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Politics and Identity in Cyberspace

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POLITICS AND IDENTITY IN CYBERSPACE
A case study of Australian Women in Agriculture online

This paper reports on an exploratory study of the use of new technologies by the rural women's group Australian Women in Agriculture (AWiA). Data from interviews with twenty members of AWiA and an analysis of organizational documents, including a number of messages posted on the group's discussion list, are used to examine the extent to which cyberspace offers a new space for political engagement for women's activism. The experiences of AWiA members offer some cause for optimism. Geographically dispersed and excluded from male-dominated public agricultural arenas, the women of AWiA have constructed a technosocial landscape that facilitates the active dissemination of information, which has been used to advance a political agenda for farming women. However, there is evidence that less powerful actors within the network whose preference was for more social discussion on the list have been marginalized in the process. For these women, space for political engagement online has been limited on the AWiA discussion list. In conclusion, the paper draws attention to the new research questions that have emerged from this study.

Keywords   women; agriculture; rural; technology

In a front-page story entitled 'Confessions of an IT junkie', published in an edition of *The Buzz*, a quarterly magazine of the farm women's group Australian Women in Agriculture (AWiA), rural woman Judy Brewer (2001, p. 1) says that 'going Online has changed my life'. She writes that technology is essential to her business work and an increasingly important element of her social life particularly given that, as well as having two young children, she lives sixty kilometres from the nearest shop and two hundred kilometres from a town centre.

In this paper we explore Brewer's (2001) reflections about the impact of new communication technologies on rural women's lives and, particularly, the

extent to which these technologies have facilitated the political agendas of women in rural Australia. The focus for this analysis is the discussion list of AWiA, which was established in 1998 to support the political and social activities of network members. Using interviews with twenty members of the discussion list, we argue that AWiA women have engaged the technology to constitute new identities for themselves far removed from the traditional construction of women on farms as 'farmers' wives' or 'farm wives'. These are the identities of 'political activist', 'business manager' and 'community leader'. In tracing this evolutionary process we further highlight the way in which the women's use of technology has reshaped and shifted notions of 'public' and 'private'. To begin, we turn to the literature from rural sociology, which provides a context for understanding the way in which technology has been taken up by AWiA.

Farm women and their emerging political identities

American academic Carolyn Sachs (1996), who has made a substantial contribution to feminist rural sociology, has argued that the widespread use of the nomenclature 'farmwife' raises critical questions for investigation. These, she suggests, are:

> Who are farm wives and what do they do? How do they perceive of themselves? In the larger context, what changes are occurring in women's definition of themselves? What is the relation between the state and farm women?

> (Sachs 1996, p. 134)

Of these questions, the first – that of 'what women do on farms' – is the one that has, until recently, received the greatest attention from rural social scientists (see, e.g., Sachs 1983; Whatmore 1991; Alston 1995). A central outcome of this research has been the realization that the nature of women's work on farms, characterized by pluriactivity and the connection between the reproductive and productive spheres, blurred the traditional definitions of what constituted 'work'.

Sachs's (1996) second thematic question – that of how farm women 'perceive of themselves' – has also generated attention from rural sociological scholars. As a means of addressing this issue, some writers have turned their attention to the discourses of agrarianism and rurality in the narratives of farm women themselves. These discourses, which highlight the moral superiority of rural/farm life and the traditional division of household labour, constitute an identity for 'farm women' that has typically limited their role to the domestic and household sphere (e.g. Little 1987, 1997; Fink 1992). Liepins (1996), by

contrast, turns her attention to the media to explore the formation of gendered agricultural identities. She finds, however, a similar marginal position for the subject 'farm wife' in this discursive site, in that representations of women are 'almost entirely absent' or limited to their roles as 'wives, mothers and homemakers devoted to home, community service and ancillary support work on the farm' (Liepins 1996, p. 5).

