'Communications Research Forum', 19–20 October, 1995, Gazebo Hotel, Kings Cross, Sydney. The feedback from participants is deeply appreciated.

¹Our use of the term 'residential consumers' can be explained as follows: the term is hardly unproblematic, especially given the changing nature of the technological systems under discussion. Further, the distinction between work carried out in places of business and consumers at home (residential consumers) will increasingly become blurred. The term 'residential consumers' is retained, however, because of the importance of recognizing distinct issues for consumers who lack the influence and control of corporate and business use, yet identify needs and aspirations which are not found in the dominant discourses of communications and information technologies (Goggin G and Newell C 'Reflections from the Roadside: Residential Consumers and the Information Superhighway' Media Information Australia 1994 74 November 40).

²Telecom Australia changed its name to Telstra in 1995. It is a fully government owned telecommunications company, though the new Federal government elected in March 1996 intends to privatize one-third of Telstra.

³Now the Telstra Consumer Consultative Council (TCCC). Established in 1989, the TCCC is an innovative forum for Telstra to consult with consumer and community groups on issues affecting residential consumers.

⁴Adamson, L, et al Planning for an Information Society: Population Group Discussion Papers and Policy Issue Discussion Papers Telecom Australia and Melbourne (1994) ISBN: 0 64221363 1.

⁵Elix, J and Lambert, J, Final Report: 'Have Your Say' National seminar series on Future Communications Technologies: Issues and Opportunities, Community Solutions, Fairlight, NSW, 1994. published in the Population Group Discussion Papers and Policy Issue Discussion Papers volume⁴ which provided the foundation for a national series of seminars entitled 'Have Your Say'.⁵

This research covered topic areas pertaining to population groups of women, low income people, consumers with disabilities, older people, aboriginal people, people from non-English speaking backgrounds, rural and remote consumers, youth, and even the notion of 'technically advanced households and individuals'. Significantly, with two exceptions, such research involved providing resources to organizations for, and of, the population groups mentioned, to enable them to organize their own research. In the case of low income people research was undertaken by the Australian Council on Social Service, and for the emerging social grouping of 'technically advanced households and individuals' (which was not an already organized 'community of interest'), the Consumers' Telecommunications' Network (itself a coalition of consumer organizations) employed a consultant.

Within a very tight time-frame organizations contracted with Telstra to organize research and consultations within their constituency or population group regarding such areas as:

- (1) the nature and size of the population group;
- (2) existing use of telecommunications and information technology;
- (3) likely future developments/changes for the population group;
- (4) barriers to the use of new computing and telecommunications technology services;
- (5) how new developments could meet needs of the population group (as articulated by them).

These questions were addressed in light of a discussion paper prepared by Telstra, with consumer input, to aid informed discussion regarding the emerging social and technological systems. Essential to this were people who had both a technical knowledge and an understanding of the complex social relations of technology, as well as the skills provided by Telstra's Consumer Consultative Council secretariat in liaising with consumers.

The research was supervised via a committee comprised of representatives from Telecom and consumer representatives from the TCCC. Both parties brought research experience to bear, and consumer representation included academic, social and action research experience, which was offered to assist groups conducting research, and of which there was some take-up by several groups.

In addition to the population groups mentioned, papers were also commissioned on such topics as:

- (1) privacy and security;
- (2) occupational health and safety;
- (3) content regulation;
- (4) fair trading;
- (5) impact on family and social relations;
- (6) universal service.

While the content of these other papers was not necessarily from the perspective of residential consumers, it provided an important aid to informed discussions by consumer and other interest groups.

Indeed, the combined research also provided a starting point for a seminars series jointly organized by the Telstra Consumer Consultative

Council and Telstra Regional Consumer Councils, Consumers' Telecommunications Network (CTN) and the Small Enterprise Telecommunications Centre (an organization representing small business users of telecommunications). Seminars in each state and territory of Australia sponsored by Telstra and the Broadband Services Expert Group provided a forum for residential consumer and small business representatives to have some input into how broadband services are defined. In addition, the paper pertaining to people with disabilities was made available on the South Australian based Bulletin Board 'Common Ground', regarding disability issues, and feed-back from participants was included in the evaluation.

