

# Community Base

## The Essential Grounding of

by Linda Christiansen-Ruffman

*L'auteure relate l'importance du rôle socio-historique que les femmes scientifiques jouent dans la communauté féminine à l'extérieur du monde académique en rendant hommage à des pionnières féministes comme Maggie Benston. La participation communautaire constitue une des principales composantes d'une bourse féministe. Elle facilite la purification des sciences et de la technologie de leurs préjugés patriarcaux et encourage leur réorientation pour qu'elles servent la communauté et ses divers besoins humains.*

### Introduction

The legacy of Margaret Lowe Benston in science and technology is not only the encouragement of an increased representation of women in these fields. Maggie saw the need for women to transform science and technology in fundamental ways. As she wrote:

We cannot afford to give up the struggle to understand and to come to terms with our world. As women and as feminists, we must begin to deal with the science and technology that shapes our lives and even our bodies. We have been the objects of a bad science; now we must become the makers of a new one.  
(Benston, 1989a: 74)

Hers was a feminist vision. She recognized the social context of science and hence the importance of a community base in its continuing transformative process. She envisaged a science and technology grounded in and oriented toward the community and its diverse human needs. As she said, "Both the 'science with the people' and 'science by the people' models are goals that those of us with scientific and technical training can work toward now." (Benston, 1986: 72) She saw these and "science for the people" as three possible ways of making the necessary changes in the role of experts in science and technology.

The first section of this article analyzes the social dynamics that accounted for the invisibility of the few women who entered science and technology in the mid 20th century. Maggie Benston, a feminist grounded in the women's community, showed science and technology a different path. In paying tribute to the feminist vision and activities of this early pioneer,

we reflect on "the personal is political" and upon the importance of the women's movement for the development of the women's movement as a whole in science. We next explore the crucial reasons for continuing to ground science in the women's community, in the everyday world of women and women workers. The article concludes with a cautionary note about scientific elitism and individualism, and with a reminder of the continued contribution of a diverse community base to contemporary science and technology.

### Entry of invisible women into science

Women continually live with the consequences and contradictions resulting from the dominance of patriarchal institutions over all spheres of life. Occasionally, women do benefit from some patriarchally constructed rules and situations. Society's need for scientists and university professors and the still current "universalistic" and "objective" rules of education, research, and scholarship have allowed a few selected and talented women to participate as researchers and scholars within the academy, albeit in very small numbers.<sup>1</sup>

Pioneer women scientists and scholars in the mid 20th century had to "master" the many norms and rules of science and of their elite workplace in order to gain appropriate credentials and to perform academic rituals properly. The very few women in science did not identify themselves as women, especially when their numbers were small and there were no organizations to help reduce their isolation. It would have been very difficult for them to do so. They had entered a man's world and were to be judged by its rules. It was in everyone's interests for them to be invisible as women. Moreover, during

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## Science in Women's Community

this historical time, women's culture was closeted and was not a conscious political resource for these women. They were unlikely to see themselves as women scientists or as based in a women's community. If they were asked about the women's community, they were likely to adopt the majority culture's view of women's realm as second rate and unimportant. These early pioneers lacked the alternative visions and possibilities later provided by the women's movement.

Not all early women scientists handled their situation in the same way. (See Ainley) A number of them learned the rules so well and became so constrained by the patriarchal world in which they found themselves that they felt they had to reassert existing patriarchal ideas, norms, and practices constantly in order to "get ahead." Some became men in women's bodies, embracing patricentric components of the culture with more diligence than the men, in a vain attempt to show they "belonged." Others remained more in tune with women's cultural base, producing exciting and innovative science but meeting stiff resistance. (See Keller, for example)

Despite these differences, women scientists shared a paradoxical but common status. The discrimination within the workplace constructed them as socially inferior, but the many layers of sexism within science remained hidden under a rhetoric of scientific objectivity and individualism. Under these conditions, it would not have been socially useful for them to identify as women. The social conditions promoted the idea of equality and their presence indicated that they had competed successfully as individuals. Since the rhetoric of equality had allowed them entry into science, to draw attention to their womanhood would undermine their personal credibility and diminish

their personal accomplishments. To admit that they had been helped by affirmative action would, in the minds of others, suggest that they might be second-rate. Once part of the system, it was difficult even to recognize the maleness of the rules of the game they had "mastered."