It is in studying how farm women 'perceive themselves' that feminist rural sociologists have necessarily engaged Sachs's (1996) third question – that of how farm women's self-definition is changing. It seems that, just as the theoretical spotlight was being placed on the nature of farm women's identities, substantial changes began occurring in how these identities were being constituted. This is perhaps because the cultural turn within rural sociology coincided with a decade of rural and farm women's political activism across Australia, New Zealand, Canada and Europe. Motivated by the crisis in agriculture, inspired by the impact of the urban women's movement and frustrated by men's numerical dominance of established agri-political groups, rural women formed groups to provide new spaces and places for uniting and addressing their concerns. To analyse the changes occurring in farm women's self-perceptions as a result of their involvement in these groups, Mackenzie (1994) and Liepins (1995) undertook discourse analysis of the network's media. This process revealed the way in which the new farm women groups were contributing to a reconstitution of the identities of 'farm women' and 'farmer'. An important feature of these identities was – and remains today – a role for farm women in the public sphere of agriculture as political activists, as business managers and as industry leaders.

In a recent paper, Fincher & Panelli (2001) contribute to the scholarship on farm women's shifting identities, while simultaneously addressing Sachs's (1996) final question – that of the relationship between farm women and the state. The focus for their analysis is how the political actors of the AWiA movement are using the state to advance their agendas. To undertake this analysis they draw on what Cox (1997, p. 21) refers to as 'spaces of engagement' for political change. These arenas are distinguished from the 'spaces of dependence' that are the place-specific and material spaces in which political actors operate. They are, by contrast, often contingent and dependent upon the construction of networks (often beyond the immediate physical space).

Fincher & Panelli (2001) identify two ways in which the women in agriculture movement in Australia has generated 'spaces of engagement'. The first has been by positioning themselves within specific geographical locations. For women in agriculture members this has meant strategically positioning themselves within discourses of 'rurality'. This strategy, the authors suggest, both facilitated the development of a cohesive group identity and fostered a sense of legitimacy in dealing with the state. The second has been to engage strategically both with private and public space for their activism. To argue this case,

the authors demonstrate the way in which the private space has been used by women to develop the skills, knowledge and expertise used in the public space. For example, lobbying politicians, holding conferences and submitting press releases undertaken by AWiA members is organized and supported through such private sphere activities as face-to-face and telephone conversations between women and home-based meetings.

In this paper, we take up the arguments made by Fincher & Panelli (2001). Our purpose however, is to address one area of space that the authors do not consider in their analysis of activist women's use of space, that is the use of cyberspace. This is a particularly important space in which to examine political engagement for a group such as AWiA, because their 600-member constituency is dispersed across the country. This is because technology has the capacity to address the limitations to group identity and political action that may exist when there is a lack of physical connectivity amongst members. A further reason why cyberspace is an important space in which to examine farm women's activism is that this space offers the potential to disrupt existing power and social relations (Loader 1997). Groups using information and communication technologies (ICTs) may challenge dominant political interests and agendas through forging alliances and undertaking activities that do not rely on formalized face-to-face or structured institutional interactions in specific geographic locations.

While Fincher & Panelli (2001) took as their focus for analysis a range of farm and rural women's groups in Australia (as well as an urban-based group), we focus specifically on the organization AWiA. The group, formed in 1992, has the following objectives:

- Uniting and raising the profile of women in agriculture
- Addressing rural and agricultural inequities
- Working to ensure the survival of agriculture for future generations
- Securing local, regional and international recognition
- Achieving the status of a political and economic force

(AWiA 2002)

In order to understand the extent to which cyberspace may offer a new space for AWiA members to meet these political goals, it is necessary to examine how members conceptualize technology. The following section of the paper provides a conceptual framework for undertaking this task.

Gender and the social construction of technology

Social-shaping or social constructivist approaches to technology (MacKenzie & Wajcman 1999) offer a compelling perspective for looking at gender and the Internet. This is principally because constructivists' observations of 'technol-

ogy' recognize not only about the built device itself, but also the practices and knowledge related to it and the social arrangements that form around the device, which in turn imbues practices and knowledge (Mackenzie & Wajcman 1999). The analysis and technological discussion undertaken in this paper departs from dominant approaches towards technology that typically study the effects or impact of technology on society. Rather, it explores how the social shaping of technology by rural women has facilitated the social process of women's engagement in online activism. In this paper we apply the specific model of SCOT (Social Construction of Technology) because it has several advantages in analysing users as agents of technological change (Pinch & Bijker 1984). SCOT's conceptual framework focuses on three interrelated components: interpretative flexibility, relevant social groups and closure and stabilization of the artefact.