In brief the outcomes of the research and seminars were that residential consumers and small business shared similar concerns regarding access to and affordability of the emerging technologies. There were also key issues which arose out of workshops and evaluation questionnaires. The conclusions of the evaluators were in part:

- that a redefinition and delivery of universal service be undertaken, extending it to take into account technological change, and that this be periodically reviewed, with input from a 'wide range of groups';
- that access to the more advanced telecommunications technologies, particularly for rural and remote consumers, be facilitated via community based telecottages and telecentres, supported by service providers and government;
- that disadvantaged groups be consulted concerning specific projects intended to be of assistance to them, and that funding of such programs become part of "the basic obligation of government, carriers and service providers";
- that basic 'no frills' equipment be available from service providers and equipment suppliers (for instance, modems at reasonable cost), to ensure access to new telecommunications services, and that this be designed for ease of use and to prevent 'rapid obsolescence';
- "That the federal (*sic*) government, carriers and service providers establish mechanisms to maintain ongoing consultation with residential consumers and small business representatives";
- "That formal and informal consultation processes need to occur at all levels of product development and service provision";
- that the development of information and education programs involve consideration of accessible venues, widely accessible telecottages and telecentres, use of public facilities such as schools, targeting population groups as necessary, and using culturally appropriate training;
- that the Federal government take up the issues of privacy and security for the groups consulted, and;
- "That priority be given to social research into the uptake and impact of new telecommunications technologies".⁶

This research, consultations and resulting recommendations, indicate how different knowledges can be constructed, compared with existing dominant knowledge, given appropriate mechanisms. In particular the provision of resources allows residential consumers to organize and research for themselves effectively, to share their experiences (in the same way that business people have knowledge exchanges in meetings) and to have the policy time and space provided. This goes some way

⁶After Elix and Lambert, *Ibid*, 11–17.

towards redressing the inequitable situation where the population groups (including small business) consulted make up the vast majority of the population, yet a clear concern was that their life experience and needs were rejected. This latter phenomenon can be seen as a form of what has been historically 'rejected knowledge'.

Many of the population groups represented were typically represented negatively in dominant discourses; such as lacking in command of English (in the case of people from non-English speaking background or those who are Deaf,⁷ abilities (people with disabilities), or living too far from urban centres (rural and remote dwellers). This research project gave them an opportunity to organize research for themselves around future policy questions, and to dare to dream of ways in which future social and technological systems could be of real assistance for them, via providing an inclusive communications systems, and identifying barriers to this achievement for them. Overwhelmingly, the picture that emerged showed that the population groups, which account for a significant proportion of the Australian population, lay outside the dominant discourse of telecommunications. This discourse, and its accompanying definition of markets and policy processes, has incorporated negative conceptions of such populations; indeed it has rejected the knowledge that these population groups propose. This consumer knowledge may be dismissed as 'uninformed' or 'ignorant', which shows a lack of understanding that all people bring knowledge to such encounters. A rejection of that which does not fit narrow norms or expectations may give rise to such terminology.

For example, people with disabilities have been disabled via technological systems which exclude them. There is a lack of acknowledgment of the life circumstances of people with disabilities in all stages of research and development through to policy. The situation continues in the creation and perpetuation of 'special needs' over the years. For instance, a news release from the former Federal Minister for Communications' recent news release regarding the post- 1997 Australian telecommunications environment assigned the needs and aspirations of people with disabilities to the category of 'special needs'.⁸ Knowledge from the community of people with disabilities and critical scholarship in the area shows how it is narrow norms and knowledge which exclude and create 'special needs', resulting in 'rejected knowledge'. We here draw upon the tools found in that transdisciplinary endeavour variously called the history and philosophy of science or science and technology studies.⁹ Simply put, such rejected knowledge is either not recognized by dominant knowledge systems and discourses, or is reinterpreted in policy exchanges, in ways which are in accordance with dominant knowledge. For example, for years people regarded by dominant knowledge to be 'disabled' have been held to have special and exceptional needs in terms of voice dominated telephony, with scant regard given to alternative accounts that it is such dominant knowledge, manifested in technological systems, which creates disability. In this way, knowledge about disability has been constructed in an oppressive manner which rejects alternative accounts.¹⁰

From this perspective there is a clear danger that the government and telecommunications industry was leaving the concerns and knowledge of some groups of residential consumers, particularly those marginalized groups, 'by the roadside'¹¹ in the development of knowledge on new communications technologies. This can be clearly seen by a consideration of policy and knowledge on broadband services in Australia in 1994.

