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# BEYOND THE CITY LIMITS: AN AUSTRALIAN RURAL PERSPECTIVE ON TELEWORK

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## Abstract

*The majority of research literature on telework has examined the experiences of those who live and work in an urban environment. In contrast, this paper takes as its focus rural teleworkers. Drawing on two case studies of rural telework in Australia, the authors describe the models of telework adopted by participants and participants' views about the difficulties of telework. In addition to comparing the data from the two case studies, the paper also draws attention to the way in which the telework experiences of rural people are different from, and/or similar to, those of their urban counterparts who have traditionally been the main focus of academic work. While highlighting the need to avoid homogenizing rural people and places, the authors conclude by suggesting that one's location as a 'rural' worker is an important dimension to consider in studies of telework.*

## Background

Telework, as both a term and concept, is historically firmly located in the urban sphere. It emerged as a concept in the early 1970s as a response to the need to reduce energy consumption with the oil crisis and 'as a mitigation strategy against congestion and air pollution' (Mokhtarian and Salomon 1994, p. 751). Further, it was while apparently 'stuck in traffic in Los Angeles' that Jack Nilles was said to have first coined the term 'telecommuting' (Kurland and Bailey 2000, p. 49).

Given this background, it is perhaps not surprising that the majority of telework studies have focused on urban based workers. Mokhtarian, Bagley and Salomon (1998), for example, examine how dimensions such as gender, occupation and the presence of children impact on both the motivations and constraints to telework, but the sample of 583 workers are all located in the city of San Diego. Similarly, all of the 1249 respondents in a recent large survey of Australian teleworkers in a study by Brewer (2000) are located in state capital cities. In other studies authors do not include a discussion of whether their sample is located predominantly in a rural or urban context, perhaps assuming that the urban situation is the norm or that this is not a significant dimension for analysis (e.g. Duxbury, Higgins and Irving 1987; Olson 1989).

Against this lack of academic interest in rural telework has been a focus, in recent years, by government in Western industrial countries on telework as a source of rural revival. In an early publication on the subject the International Labor Office (1990, p.12) reported that 'special attention' should be given to rural workers who were one of the 'special categories' of workers for whom telework offered the greatest potential. Commenting on the situation in Europe more recently, Grimes (2000 p. 19) writes that 'telework has been one of the most vaunted areas of opportunities for rural areas by European policymakers arising from the new information and communication technologies'. In the United States work commissioned by the Department of Labor reports that there are new opportunities for urban based telework centers to relocate to rural communities and thereby reduce rural unemployment (Van Horn and Storen 2000). In Australia, the Federal Government has committed large amounts of funding to establish telecentres to facilitate telework based on the assumption that this has 'the potential to overcome many of the traditional handicaps suffered by rural and remote communities' (Horner and Reeve 1991, p. 46).

The purpose of this paper is to make a contribution to the gap in academic knowledge about rurality and telework. After providing an overview of the two case studies we examine the models of telework used by the participants and the difficulties they have experienced as a result of their change to a less traditional form of work practice.

## **The Case Studies**

This paper reports on two case studies of rural telework. The first case study examined telework in a state government department responsible for agriculture and rural communities. While departmental staff are distributed across the state, the smaller rural policy unit employing the three teleworkers is located in the central office in the state capital of Brisbane. The first of the three teleworkers was appointed in 1997 on a short-term contract to trial telework. She continues in this position today. In 1999 two more teleworkers were employed to work as part-time contractual employees. Two of the government teleworkers are female and one is male.

The second case study examined a nationally funded Internet and email-training program entitled 'BridgIT' (Bridging Information Technology), which had, as one of its main goals, the need to 'promote telework'. The project, which commenced in 1997, involved the appointment of seven trainers and an administration officer located in different rural and remote locations throughout the state of Queensland, as well as a project director located in Brisbane. Also telecommuting as part of the project were the six members of the project's steering committee, three of whom live in rural Queensland. While men have been employed over the course of the project, only women were involved in BridgIT at the time of the study, and therefore all teleworkers interviewed in the study are women.

The case studies first involved an examination of documentary materials relevant to each of the telecommuting experiences – policy documents, media releases, and grant applications. The second phase of the case studies involved in-depth interviews with the telework participants. In the first government case study, the three telecommuting officers were interviewed as well as urban and rural colleagues. In the BridgIT case study, interviews were conducted with the trainers, steering committee members, project director and administration officer.