The focus on 'interpretative flexibility' in the SCOT framework 'underscores artefacts and, in particular, their working as subject to radically different interpretations that are coextensive with social groups' (Kline & Pinch 1999, p. 114). The SCOT framework emphasizes that technological studies need to draw attention to technological benefits that are human-centred, usable, equitable, appropriate and responsive to everyday culture and practice (Williams & Edge 1996). This study of AWiA is thus about the usability of the Internet for rural women's activism and the intergroup negotiations between relevant social groups involved online as they work to make their organization a 'political and economic force' (AWiA 2002).

In SCOT, 'relevant social groups' that play a role in the development of a technological artefact are defined as those groups that share a meaning of the artefact (Klein & Kleinman 2002). Within AWiA, a number of social groups participate in constructing AWiA online. For example, different types of farming women (e.g. graziers, horticulture, fishing, etc.), rural consultants, researchers and bureaucrats participate in the list and collectively construct meanings about rural and agricultural concerns. However, as discussed later in this paper, these multiple groups embody a specific interpretation of the AWiA list and, thus, negotiation continues over the design of AWiA's content and communication style. Evidently, different social groups in AWiA associate different meanings with the Internet, leading to interpretative flexibility over the discussion list. Interpretative flexibility will cease at some stage and stabilization will occur. At this stage, AWiA has stabilized because there are fewer conflicts and the artefact (discussion list) no longer poses a problem to any relevant social group, and the multi-group process on AWiA has achieved closure. In the SCOT framework, closure by definition occurs when unresolved problems are redefined so that they no longer pose problems to social groups (Klein & Kleinman 2002).

The SCOT approach has two major limitations. First, SCOT says little about the social structure and power relationships within which technical development

takes place (Russell 1986). A related concern is the neglect of the reciprocal relationship between technology and social groups. In agreement with Kline & Pinch (1996, p. 767), we believe that it is important to show not only how social groups shape technology, but also how the identities of social groups are reconstituted in the process. Another major concern with the SCOT approach is the absence of a focus on gender and, importantly, the lack of attention to the historical nature of gendered power, which has been of concern to feminists studying technology (e.g. Wajcman 1991; Cockburn & Ormrod 1993). Mindful of this omission, this paper places gender at the centre of its inquiry. Thus, our study of women's use of technology shifts attention away from the artefacts (Internet and computers) and instead privileges the work women undertake online and their processes while online. In this sense, our interest is not in the technology itself, but rather on what Jackson *et al*. (2002, p. 238) call the possibility to 'envision new or alternative modes of engagement'. Before beginning to explore data on this subject, the following section provides a brief overview of the research methodology used for the study.

Methodology

This paper is based on twenty semi-structured interviews undertaken with members of AWiA during their Annual General Meeting in Melbourne in 2001. A key advantage of this process was its flexibility. Given the differing levels of engagement with technology and opinions about technology held by members, a semi-structured approach was useful in that it allowed us to contextualize approaches to address the views of particular individuals (Cohen & Manion 1989). The interview was also valuable in that it is a method that gives emphasis to the meanings and interpretations of participants and thus provides the means of valuing the voice and experience of women (Limerick *et al*. 1996). Interviews were transcribed and coded thematically for analysis using the software program NUD*IST VIVO (Qualitative Solutions and Research 1999).

As well as drawing on interview data, the paper also uses documentary evidence in the form of past editions of the organizational monthly publication *The Buzz* to provide a more comprehensive understanding of the research questions (Yin 1994). This magazine is useful in elucidating the research question, particularly as a selection of letters on the chatline are published monthly. We thus had an edited, but still important retrospective picture (Sarantakos 1993) of the topics that have been discussed electronically as well as the nature and tone of the online discussion.

It is recognized that the use of new technologies by members of AWiA may be undertaken for a range of purposes, by different individuals or subsets within the group, and between these individuals and subsets and outside members. The organization itself is made up of women involved in a range of farm-

related activities. Some are on farms while others are in government, academia, extension agencies and rural-based commercial enterprises. Currently, the organization has no demographic data on the make-up of its discussion list, which could have provided further insights into the data. For the purposes of this paper, we have looked separately at the use of technology by and for the Executive Board of the organization and the use of technology by and for the general membership of the group on the AWiA chatline, Australian Women in Agriculture Online. These are discussed below.