Given the power of the institution of science and women's lack of public presence in defining all social institutions, it is not surprising that women were so few in number and that those present were invisible. What was less predictable was what might be called the women's movement within science. The women's movement in science was made possible by feminist pioneers in science who were also part of and committed to the Women's Liberation Movement. These women rejected the easier paths of career advancement, proclaimed their status as women scientists with a different agenda, and challenged the patricentric nature of scholarship.

### Pioneer Work of Maggie Benston

Maggie Benston was a leader of the Women's Liberation Movement (see Glazer and Waehrer) and a pioneer in the women's movement within science and scholarship. She identified as a woman and recognized women explicitly in her writing and in her actions. Feminist values and principles governed her activities. Her experiences within the larger women's movement taught her that the personal was political. Her activities were consistent with a feminist commitment to transform the nature of science and technology in content and in methodology. As she wrote:

As long as technology is created only by credentialed experts operating from this dominant worldview, it will

serve only the interests of those in power and will be inaccessible to women. In a new twist, the idea of the personal as political can be applied to technology in its social context. Present technology contains certain values built into it and is political in that sense. The process of creating a new technology involves not only making these present values and assumptions explicit but creating a method by which different values and assumptions can be incorporated. These different values might reflect alternate, feminist visions, personal needs and goals, or whatever was appropriate to the technology under consideration. In that sense technology needs to be personal. The fact that it is so far from reflecting the needs or values of individuals today is a measure of the extent to which it is out of our control. (1989b: 210-1)

The women's movement helped Maggie to discover important features of the patriarchal nature of science and knowledge and gave her the strength and structural support to articulate alternatives:

As a feminist, I am looking for technologies that embody egalitarian principles and support the collective work that I want to do, that facilitate decentralized decision-making and the freest possible access to and control over information.

(Benston, 1989b: 217)

She recognized the need to make science and technology accountable to the community. Consistent with her feminist principles, she rejected the hierarchical privileges that came with her academic status and expertise. By her own actions, she challenged what she saw as inappro-

priate features of science and attempted to revise the rules of the knowledge "industries" so that their practices and their benefits could be shared by women in the community.

One of the differences between feminist activists and existing technical experts is that feminist stress on collective action. This is more than simply a feminist quirk but a recognition of the importance of community and of the institutions that build and structure human interaction. (Benston, 1989b: 218)

In fact, Maggie worked with, enjoyed, appreciated, supported, and empowered the women's community outside academia. She acknowledged that women in the community were necessary collaborators in achieving the just and equitable world that is fundamental to feminist objectives. She understood that feminists must begin the difficult work of creating lives and social processes that embody these goals. Like many pioneers, her efforts were not always successful or appreciated at the time. Creating social change is not easy. Some of her innovative research projects were rejected because they broke conventions of what was considered to be appropriate research. The difficulties of working with the community were not understood by her scientific colleagues and this community-based approach, which challenged the elite and hierarchal values of science, was discouraged. The idea that science

and technology could be put to work for ordinary, community-based women and women workers instead of businessmen, capitalists, politicians and the military challenged taken-for-granted assumptions regarding the practice of science. Teaching students and re-organizing workplaces

so that women were empowered by knowledge and in control of knowledge was a rare approach. Such an orientation called into question the scholarly and educational activities of other researchers and scientists as well as the sexist, classist, and racist underpinnings of these supposedly universalistic institutions.

This implicit critique of scientific practice was not welcomed generally, but it did strike a responsive chord with other

were at least partially accepted within the women's movement in Canadian scholarship, but they still have not gained full legitimacy.