⁹See for example: Richards, E Vitamin C and Cancer MacMillan, London (1991); Newell, C The Social Construction of the Wheelchair and the Cochlear Implant: A Study of the Definition and Regulation of Disability Unpublished Ph.D. thesis, School of Social Inquiry, Deakin University, Geelong and Victoria (1994); Wallis, R, ed, On the Margins of Science: The Social Construction of Rejected Knowledge, University of Keele, Keele, Staffordshire (1979).

¹⁰See Newell, Ibid.

⁷We follow the convention of using 'Deaf' to describe those who are part of the Australian Deaf community, which may be defined in socio-linguistic terms, and in Australia usually consists of those prelingually deaf and who use Australian Sign Language (Auslan) as their first language. ⁸Lee, Hon M, Minister for Communications and the Arts, 'Telecommunications Policy Principles: Post 1997', Canberra, 31 July 1995.

¹¹Goggin, G and Newell, C op cit Ref 1.

Theorizing (broadband) policy exchanges

In Australia, and elsewhere in the world, it is useful to examine how communications technologies were constructed—discursively, institutionally and politically—as 'new' and 'broadband' in 1994–5. In Australia, one important component of these 'broadband' policy exchanges was the work of the Federal Government's Broadband Services Expert Group and the Bureau of Transport and Communications Economics' Communications Futures Project.¹² These policy exchanges had their parallels elsewhere in the world, such as the USA's National Information Infrastructure (NII) policy, the global Global Information Infrastructure (GII), the Bangemann Task Force Report on an European information infrastructure and the British government's White Paper, *Creating the Superhighways of the Future*.¹³

We have previously been critical of the approach taken by the government in establishing an 'expert' group to inquire into Broadband Services, arguing that, as constituted, it had a narrowly commercial and technological focus, and that its membership was unrepresentative.¹⁴ It appeared that the government lacked a commitment to fostering wide participation in decision-making around communications technologies. Indeed, the shortcomings of the BSEG Interim Report confirmed these fears¹⁵. The Interim Report was based on select invitation-only consultations with limited community participation. It tended to be enthusiastic about the possibilities that the technology would unleash and vague about what sort of policy directions were appropriate for government to take. The Interim Report was limited in its coverage of consumer and social policy issues, being characterized by general statements that did not take the social and cultural dimensions of technology seriously.¹⁶

Following the 'Have Your Say' research and consultation process outlined above, it is apparent that the introduction of other perspectives, institutions, discourses and actors in the policy exchanges may have had a salutary effect. (The critiques of commentators such as David Sless and the exemplary work from the 'inside' of BSEG by Patricia Gillard equally left their mark.¹⁷) This can be seen in some of the rhetoric of the BSEG Final Report.¹⁸ Certainly the discourse of access and equity takes on a far more prominent role in the Final Report. This is an important achievement and may be due to the topical nature of communications technologies, with an explosion of marketing hype, as well as the involvement of consumer and community groups in policy development and debates. For instance, the report states that:

...(a)cess to the network for both users and service providers is fundamental. This access must be equitable if our society is to share the benefits of the emerging communications environment...Access to broadband communications networks may become part of the basic community infrastructure—as essential as roads, electricity or water.¹⁹

The BSEG Report also points to the difficulty of the question of access, maintaining that Australia needs to have a "sustained debate about communications needs and how they should be met" (p. vii). In the interim, it suggests that "we must begin the process of giving people access now" (p. vii), starting with digital narrowband access. BSEG also notes the need for training people in the use of technologies in order to be able to use community access points effectively. BSEG's stance relates to

¹³For a discussion of the British policy experience see Goodwin, P, British media policy takes to the superhighway. *Media, Culture and Society*, 1995, **17**, 677–689.
¹⁴See Goggin and Newell, *op cit* Ref 1.

¹⁵Broadband Services Expert Group *Networking Australia's Future* The Interim Report of the Broadband Services Expert Group, Canberra, July 1994.

¹⁶Sless, D 'Between dreams and reality' *Communication News* (Communications Research Institute of Australia), **7.4** 1994 1–7.