The technosocial landscape of AWiA

In this section of the paper we shall discuss the way in which the technosocial conventions of the AWiA email list have emerged and come to be stabilized. Members have a historical reliance on technology for conducting the business of the organization. Before Internet technology, members had used faxes, phone and post. The latter was particularly problematic since some board members on isolated properties only receive post once a week or, in periods of flood or fire, are cut off from mail access for days or weeks at a time. The former technologies of phone or fax are also problematic, as is the use of the Internet, for rural people in Australia who rely on the Digital Radio Concentrator System (DRCS), as it is notoriously unreliable and users are often without lines for days or weeks (Simpson *et al.* 2001).

Members agreed there were advantages in the use of new communication technologies for board members; however, there were also some tensions. Of these, the most commonly mentioned was that there was a difference of opinion as to the degree of informal discussion that should be engaged in in a board email. Some saw the issue as the need for board members to restrict any non-business references in board emails. One member commented, for example, that the problem facing the board was that some members could not 'get to the point'. Others believed that informal discussion between board members was important, but that strategies needed to be developed to ensure that this was done using other media such as the telephone. As one interviewee commented:

> The problem with the technology is that people like to chat to each other. How to separate out the chat from the business is difficult. We have had to really work on that to combine both . . . encourage people to ring each other and talk between meetings or email each other for chats as well as for business.

As well as using email for sharing information and networking amongst each other, AWiA board members also use the technology for communicating with

members – that is, they ask for feedback on submissions they have received or for issues they would like raised if a member is involved in a lobbying trip or is a representative on an industry/government committee. Another purpose of the discussion group for board members is supporting and encouraging membership activities. One Executive member summed up this role saying:

> I try and encourage what's going on. If someone posts something saying that they are having a gathering, I'd write and say, 'Great! Good on you.' So I try and not just contribute by saying something but also by supporting what others are doing and saying.

What the members of the AWiA board do not use the technology for is direct lobbying. One commented: 'We use technology for information gathering to do the lobbying, but typically the lobbying we do is face-to-face.' This 'face-to-face' lobbying involved annual trips to the national capital, Canberra, where members meet with various politicians and industry leaders. Asked why there was not greater use of new technologies for lobbying politicians, board members argued that they believed there was greater potential to influence people when meeting them in person. These women are thus interpreting technology for a range of political ends including developing their political skills and knowledge, and sharing information between group members. At the same time, they construct technology as being less powerful politically compared with direct personal interaction.

Australian Women in Agriculture online

The discussion list AWiA was established in 1998 and currently has 206 members. No demographic data on list members are held by the organization and thus it is not possible to present a profile of participants. However, interviews with members as well as an examination of messages indicate that, like the broader membership of AWiA, list members are a mix of women living in rural Australia, government officers working in agricultural agencies, agricultural consultants and rural researchers.

The reasons for only a third of the AWiA membership being involved in the discussion list had not been investigated by the organization, but it was a subject that was of great interest to members of the Executive. In replying to why she thought some members had not signed up to be part of this group, one current leader and farm woman observed:

> Maybe it is cost. In lots of areas it is still expensive, especially where there aren't local service providers. Maybe it is that they think they're going to get inundated with emails. Maybe they haven't even got a computer yet or haven't had training. I just don't know.

To explain why some AWiA women do not participate in the online list, we should think beyond the purely functional role of access as being grounded in infrastructure and technology training towards a conceptualization of geographies of access (Scott *et al*. 1999). Dutton (cited in Scott *et al*. 1999) argues that we cannot think about Internet-based technology that simply adds to people's existing capacities and resources. Instead, we must ask other questions. These questions are: 'To what are women gaining access?' And, 'How is access to Internet-based technologies substituting other activities in women's lives?' Some perspective on these questions was provided by three of the twenty members interviewed who are not part of the discussion list. All three of these women were farm women living in different parts of rural Australia. One commented on the fact that her paid work demanded time on the computer, and therefore she did not want to engage in using technology in her leisure and private life. She explained this functional view:

> I use the email as a tool. I find it very time consuming when time is precious. I spend so much of my life at the computer now, that to have to email people as well would be a chore. I very rarely send a chatty message. It's just not my thing. I'd rather talk on the phone. I find it impersonal. There's no intimacy about it. People say it's so quick. Yes, it's quick, but it's not intimate.