### The women's movement in science

As the women's movement within science and scholarship gained strength, with leadership from pioneers such as Maggie and with help and support from the women's movement as a whole, the social dynamics of being a woman in science and technology changed. Feminist scholars took pride in their identities as women and in recognizing their contribution to science as feminist scholars. Moreover, by the 1980s it had become increasingly difficult for other women scientists to deny being women. Women scientists were often asked to speak as women scientists and their identity as women was increasingly hard to escape. The growing women's movement in science also led to the initiation of government policies and programs globally to increase the presence of women in science. (See Stolte-Heiskanen)

The women's movement within science not only sought to increase the number of women scientists and to decrease the barriers to women in science but also to transform the practice of science. It became more legitimate to focus on women and women's experiences as important to the creation of knowledge. The 1970s and 1990s in Canada and in many parts of the western world witnessed the growth

of Women's Studies and feminist scholarship as well as the growing recognition of the biases against women both within the organization of science and within scientific thought.

Critiques of science and awareness of the fundamental sexist biases within sci-



"Maggie in her Community"  
(August 1988)

Photo: Pat Davitt

feminist scholars. They recognized the importance of these alternative, transformative, feminist ways of organizing, empowering, and doing science. Over time, as the women's movement within science gained momentum, alternative community-based feminist methodologies

ence emerged gradually and unevenly within disciplines and within countries. (See Wylkie *et. al.*; Rosser) As women scientists came together, they began to identify and share ways in which scientific norms, rules, and practices felt foreign to them. They recognized that what was considered by science to be objective knowledge was in fact patricentric and distorted knowledge. Since the sciences were developed by, for, and about men, patricentric thought had become embedded within its assumptions and practices.<sup>2</sup>

It has been and will be an intellectual challenge of major proportions to rid science and technology theory, methodologies, and practices of their layers of patricentrism. The pervasiveness of this patricentrism means that it will take years to correct these biases within science. While doing so, it is necessary to call into question some of the ideas, norms, and practices within the academy, including, paradoxically, the universalism and objectivity of science that made women's advancement possible.

### **Feminist research and scholarship**

The feminist scholarly community has recognized the significance of the women's community (see Hubbard, 1990: 1-2) and the importance of the ongoing interrelationships between science and academe. (See for example, Miles and Finn, 1982 and 1989; Wine and Ristock) Now that there are new recruits to the women's movement in science who do not share its history, it is especially important to articulate the intellectual, scholarly, and political reasons why feminist scholarship must relate to and be part of an ongoing women's community outside of academia.

Not all scholars who consider themselves feminists use feminist methodologies aimed at or associated with the women's community. A distinction needs to be made between these feminist methodologies and feminists' methodologies. The concept of feminists' methodologies is an empirical one and its content would be found by a study of the ways in which people who consider themselves feminists conduct research. (See Reinharz) The concept of feminist methodology, on the other hand, is a prescriptive one. It includes developing a set of methodologi-

cal rules that address the feminist critique of patricentric science and that attempt to create a body of knowledge grounded in women's experiences. The relationship of feminist methodology to the community is a key element in that prescription.

In other words, there are researchers who consider themselves to be both feminists and researchers but who do not deem it important to engage with anyone but other scholars in the pursuit of knowledge. For some studies and for brief periods of time, such a research strategy may well be an appropriate one. But it is unlikely that scholars who remain in the patricentric ivory tower for long periods can sustain their critical, feminist perspective. The weight of patricentric scholarly tradition suffocates it. Their work becomes coopted, abstracted, and stale. They become complacent and blind to patricentrism.