## **Definitions and Models of Rural Telework: Encompassing the Experiences of Rural Workers**

One approach to what McGrath and Houlihan (1998 p. 58) have called 'the tortuous and disputed route of trying to establish a clear definition of telework' has been for researchers to offer different models and categorizations of telework (e.g. Kraut 1989; Helling 2000; Kurland and Bailey 2000).

While these categorizations offer some similarities with the experiences of telework undertaken by participants in this research, there is, ultimately, not an easy fit. For example, while the government workers most closely resemble the type of telework described by Kurland and Bailey (2000) as home based, they differ significantly in that they spend almost all their time away from the office. The physical distance between their 'home' locations and the central 'office' locations of these rural teleworkers obviously impacts adopted. In one case the distance is over 1400 kilometres and therefore choices about blending the home and office locales more frequently are not available. Similarly, while Kraut (1989) uses the category of 'supplementers' to refer to those who bring supplementary work home from a conventional office, this does not necessarily reflect the telework undertaken by the BridgIT steering committee members. As the project was initiated by a volunteer community based group (Queensland Rural Women's Network) the telework steering committee members also provide another challenge to traditional definitions of what constitutes 'telework'. These 'workers' operate predominantly in telework mode, conducting the majority of meetings via teleconference and maintaining contact via email and telephone. However, this telework is in addition to other paid work commitments undertaken by the women involved and which, apart from two members, is all done in traditional office settings.

Current models of telework may therefore be considered somewhat limited, and a broadening of definitions and categorizations is needed to encompass the diverse range of experiences of telework described in this study. The following sections explore this theme of diversity further by examining some of the difficulties and challenges facing teleworkers.

## Isolation: Differing Rural Perspectives

In a comprehensive summary and critique of the literature on telework Ellison (1999 p. 344) writes that 'isolation (either feared or experienced) is a consistent theme' in studies examining telework. Indeed, The International Labor Organization reports on work which found that 60% of teleworkers named isolation as the greatest disadvantage and explains that this isolation can affect one's 'physical and psychological well-being' (International Labour Office 1990, p. 18). A different perspective is offered, however, by Crossan and Burton (1993, p. 349) who warn that 'teleworkers may not be the homogeneous group commentators often describe' and point to different perceptions about isolation to develop their case. They explain that for two of the eight employees involved in their research telework did not lead to a sense of isolation. In fact, these workers experienced a lower sense of isolation because they had 'an extra activity in their lives as well as looking after a house and family' (Crossan and Burton 1993, p. 359). Similarly, Pratt (1984) notes that while 'standing around the water cooler' and being able to network, socialize and gain emotional support are important to some workers, those participants in her study who had young children or had disabilities gained new social contacts and reduced isolation through teleworking.

Interviews with participants in the BridgIT case study revealed that isolation was indeed a significant challenge for workers. Interestingly, however, this was not the view of the government workers, who felt that telework had lessened their sense of isolation. This difference in emphasis on the impact of isolation may be due to two different factors. First may be the nature of the work undertaken by the government workers compared to the nature of the work undertaken by the trainers in the BridgIT case study. The trainers' tasks, providing beginning training in the use of the Internet and email, was often exhausting, and sometimes monotonous. Furthermore, their work involved travelling long distances on isolated and often difficult to manage roads as one explained:

*You've basically got to put yourself at risk sometimes. They (clients) tell you to drive down this road and tell you it's alright but basically it's not that good at all ... I have been through 200 km of sliding dirt, slipping and sliding.*

Trainers viewed collegiate contact and peer support as important for motivation with one reflecting that she needed to talk to one of the other trainers because she was 'getting quite stale' and 'doing the same thing over and over again.' For the trainers it was also important to debrief about difficulties they had had with particular trips and receive emotional support from what one said was 'people in the same situation'. The government workers were involved in much different work. It did not involve a lot of travel or client contact and tended to be both diverse and challenging.

The research literature has demonstrated that the type of role one performs may indeed impact on the extent to which isolation is a primary concern as a teleworker. Salomon and Salomon (1984) quote early work on the subject which suggests that those involved in more routine tasks may gain little satisfaction from work itself (compared with professional or managerial workers) and may therefore place a high premium on social interaction in the workplace (Herzberg, Mausner and Peterson 1957). Indeed, the administration officer working on the BridgIT project explained that being 'in a room on your own for forty hours a week' doing clerical work caused her to feel quite depressed and dissatisfied. She compared herself with another woman who was 'always pushing telework as wonderful' but noted that this woman had both a family (while the administration officer lived alone) and was involved in more challenging work.