While the second woman agreed with the participant quoted above saying that she did not like the impersonality of technology, a third said she was simply too busy. She referred to the fact that, often, involvement in off-farm paid work, on-farm work and volunteer work meant that something like being part of a discussion group was a 'luxury' she could not afford.

For the remaining seventeen participants interviewed, participation in the AWiA discussion list was critical to receiving up-to-date information and being in a position to provide input into policy. This attitude was summed up by the participant who replied to a question about the significance of the discussion list saying, 'We finally have a voice'. She provided a range of examples to demonstrate what this meant. In one example she referred to a posting by an Australian Broadcasting Commission reporter who said they would be interviewing the Prime Minister the next day and asked members if they had any particular questions they would like addressed. This participant's example along with those provided by others demonstrates the way in which cyberspace provides the opportunity for women activists to subvert what Scott *et al*. (1990, p. 550) have called the 'geographies of public and private'. They are participating in the public world of agri-politics in which they have traditionally been marginalized – and doing so from the private world of their home computers.

It had been the original intention that all members of AWiA would be a

part of the online group. Thus, when members joined the organization, they were immediately connected to the discussion list. This did not continue, however, beyond 2000, when some members who had been connected complained about the number of emails they were receiving and the content of the emails. This reflects an ongoing tension in the discussion list. It was a tension one board member characterized by the 'different groups' that she said made up the membership of AWiA. One group, she said, were the 'bureaucrats and consultants' who wanted to use the list for distributing information. The second group were those she categorized as the 'broad base of membership', who were interested in obtaining information but also in informal discussion and networking. The participation of actors from different communities of practice, such as bureaucracy, academia, and agri-commerical enterprises, provides AWiA with the opportunity to meet its political goals. However, as other research has noted, simultaneous membership of more than one community can create tensions for individuals as we involve ourselves in many potential actions (Becker, cited in Star 1991, p. 50).

At this stage of the research, we have not undertaken interviews with members from the full range of occupational groups represented on the list or undertaken a detailed analysis of postings according to occupational categories. However, it is possible and likely that the different occupational identities of members will inform their construction of the list. Importantly, members are not anonymous on the list and, typically, when postings are made, signatories reveal the occupational position and geographic location of a member. Given the different discursive power of occupational identities (politician, Minister's advisor, journalist, farm woman), some postings may be seen to be more privileged or legitimate than others. This may be the case with those that have been vocal about how the list should be used. This was evident when a list member, whose occupation was not specifically known, but who signed herself as 'Dr' wrote to the list saying: 'Is it possible to partially remove me from the email list? I would like to continue to get the outgoing emails from you BUT NOT the returning comments etc.' Another member from a farm in the southwestern part of the state of Queensland, replied saying that, while she did not want to risk 'adding to the gabble', she too would 'like to receive the minimum'. Quite a different response was elicited in two replies from women in rural Victoria and New South Wales:

> Having seen people come and go from the AWiA list I am intrigued to see talk about gabble . . . my understanding was that this forum wasn't just for information dissemination but to hear each others' voices. I sometimes feel it's clutter . . . not gabble and so I only open my AWiA mail (which I prize!) when I have time to read (not hear unfortunately). . . . As rural women this is a valuable way of feeling part of another community. Please consider carefully any changes. . . . I like it the way it is!!!

> Let's not forget that, only a short time ago, access to this amount of information, and opinions, and discussion, could only be dreamed about. Now we can access women from different skills, backgrounds, farming concerns – all at the click of one email. I think it's fabulous.

In an interview, the list moderator at the time recalled the debate, as well as the way in which some members who had been actively involved in 'chatting' seemed to 'jump off and never speak again' rather than, she said, 'be assertive enough to say that this is what we want it for so you get off'. Another member concurred with this perspective, reflecting on the changes in the list since the tensions had erupted:

> People wanted to chat about the weather and the kids and that was okay. But then a certain percentage of the membership wasn't happy with that at all so they started saying things like, 'We don't want to hear that it's good drying weather.' So I think it's been very quiet in the last couple of years.