Feminist methodologies rely upon the women's movement and engagement in the feminist community to provide an important structural or material base for critiquing pervasive and invasive patricentric scholarly practices that still plague our work within the academy. Feminist scholarship continues to uncover patricentrism in the rules of the organization of science, in its intellectual productions and knowledge, and in its technologies or practical usages. The feminist community in all its diversity provides the best possible base for a critique. It furnishes glimpses of alternative ideas, norms and practices and thereby suggests directions that might help to rid feminist research and scholarship of the patricentric layers that still remain. The women's community also provides the most appropriate empirical setting for what I have called "autonomous feminist theorizing" or the creation of new concepts, theories, and methodological approaches grounded in women's experiences. For strictly scholarly reasons, therefore, it is essential to ground science and technology in the women's community. It is not only intellectually challenging, but necessary for their unbiased development.

Grounding science and technology in the women's community also has an important feminist rationale. If we conceive of feminism as the appreciation of women and women's potential, the recognition of women's oppression in society, and a

commitment to change that situation, each of these components will be aided by further scientific knowledge. In order for science to serve the feminist community, it must know what the current needs are in each of these general areas and use this knowledge as a way of setting its research agenda. In this way, science and technology will create knowledge relevant to the feminist agenda. Thus, the feminist community helps the feminist scholar to recognize important agenda items that need to be researched and to stay in touch with the socially transformative vision and the social change goals that are definitive of feminist praxis.

Feminist methodologists such as Maggie also knew and understood the importance of the community base not only for setting the scientific and technology agenda but for using the products of

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that knowledge. If social change is going to occur in ways that support the decline of patriarchy, then a strong and broad-based women's movement is a necessity. It could usefully be fortified with the fruits of science and technology. (See Benston, 1989b) All members of that community should also be empowered with useful knowledge that encourages them to assert more control over their own social conditions and facilitates the necessary processes of social and political change. (Benston, 1986)

### **Conclusions**

As feminist scholars have learned, the patriarchy continually attempts to reassert itself within all institutions. The legacy

of Maggie Benston is therefore a fragile one. As the women's movement in science gains momentum, new women are recruited who are unaware of the history of feminist struggles that have provided a space for them within the academy. It is easy for such new recruits to fail to make those connections between the personal and the political. There is a distinct possibility that they will be seduced by comfortable and safe positions, without challenging the patriarchy. One may expect patriarchal forces to help establish upwardly mobile career paths for the "new women," designed to re-establish hierarchy and elitism, and to support patriarchy.

As the women's movement in science gains massive new recruits, therefore, a danger exists that it will become detached from its base. At all stages there have been calls to cement the legitimacy of gains and to break connections with the diverse women's community outside academia. The 1990s push toward "excellence" is one feature of this attempt to re-establish the elitism of science and to discredit those outside academia. For practical, political, and social reasons, to say nothing of time constraints, therefore, it continues to appear easier to associate only with other elite members, especially now that there is a women's movement within the academy.

It is not surprising to feminists that social structural forces will continue to conspire in an attempt to break women's solidarity. Such pressures have always existed, and will continue to attempt to subvert links between scientists and other women and to sabotage or appropriate the women's movement in science and elsewhere. The importance of the broad and diverse community base to science and technology, that feminist pioneer scientists such as Maggie recognized and understood, needs to be institutionalized in feminist scholarship.

Maggie blazed new trails in our collective search for knowledge and understanding, for social development and social justice. We need to follow her many trails and her legacy by continuing to treat the community as important in feminist scholarship. Her vision of a science and technology grounded in and oriented toward the community and its diverse human needs requires continual renewal in feminist practices.

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<sup>1</sup>In 1958-59 women comprised only 11 per cent of teachers in universities. By 1972-73 this number had risen to only 12.9 per cent and by 1987-88 women comprised 17.9 per cent of teachers in universities, still less than one fifth. In the fifteen years between 1972 and 1987, women in the natural and social sciences and in engineering increased from 7.9 per cent to 12.5 per cent of university teachers. Inequality is shown in the sharply accelerating pyramidal decline of women as one nears the top ranks. There has been some improvement since this picture was (again) brought to society's consciousness by the women's movement.

<sup>2</sup>Ruth Hubbard in the United States and Ursula Franklin in Canada are two other examples of pioneer feminist scientists. (See Hubbard; Franklin, 1985 and 1990)

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