¹⁷Patricia Gillard heads the Telecommunications Needs Research Group at the Royal Melbourne Institute of Technology and was the only female member of BSEG. See, for instance, Gillard P, Wale K and Bow A 'Re-engineering telecommunications for the way people want to live: Social research in the design of new technologies' Prometheus 14.1 80-89. Gillard has chronicled her experiences on the BSEG in an illuminating discussion of the way broadband policy is constructed in her 'Not a woman within coo'ee. An encounter with cultural policy on the superhighway', in Alison Beale and A Van den Bosch (eds), Ghosts in the Machine. Women and Cultural Policy in Canada and Australia Hale and Iremonger, Toronto (1996).

¹⁸Broadband Services Expert Group, *Networking Australia's Future*, The Final Report of the Broadband Services Expert Group Canberra: Australian Government Publishing Service (1995).

¹⁹Broadband Services Expert Group (1995), vi, 50.

¹²For alternative accounts of the Australian 'broadband' policy exchanges, see a number of essays in 'Communication Futures in Australia', the special issue of *Prometheus* **14**(1) 1996, and also in the special issue of *Media Information Australia*, 'Superhighway Blues', No 74, November 1994.

at least two of the principles set down in the Interim Report, namely that the principle that broadband services must be based on the Australian "tradition of inclusiveness and avoid creating or adding to inequalities... we need to ensure there is wide consultation with the community in planning broadband services"; and the principle that "broadband services should contribute to the economic and social well-being of the community" (p. 100). In these ways, the BSEG Final Report reflects an acknowledgement of some of the specific barriers for different groups of consumers.

However, BSEG's fine sentiments gloss over the fact that Australia has also had a countervailing tradition to that of inclusiveness—namely that, of exclusiveness and inequality, which can be seen to be part of the dominant knowledge which informs notions of 'viable', 'practical' and 'special needs'. It is curious that for all its talk of beginning the process of giving access now, BSEG fails to recognize current areas of inequality and lack of access in relation to the plain old telephone. This is also a flaw in the paper on 'Access, Communication and Community' prepared for the first meeting of the National Information Services Council (NISC) in August 1995—a paper that represents a backward step in some respects, compared with the BSEG Final Report.²⁰ Such an approach runs counter to the view that rectifying current injustices in telecommunications access is the perquisite for being able to conceptualize access in relation to broadband services.

Of course, BSEG canvass an approach to access based on the community having a right to an "effective standard of communications" rather than a standard piece of technology (p. 52). Yet the Report does not recognize the fact that some consumers at present have been denied the right to an effective standard of communications in the form of the universal service that is offered to most of the population—for instance many people with disabilities, lower-income earners and those in rural and remote areas, to mention just three.

In reading BSEG's discussion of access, it is hard not to see its recognition of access in principle as being subtly curtailed. The concept of universal service in relation to broadband services is also an explicit form of 'rejected knowledge', not least because it is seen as too costly to implement. However, this in itself is an interesting construction of economics, since the cost of not including all people on broadband services, or the benefits of doing so, is not explored.

BSEG has effectively eschewed 'universal service' for the concept of 'universal reach'. Universal reach is used to direct attention away from connecting households to instead looking at connecting communities. For instance, in relation to universal reach BSEG talks of encouraging the whole community to become familiar with, and use, communications technologies, via a network of community access points. These community access points are vital, particularly if they offer education in the technologies for communities, and allow communities to construct their own uses and meanings of the technologies.

However, just as payphones will remain essential but need to be complemented by residential access to telecommunications, so community access points need to be conceived side by side with household access. Amongst other things, many members of the population may not be able effectively to gain access to these so-called 'access points'. Universal reach neatly fits the aim of cordoning off the commercial objectives of the communications industry, granting profitable markets to

²⁰National Information Service Council, Agenda papers from the first meeting of the Council, 10 August 1995, Canberra: Australian Government Publishing Service (1995). Thanks to Trish Benson for this point.

transnational corporations, from the social needs of loss-making citizens who are awarded the consolation prize of a ever shrinking safety net of 'access points', for example, by a financially straitened state.

This conceptual move of shifting from universal service to universal reach is done on the pragmatic and narrowly constructed grounds of cost, fitting nicely with the prevailing pro-competitive agenda (or knowledge) and of putting faith in the market to deliver essential services.²¹ The Australian government's role, on this view, is not dissimilar to that of the role of government staked out in the Clinton government's National Information Infrastructure initiative. Government takes on the role of spruiker for the private sector, encouraging it to provide communications services to society that will be profitable for the corporations involved. However, the Australian state, especially its more economically 'dry' parts, such as the Treasury, the Industry Commission and the Department of Communications to meet social objectives, or to spend funds itself.