An examination of the emails posted during April 2002 attests to the dominance of instrumental communication on the list. Of the total forty-one posted messages, one focused solely on personal issues as a new list member introduced themselves. The remainder either provided or sought information. This demonstrates the stabilizing of technology within AWiA.

At the same time, members maintained that there is still a place for chat. Many found this aspect of the discussion list particularly important. One commented:

> Maybe someone will say that we had a meeting today and who hosted it and what was discussed and things. And then they'll say at the bottom that 'My daughter had my first grandchild today.' At the bottom you get that human aspect which really makes it more special. You can really picture people.

A range of emails published in previous editions of The Buzz attest to the prevalence of this particular type of discourse, of which the following is illustrative:

> If you want to get a political skills handbook Joan Kirner and Moira Rayner have not long put out The Women's Power Handbook. It is a very basic commonsense read about political activism in easy to understand language. Published by Viking Press. Had some great rain this weekend, Sorry to hear Moora has copped a flood.

This mention of 'the weather' in an email on the discussion list is common according to interviews with members. Asked why they believed this topic is so prevalent, members pointed to the importance of the weather to farmers and anyone involved with agriculture.

The construction of technology by AWiA members

The technology constructionist approach we have adopted in this paper to examine the extent to which cyberspace offers women a new space for political engagement focuses attention on the human-centred processes manifest in the technology of the discussion list. The data reveal that the construction of the AWiA members cannot be separated from their own gendered identities. There is, as Cockburn & Ormrod (1993) demonstrated in tracing the life of the microwave oven through design and manufacturing to its point of purchase, a relational and lived process by which technology and gender are 'made'. Thus, the AWiA members' construction of the technology as a 'business tool' has been influenced by their own gendered identities as 'women activists'. The aims and objectives of the AWiA are broad ranging and reconstruct women in agriculture from a position of assisting on the family farm or 'farm wife' to a political force in their own right in the agri-political sphere. The objectives to raise the profile and political status of agricultural women alongside those of structural adjustment, viability and equity concerns in relation to the agricultural industry signal an intent to engage politically at the highest levels. Adopting a 'business' approach to using the technology demonstrates AWiA members' reconstituted identities as they shift from 'farmers' wife' to 'political activist'.

To understand why the women of AWiA have constructed discussion list technology as being for 'business' rather than 'leisure', it is also necessary to examine the broader gendered context in which their subject positions are constituted. The first contextual factor is that for women leisure is typically highly circumscribed by gendered power relations (Green et al. 1990; Wearing 1998). In their review of the still limited literature on the subject of gender, leisure and ICTs, Green & Adam (1998, p. 302) make the salient point that because of

> the constraints on women's time, especially their leisure or 'uncommitted time', the use of ICTs for leisure purposes is likely to be limited for most women and heavily dependent upon the possibility of combining such activities with the work of child minding or housework.

This may be particularly pertinent for the farming women who were the subject of this study. This is a group of women who are likely to be responsible

for all domestic labour and a number of other on-farm tasks, who undertake off-farm paid work and are involved in a number of voluntary and community activities (Alston 1995; Sachs 1996). Thus, these are women for whom time is critical. There is, as well, the added factor that the women's already limited time availability will have been further eroded by their online activity. This was certainly the experience of the participants in Scott's (2001, p. 416) study, one of whom found responding to the excessive numbers of emails that are possible due to the speed and efficiency of technology, as a 'bit like housework'. Given this content, it is understandable that the technology used by AWiA members has been largely constructed in ways that give primacy to it as a tool for efficient business use. In this sense, the lives of the women have shaped the technology of the discussion list.

The construction of the discussion list by AWiA members as primarily instrumental may shift and change over time. Wajcman (1991, p. 103) has argued that 'many domestic technologies were initially developed for business use' but have been subsequently reconstructed. Frissen (1995) has illustrated this phenomenon in terms of the telephone, which was first seen as an instrument of 'business' rather than one for social interaction; but women have, over time, established a dimension of 'sociability' in relation to its usage. It may be that in this period in the early adoption of the Internet as a medium of communication 'business' transactions may be given more prominence, but this may change. It is certainly the case that the telephone is constructed by AWiA members as being for both personal and business use. While it is often used for undertaking the business of AWiA, there is no suggestion that a conversation about 'business' on the telephone precludes including some personal opening or closure. Indeed, during the three-day AWiA General Meeting, during which time the interviews reported in this paper were conducted, we noted that it was common and seemingly acceptable for there to be a blurring of conversational/personal and formal/business discourses within AWiA. The more stringent discursive boundaries that have been established by AWiA members in the positioning of the computer technology as purely for – at least primarily for – 'business' may also come to resemble the conventions associated with telephone or meeting technologies as it becomes more integrated into the women's lives.