A second factor which may explain the differences in perspectives on isolation may be the different life experiences of the participants. Of the seven trainers, three had grown up in rural areas of Australia but for others the experience of being in full time employment in a rural location was a new experience. Of the seven only one had lived in her rural training region before taking up the appointment. In contrast, the three telecommuters employed in the government case study were all long time residents of the rural communities in which they now teleworked. For these workers, it may be that the effects of isolation, so commonly described in the research literature on telecommuting are not relevant, as isolation is their daily life experience. One explained:

*I feel less isolated by having a telework job. It has opened up great new horizons for me, this job. I live remotely ... This has allowed me to travel the region in a paid role, to participate in a number of pro-community groups that I love being part of. Through what we've done in government, in pioneering the telework thing, I've spoken at a lot of places. I have met heaps of people on-line through the projects that I'm working on, and this continues to be – so no, it hasn't isolated me.*

Importantly, for these rural workers telework represents the most likely (and perhaps the only) opportunity to engage in paid work and a career. One reflected that as an ex-teacher she had ‘limited career prospects’ due to where she lived ‘some 100 kilometres away’ and that with telework ‘now I have a career’.

The research literature on telework has provided substantial evidence to suggest that isolation is an issue for urban workers, just as it is for some of the rural workers in this study. However, for some geographically isolated workers involved in this study, isolation was seen as being reduced rather than caused by telework. Given this finding, Crossan and Burton’s (1993, p. 349) advice about needing to understand the heterogeneity of teleworkers in undertaking research appears to be highly pertinent.

## The Lack of Soft and Hard Technologies in Rural Areas

A greater concern for all participants was the lack of social and technological infrastructure to support them in their work. The workers experienced this as soon as they were appointed. For example, one worker located in the central government office in Brisbane commented on the difficulties that the telecommuters had experienced in setting up hardware, downloading files and accessing services, explaining that ‘in here we just ring up the help desk and five minutes later someone appears from the fourteenth floor to fix it’.

It was not uncommon, one government worker stated, for ‘lines to be down for almost a week’. Another saw the lack of hard technology as the major impediment to the adoption of telework in rural areas explaining:

*For instance, a person using a Digital Radio Concentrator System (DRCS) would have difficulty teleworking a job that required a lot of web searching as the movement from page to page is simply too slow and therefore costly. Vast file transfers required for database updates would be beyond the capacity of the DRCS also.*

The telework trainers all have expertise in the use of computer software and technical matters. However, they were acutely aware of the problems the lack of telecommunications’ infrastructure and personnel presented for rural people. Trainers were often asked by isolated people for assistance with equipment or programs which were technically outside of their job description, such as help with fax machines, printers and a range of software packages. One laughed that she was asked for help with ‘just about everything because you’re seen as this technical person’ and even if your expertise is limited ‘you’re the best thing available and it will have to do because you’re out there and no-one is ever out there’.

Trainers experienced difficulties in meeting work demands because of slow lines or the constant dropping out of lines. This made it difficult for them to perform their role to encourage people in the district to engage in training. One said:

They get so disappointed because they can’t get on ... they think I can wave a magic wand. And then you feel like you’ve failed and then they go, “Well, there’s no point in learning about this then because I won’t be able to use it. ... So many people say, “Why bother?” ... They are so disheartened.

A further constraint to telework raised in the BridGIT case study related to other aspects of the lack of infrastructure and diminishing services in rural areas. The administration officer, for example, lived on an isolated property 650 kilometres away from both the state capital and the project director. She described her early experience of the project, working from an office on her property with just a twice-weekly mail service, tied to a computer for forty hours per week, and ‘unable to duck out at lunchtime even to do the banking’. Another trainer in an isolated community explained that the only photocopying service she had available to her was the photocopying machine at the local school.

Urban workers in studies of telework have also voiced concerns with infrastructure. For example, Meyers and Hearn (2000) report that almost half of the thirty-nine urban-based company workers interviewed in their study of telework had experienced difficulties with the use of computer technologies. Therefore, while not suggesting that concerns with a lack of access to soft and hard technologies are peculiar to rural teleworkers, we would suggest that this lack of access is particularly magnified in the rural context.

## Conclusions

This paper has argued that we need to challenge urban-centric telework definitions and assumptions and incorporate the perspectives and experiences of those who live ‘beyond the city limits’ in future telework research. At the same time, it is

important to acknowledge the diversity of the people and places that are labelled 'rural' and not simply form another homogenous category 'the rural teleworker'. While recognising and incorporating heterogeneity into our understanding of telework and teleworkers offers challenges to us as researchers, it also offers exciting possibilities for greater knowledge and richer perspectives on the subject.

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