Such manoeuvres have been enabled by the fact that the government and telecommunications industry have, since the inauguration of the Telecom–Optus duopoly in 1991, been avoiding the glaring gaps in the delivery of the 'voice grade' universal service that was mandated.²²

While the new government has committed itself to retaining the status quo on universal service (or universal access to telecommunications, also known as community service obligations), it has taken a very narrow view. At the moment, universal service is defined at the rights of all Australians wherever they live to the standard telephone service, and also payphone services. The government declares a universal service carrier who is charged with this responsibility (Telstra since 1991). Other carriers then pay a contribution to any losses incurred in delivering universal service. After 1997, contributions to universal service will be based on revenue share.

The new government is presently finalizing the details of its new telecommunications legislation, but has indicated that it will preserve the existing universal service obligation, while changing the name of the standard telephone service to standard *telecommunications* service. This service will be defined as 'primarily' a voice service, but will include functional equivalents such as teletypewriters for Deaf people and people with speech and hearing disabilities. The government has established a committee to review the standard telecommunications service, to examine, in part, whether the service should be defined as including a data grade line capable of good Internet access, as well as the universal service issues associated with broadband networks.

The new government's retention and slight broadening of universal service is critical to ensuring access to telecommunications, but does not go far enough, particularly with the spectre of part privatization of Telstra, and open competition, on the horizon. In terms of broadband policy, the government has to a certain degree abdicated responsibility for consumer access. Telstra and Optus are both engaged in rolling out hybrid fibre-coaxial cable to millions of Australian households by the end of the century. However, this cable-based infrastructure will only reach Australians in metropolitan areas or regional centres for the foreseeable future. How broadband access will be provided to Australians in remoter areas, via satellite or wireless means for instance, is unclear at this stage.

²¹The nature of such 'essential services' is, of course, contested knowledge.

²²Wilson, I R and Goggin, G, Reforming Universal Service: The Future of Consumer Access and Equity in Australian Telecommunications Consumers' Telecommunications Network, Sydney (1993).

Corporate policy making on broadband policy, to a large extent, is not being greatly influenced by consumer consultation or research, as commercial considerations are predominating in the early stage of market development.

Policy exchanges and knowledge construction in telecommunications

These broadband policy exchanges reveal much about the construction of knowledge in telecommunications, only some of which can be explored in this article. The research produced for the 'Have Your Say' seminars, together with the national consultation, produced a body of material that complements and cuts across the official broadband policy outcomes. In policy exchanges, 'consultation' represents a repertoire of techniques or even an arena where different forms of knowledge are hybridized, prioritized and synthesized by different actors. Policy exchanges are also constituted over longer time periods by ongoing research and development of knowledges.

There are definite margins and centres established in the canons of such communications and information research. A recent review of literature relating to telecommunications competition and residential consumers concluded that there existed a

...near invisibility of literature written from the perspectives of residential consumers and small businesses, in much of the 'official' literature on telecommunications. Publications by consumer, community and public interest organizations are more difficult to obtain and are published in more ephemeral forms due to cost and time constraints ... They are rarely considered, reviewed or commented on in academic, corporate or government publications. In this sense they are marginal to the policy making circuits that exist between academic institutions, corporations and governments.23

Forms of knowledge developed by residential consumers are to a large extent rejected by policy makers, or at least rendered marginal. As Goggin and Milne go on to conclude:

... there is little consideration of consumer or social issues in the formal evaluation of telecommunications policy, especially in relation to structural adjustment. There is a need for greater research and analysis of these issues, particularly using social science and public policy approaches.24

On an empirical level, data on the effects of telecommunications policy on residential consumers is lacking in Australia and many other countries, and on a methodological level, there is a lack of adequate frameworks for understanding such data. Narrow economic efficiency approaches dominate research and policy, and equity, while social and consumer dimensions are neglected.