A new space for political engagement?

This research has demonstrated that ICT has not only overwhelmingly improved communication between members but has linked the group into the political process in more effective ways. Through the sharing of knowledge fostered by new technologies, rural women have had opportunities for input into the processes of policy making and access to government representatives and

decision-making forums that were previously unavailable to them. A further outcome of the technology is that it has facilitated the women's identity transformation, as they become 'women in agriculture' who are embracing activism to give their organization 'the status of a political and economic force'.

However, there are, to use the terminology of Cox (1997), 'spaces of engagement' available electronically not being exploited by AWiA which could facilitate the organization's meeting its political goals. The technology could be further used as a means of collectivizing and empowering members. It could also be used to assist the development of a shared identity – 'women in Australian agriculture' – as well as to provide opportunities for negotiating the differences and diversities of women involved in farming.

Clearly, there has been some tension among group members because they have viewed the technology as differently located: as a white good, a brown good or a mixture of both. This tension was played out on the list as members either voiced their preference for instrumental talk, for social talk, or for a combination of both. Power dynamics were revealed through these tensions. That is, while stabilization of the technosocial conventions on AWiA have benefited some members, this has not been the case for those who have left the list. Star (1991, p. 43) points out 'a network is only stable for some, and that is for those who are members of the community of practice who form/ use/maintain it'. Thus, those 'non-standard' members no longer have their voices heard on the AWiA discussion list. This means that these women are no longer participating in cyberspace as a political 'space for engagement'. It may be that the women who left the list had limited political aspirations. However, their participation in the list may actually have politicized them. This is because involvement in a discussion list such as AWiA Online has been demonstrated to increase women's confidence in using new technologies, sharing points of view, accessing information and resources and expressing one's ideas (Lennie *et al.* 1999). What is interesting is that the importance of a 'private' space in which women may be supported to debate ideas, network and develop skills and knowledge that can be used in the 'public' space is something that has been well recognized by AWiA (Fincher & Panelli 2001), but in the online environment this has not been well acknowledged, or, indeed, acknowledged at all. To realize the potential of new communication and information technologies, however, group members need to reconsider the limited way in which they have constituted technology. Such a reconstruction will include relational discourses in defining technology, and not only transactional and functional discourses. This is not to suggest that attempting to create a space for open debate and discussion will, by definition, lead to such debate and discussion occurring. However, it is possible that groups such as AWiA can seek to develop online spaces that support inclusive and open debate and discussion.

Conclusion

The incorporation of technology into the political processes of AWiA is relatively new. Given the shifting nature of technology construction and identities, future research on the use of technology by AWiA members will be important in providing greater insight into the potential of new ICTs for political activism. In turn, this will raise new questions about how cyberspace is expanding and reconstituting traditional political engagement. Further exploration is also required to learn more about non-users of the discussion list. This would focus our attention on those women who do not use new communication technologies at all and the extent to which they are being marginalized by increased online political activity. What will be of use about such work is that it will highlight difference and diversity amongst women. Studies of gender, technology and communication have often claimed that there are essential differences between women as a group and men as a group (e.g. Reeder 1996; Pew Internet and American Life Project 2000). We would argue, however, that instead of examining gender as an independent variable in research on ICTs there is more significance in examining differences across subject positions and seeking to understand why such differences exist. In this paper, we have taken a gender perspective in exploring the technology use of the list participants. However, our focus has not simply been on the participants as women per se, but as rural and farm women. We have drawn attention to the salience of this latter identity in determining how AWiA members have constructed technology in their lives. There is, of course, a range of other subject positions these women inhabit, which will also influence their construction of technology. Thus, to understand fully the relationship of gender and technology in these women's lives, we will need to incorporate into future analysis an understanding of these different subjectivities.

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