It can be argued that disciplines, and interdisciplinary endeavours, to an extent actually shape the object of their study. It is no surprise that the empirical impoverishment of the policy and research discourses on residential consumers in telecommunications is matched by methodological and theoretical shortcomings. The identification and social situation

²³Goggin, G and Milne, C, 'Literature review: residential consumers and Australian telecommunications 1991-94', in Consumers' Telecommunications Network For Whom the Phone Rings: Residential Consumers and Telecommunications Competition Consumers' Telecommunications Network, Sydney (1995) 28-9. The inaugural issue of Telecommunications Policy opens with an editorial by Lawrence H. Day expressing the hope that it will serve to bring together in an on-going dialogue policy researchers, on the one hand, and decision makers and policy analysts in government and industry, on the other. Day announces that "(s)pecial efforts will also be made to involve in the debate the groups of telecommunications users, industrial and governmental, in whose names many policy developments are undertaken. Users are seldom given adequate opportunity to express their views, and every effort must be made to quarantee their inclusion in this new forum" (Day, L H 'Telecommunications teamwork' Telecommunications policy: Policy 1(1) 1976 2). Unfortunately this statement does not acknowledge residential consumers as important end users of telecommunications, although hopefully we are better able, 20 years on, to make such distinctions. ²⁴Ibid, 29.

of researchers also has an effect on the constitution of the object of study, and the knowledges produced. This has recently been theorized by researchers using an ethnographic approach to study information and communications technologies in the home.²⁵ In the course of their study, Silverstone *et al.* attempted to treat the families they were researching as 'subjects' rather than 'partners'. This called for greater reflexiveness in the researchers' own 'ethnographic self-knowledge' in allowing comment on the research process by the researched.²⁶

Conceiving of research as a dialogue between the researchers, with their own social mores and predetermined interests, and the researched, with these, is a useful step towards recognizing the value-laden nature of telecommunications, and generating different forms of knowledge. This is demonstrated in Ann Moyal's landmark national survey of women's telephone use in Australia, in which a 'qualitative', ethnographic methodology was selected which assumed the nature of "a dialogic approach...contiguous with female-gendered communication patterns".²⁷

However, such a methodology itself produces a particular sort of knowledge, which like other forms of knowledge is related to its institutional setting. Most researchers are embedded in institutional contexts such as corporations, universities, research institutes, government departments or research organizations, although a few resource-ful individuals exist in the role of 'independent' scholars (including, in Australia, Moyal herself). A recurring theme in literature on the epistemology of telecommunications policy research is the need for funding independent of industry, government and other agenda to foster innovative, critical research.²⁸ The locus for this critical research is generally thought of as the university. While it is undoubtedly true that universities have a central role to play in fostering a critical intellectual climate in telecommunications, as in other areas of societies, there are other institutions and settings that also foster critical research.

A fundamental premise of the research conducted by Consumers' Telecommunications Network, and that of consumer and community groups in the 'Have Your Say' seminars, is to allow other researchers, with different institutional locations and knowledge systems (such as that of the 'consumer movement') to produce knowledge in the telecommunications arena. This allows various groups of residential consumers to elaborate knowledges about their own telecommunications usage. It also allows these researchers to generate knowledge about other peoples' usage of, and discourse on, telecommunications. These include social groups, large corporations and governments.

There are a number of difficulties that need to be explored with this model. There is the fear that such research will merely be 'self-reporting', and will not involve proper critical research on the groups involved. This is a danger shared by institutional locations, such as government and corporate research which is often 'self-reporting', in the sense of uncritically investigating aspects of its own behaviour, and not adequately analysing important social and consumer issues.

The standard of research is often another topic of concern. Practices of academic transmission of knowledge drawing on quality measures such as peer reviewing offer safeguards in relation to ensuring that good research techniques are used, and that researchers are familiar with relevant literature in an area. Yet the deployment of these techniques have not

²⁶Silverstone et al, Ibid, 222.

²⁷Moyal A, 'The gendered use of the telephone: an Australian case study' Media, Culture and Society 1992 14 52. An associated article by Moyal is 'The feminine culture of the telephone: people, patterns and policy' Prometheus 1989 June 2. ²⁸See, for instance, Rowland, WD, telecommunications American policy research-Its contradictory origins and influences. Media Culture and Society, 1986, 8(2), 159-182 and The traditions of communication research and their implications for telecommunications study Journal of Communication 1993 43(3).

²⁵Silverstone R, Hirsch E and Morley D. Listening to a long conversation: an ethnographic approach to the study of information and communication technologies in the home. *Cultural Studies* 1991 **5** 204– 227.

been adequately examined, leading one commentator to suggest, for instance, that "the study of peer review is in its infancy".²⁹

A particularly important question in relation to peer reviewing is: "who are the 'peers' in a particular area?" Mostly, they are other academics, who are held by established disciplines or knowledge systems to be experts in the field that the study has situated itself in. This leaves the question of whether other experts should be consulted with or comment on a study, as well as the difficult question of what constitutes expertise itself?³⁰ For instance, the Telstra Social and Policy Fund encouraged researchers who propose to investigate an area to communicate with other researchers and consumer and community groups who represent or have an interest in that topic. This can promote a broader approach to a topic than narrow academic specialization might generally require.³¹ It does not however acknowledge particular expertise by members of such community and consumer groups, who increasingly may also use the tools of academia in the engagements.

Further productive relationships can, and should, be fostered between university and research institutions, and consumer and community groups to lift the definition and profile of social issues in telecommunications. Such relationships could include 'mentoring', whereby academicbased researchers are funded to provide research expertise to consumer and community groups, which due to time, funding and resource constraints lack the ability to conduct high quality research projects on an ongoing basis. Formal arrangements such as 'mentoring', exchanges of researchers, institutional links, would enhance the already blossoming relationships between consumer and community groups and the academic community over the past few years. These relationships have been due in no small part to the value that both sides place on independent critical research.

Whereas large corporations, the telecommunications industry and government are able to 'buy in' expertise by commissioning, for example, consultancy advice on economic issues or market research, consumer and community groups do not have the money required, and often relying heavily on voluntary or donated work. Further, the perspectives of these groups do not often fit readily with the knowledge base of established market researchers or neoclassical economists, whose views are approved by the telecommunications industry. Researchers with alternative views and understanding of residential consumer issues are few and far between, because these do not tend to be the lucrative areas for specialization. In this context, as well as supporting important critical research in telecommunications, the Telstra Social and Policy Fund has been an important source for consumer and community groups to obtain funding to undertake research.

Westport, C T (1993) cited in Hansen, K A. Bibliographies and scholarly communication'. *Journal of Communication*, 1994 **44** 63. ³⁰A useful reference in this area is Rice, R

C. A useful reference in this area is Aice, A E, Borgman, C L, Reeves, B, 'Citation networks of communication journals, 1977–1985: Cliques and positions, citations made and citations received' *Human Communications Research* 1988 **15** 256– 283.

²⁹Speck B W. 'Publication peer review:

an annotated bibliography' Greenwood,

³¹"Bibliometric studies have found that the subdivisions within the communications sciences generally do not communicate with one another, nor do they exchange theories or findings through cross-citation (Rice *et al, Ibid*)" (Hansen, *op cit* Ref 29, 54). Telstra social and policy fund

The Telstra Social and Policy Fund had the particular objective of encouraging social and policy research, rather than technical research and applications. Its annual budget was approximately \$750 000 in 1995–6. The Fund was established to be at 'arms length' of Telstra and has often produced research critical of Telstra, other telecommunications companies, government and the regulator, the Australian Telecommunications Authority (AUSTEL).

The Fund consisted of: project grants to support individual researchers based in universities or community and consumer groups; postgraduate support; publication and conference grants. There was also a Program Fund to support selected research institutions.

The Fund has recently been reviewed by Telstra and has been the occasion for considerable debate within industry, government and academic circles. In the ensuing debate, there have been two major criticisms of the fund. Firstly, that it is not sufficiently independent of Telstra. For instance, Ann Moyal observes that Project applications for individuals were not submitted to peer or any other form of exterior refereeing as a matter of course, and the Program Funds are allocated solely by Telstra, raising the question of "how much the research is intended to be wholly independent, 'innovative', and scholarly, or if it is designed, at least in part, to serve carrier interests"?³² This criticism is countered by academics, consumer representatives and Telstra staff who attempted through the fund to broaden and diversify the number of researchers, disciplines and research projects relating to social and policy aspects of telecommunications in Australia. This group typically argue that good critical and relevant research is often generated at the line of intersection between academic and policy contexts.³³

Secondly, there is some consensus that the quality of work commissioned by the Fund was not of a sufficiently high standard. Some also felt that the relevance of the research was also a problem. Moyal, for instance, is critical of some of the work funded under the Telstra Fund as not scholarly or taking account of existing work, as well as being hasty or uncritically framed. Overall, she finds the research funded "dispersed and *ad hoc*", noting that the Fund alone cannot provide a "sense of a critical intellectual community." (p. 3).

Yet in a competitive environment, the Telstra Fund cannot continue to be the predominant source of funding for independent research in Australia. Telstra is presently making some changes to the Fund's operation which stem from senior management concerns about its relevance to Telstra's increasingly commercial focus. Telstra holds that it still has a commitment to expanding the range of public domain research in telecommunications and is not withdrawing funding for research. Indeed Telstra claims that it wants to foster more consumer and community-focused research, and higher quality and more relevant academic social and policy research. In future, however, Telstra will decide what research will be commissioned, by whom and how it will be published-though it has promised to consult widely on topics for research. Thus it has disbanded the independent Social and Policy Fund committee and is delaying any announcement on future arrangements for developing a research agenda or commissioning research.

Given that Telstra has effectively abolished its Fund, and dispensed with any mechanisms that would give safeguard the independence, and perception of independence, of any research it might commission, it is difficult to conclude otherwise than that social and policy research in Australian telecommunications is in grave danger.

Telstra's ill-judged and narrow-sighted move to jettison its Fund is all the more regrettable given the growing need for independent social and policy research—a matter agreed upon by consumer groups, academics, industry and government alike. Indeed, as Patricia Gillard comments:

³²Moyal, A, 'Crisis in communications research' in Sless, D (ed) *The Informationless Society: Papers from the Seminar* Communication Research Press, Canberra (1995) p. 3.

³³There is considerable debate at the overlap between policy and research, and between administrative and critical research. See, for instance, Cunningham, S., Framing Culture: Criticism and Policy in Australia, Allen and Unwin, Sydney and also Rowland (1986) and (1993). Meaghan Morris suggests that "Australian cultural criticism, like Australian bureaucracy, does have a socially specific past. This is a small society, with a long tradition of circulating intellectuals between academic, media and bureaucratic work, between critical and policy functions" (Morris M. (1992), 'A gadfly bites back' Meanjin **51**(3) 545).

...if we want the new broadband communications to enhance participation in political, social and commercial life, it must be funded on a publicly accessible program of social research.³⁴

Neither government nor other telecommunications companies are prepared to devote what would be a small fraction of their rapidly expanding revenues to fund such a research program.

The Consumers' Telecommunications Network has suggested that the Australian government's Bureau of Transport and Communications Economics (BTCE) develop a social research capacity to complement its (neoclassical) economic research capacity. Such a need was recognized in the BSEG Final Report with the recommendation that "a Common-wealth government research agency, such as the Bureau of Transport and Communications Economics, should be funded to coordinate a program of social research to identify the needs of particular groups of telecommunications consumers that are not currently being met." (p. xiii).

Conclusion

Knowledges of residential consumers can be seen to be an emerging interdisciplinary, indeed transdisciplinary, endeavour, with their own contradictions and conflicts, utilizing and producing the objects for study, namely residential consumers. Such knowledges are likely to grow in significance with the telecommunications reforms bringing 'open' competition in Australia from 1 July 1997. The changes to telecommunications through convergence as well as the economic and political changes accompanying further competition will change the nature of telecommunications in Australia. To take just one example, the introduction of competition in the local network (called the 'local loop' in the USA and the 'customer access network' recently in Australia) is taking place in a complicated interaction with social and economic changes.

Residential consumers need to be able to produce their own knowledges regarding such developments and emerging consumer needs and desires, and entering into policy exchanges with government, industry and other groups. This has recently been argued by the Consumers' Telecommunications Network in relation to consumer consultation and advocacy in the relation to competition in essential services, such as telecommunications and energy industries.³⁵

This paper has argued for the importance of providing the economic, institutional and conceptual space and independence for residential consumers to conduct their own sustained reflection and research on the emerging communications technologies. The population research leading to the 'Have Your Say' seminars and the results of discussion following these is an example of different constructions of knowledge which can arise out of such circumstances. These also highlight the way in which the knowledge of residential consumers can be seen to be rejected by dominant knowledge, which is informed by narrow notions of economics and markets. Such consumer knowledge can make an important and yet currently undervalued contribution to policy exchanges, and to the emerging social and technological systems which are becoming today's and tomorrow's norms.

³⁴Gillard, P 'What do we really want? Rethinking media and telephone user research' *Media Information Australia* 1994 **74** 32.

³⁵Consumers' Telecommunications Network, Voices in the Market: Consumer Consultation and Advocacy in an Era of Competition CTN, Sydney (1995).